ASP MEMBER'S MANUAL

2021 Edition

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MISSION

We are the internationally recognized organization of actuarial professionals in the Philippines. We are committed to the standards of our profession, upholding the highest levels of integrity, pride and competence.

As acknowledged experts in assessing risks and measuring their financial outcomes, we take pride in providing technical services to our stakeholders. As responsible members of the society, we take a stand on relevant issues that affect the public good.

We are a caring organization that provides a forum for the professional growth, social development and self-regulation of our members. We value mentoring as necessary to strengthen our Society and to continuously upgrade the expertise of our members.

We shall responsibly carry out these affirmations to foster the important role of the Actuarial Society of the Philippines in the larger global community.

VISION

Our vision is for actuaries to be recognized as the leading professionals in the financial modeling and management of risk and contingent events.

VALUES

The ASP subscribes to the following values in dealing with its members and the public:

- Integrity
- Professionalism
- Quality in service and standards
- Accountability
- Objectivity
- Social Responsibility

THE ASP LOGO

The Society first adopted its official logo during the presidency of Mr. Robert A. Bergstresser in 1964-65. The logo contained a mortality curve drawn on a rectangular coordinate system, a coconut tree and the name and year of the foundation of the Society. The mortality curve is associated with actuaries as a normal distribution curve is to statisticians, or a wheel is to the civil engineers, so that it was deemed to have a mortality curve in the logo. The coconut tree, one of the most useful of all Philippine trees, symbolizes the usefulness of the actuarial profession to man.

During the Society's 50th anniversary celebration in 2003, the logo has been given a new look – a modernized version of the symbol adopted in the 60s – which is what people see in all ASP presence today. The essential parts have been kept intact to preserve the standards and ideals of the profession, which have been upheld by the Society throughout the years.

HISTORY

Prior to 1925, the one domestic life insurance company in the Philippines, the Insular Life Assurance Company Ltd., availed of the services of consulting actuaries in Hong Kong.

In 1925, Dr. Emeterio Roa, Sr. joined the Insular Life as Actuary. Dr. Roa had been an actuarial *pensionado* at the University of Michigan. He returned to the Philippines in 1924 and served for one year in the Office of the Insular Treasurer who was then performing the functions of the Insurance Commissioner.

After Dr. Roa came Dr. Luis Salvosa, Mr. Exequiel Sevilla and Dr. Manuel Hizon. These four were the actuarial pioneers in the Philippines.

In 1953, these four pioneers along with four other actuaries organized the Philippine Actuarial Society. The mission of the Society was to advance actuarial science in the Philippines through the exchange of ideas and the promotion of actuarial studies and other projects.In the early fifties, the Philippine Actuarial Society was more of a social club than a scientific body. With eight members, it was perhaps not surprising.

In 1958, the first convention was held and the progress of the Society began to accelerate. The conventions have continued yearly, and serve as venues for professional development and interaction. Actuaries benefit from presentations from speakers of varying backgrounds, on topics that may not necessarily be actuarial in nature but can be interlinked with the work and responsibilities of actuaries. The conventions also serve as means to foster ties among actuaries and those with close links with the actuarial profession.

In 1964, the Society adopted its Guide to Professional Conduct, which defined the responsibilities of the actuary as a professional. To further firm up the Society's aim, it was incorporated in 1969 as the Actuarial Society of the Philippines, Inc., and registered with the Securities and Exchange Commission. The membership structure was changed from a single level (Member), to three categories (Fellow, Associate and Affiliate). This structure is maintained to this day.

To address ethics issues, the Society created the Ethics Committee in the mid-1980s. This body was tasked to receive, hear and investigate any complaints relating to a member's non-adherence to the Society's Guide to Professional Conduct. In 1988, this Committee was reconstituted into the Professional Standard and Review Council (PSRC). A Code of Conduct had likewise been adopted. The PSRC continues to provide interpretative opinions and rulings on cases involving breaches on the Code of Conduct, to investigate questions and complaints on the conduct of members, and to organize the Fellowship Admission Session (FAS) for applicants to Fellowship status. In 2008, the PSRC also began to hold the Associateship Admission Sessions for incoming Associates.

A testimony that the Society has gone a long way is its acceptance as a full member organization of the International Actuarial Association in 1998. During the same year, the initial groundwork of the Society's Continuing Education Program, an accreditation system where qualification is granted based on credit hours of technical work such as seminars and technical papers, was laid.

The Society is also one of the founding members of the East Asian Actuarial Congress (EAAC). The EAAC is composed of 9 actuarial organizations and was organized to promote and develop international collaboration in the actuarial field. The Society played host for the first time, during the 3rd East Asian Actuarial Conference at the Philippine International Convention Center in 1985. To mark its 50th Foundation Anniversary, the Society successfully hosted the 12th East Asian Actuarial Conference at the Shangrila Plaza Hotel in Makati from October 6 to 9, 2003. To date, the EAAC has been transformed to the Asian Actuarial Conference (AAC) and ASP remains to be one of its 12 actuarial organization members.

Through the years, the exposure of actuaries in the Philippines has increased significantly. Actuaries are now involved with insurance, pre-need, employee benefits, healthcare, consulting, regulations and banking. With the expanding role of the actuary, the Society's various Committees develop programs that strengthen the actuarial foundation and enables actuaries to keep up with the advancement in their field and related areas.

To strengthen the Society's governance structure and processes to further enhance the Society's capability to serve and its members and to respond to new developments in the actuaries' various fields of practice, the Society adopted a new set of Bylaws in 2004. This led to the creation of the Education and Eligibility Council, whose main objective would be to continually update education and eligibility standards in line with international norms, and the Nominations Committee to formalize the Society's electoral process.

The Actuarial Society of the Philippines has come a long way. Now, more than ever, stands as a beacon in maintaining the high standards and integrity of the profession.

ARTICLES OF INCORPORATION
OF
THE ACTUARIAL SOCIETY OF THE PHILIPPINES, INC.

(As amended in the 3rd General membership Meeting held last October 10, 2014)

KNOW ALL MEN BY THESE PRESENTS:

That WE, all of whom are of legal age, majority are Filipinos, and residents of the Philippines, present members of the Actuarial Society of the Philippines, have this day met and unanimously decided to apply for the incorporation of this organization as a non-stock, non-profit corporation of actuaries, under the laws of the Philippines amended on October 10, 2014 at F1 Hotel, Bonifacio Global City, Taguig.

AND WE HEREBY CERTIFY:

First. -- That the name of said corporation shall be

"ACTUARIAL SOCIETY OF THE PHILIPPINES, INC."
(hereinafter referred as the "Society")
(as amended on October 10, 2014)

Second. -- That the purposes for which said corporation is formed are as follows:

PRIMARY PURPOSE

To serve as the recognized professional membership organization for actuaries in the Philippines which will qualify and develop competent professional actuaries.

SECONDARY PURPOSE

1. To promote the study and discussion of actuarial science applications to financial security programs and the allied phases of life, casualty and disability insurance, annuities and pension funds, accident and health insurance, with particular reference to conditions and problems obtaining in the Philippines;

2. To promote mutual understanding and cooperation among the members of the Society and to enable said members to become better acquainted with one another;

3. To promote and maintain high professional and ethical standards among actuaries;

4. To undertake such activities that will encourage, assist and facilitate the further education and/or technical upliftment of its members and prospective members;

5. To give or render aid and advice to any member of the association in all matters pertaining to the practice of the actuarial profession;

6. To adopt rules and regulations and/or institute measures for the maintenance of high professional conduct, honor and integrity of the members in dealing among themselves as well as with the insurance industry or the insuring public;

7. To cooperate and/or coordinate with similar technical and scientific organizations as well as government authorities for the successful and effective accomplishment of the above objectives;

8. To study the actuarial implications of any existing and proposed legislation on the various fields of applications and practice of the actuarial profession;

9. To publish statistical and actuarial tables;

10. To maintain a library for the use of members of the Society;

11. To invest the assets of the Society not immediately required in such forms of investment as may be approved by the Board of Governors;

12. To engage and/or terminate the services of employees necessary to achieve the Society's objectives;

13. To insure assets and employees of the Society against such hazards, risks, accidents and liabilities of all kinds;

14. To raise funds from the members and to accept donations and bequests for any or all of the purposes of the Society;

15. To make donations to other organizations having similar or parallel objective as the Society or to charitable organizations as may be approved by the Board of Governors; (as amended on October 10, 2014)

16. To appropriate budgets for expenditures for carrying out the Society's projects and activities; and

17. To engage professional services of any kind and remunerate any person for such services rendered in connection with the conduct or affairs of the Society.

AND IN FURTHERANCE OF SUCH AIMS AND PURPOSES

To purchase, acquire, lease, hold, sell, and convey such real or personal property as may be necessary or proper for the attainment of those purposes for which the Society is organized, and

To do each and everything necessary, suitable, and proper at any time or place for the accomplishment of any of the purposes, or attainment of any one or more of the objectives herein enumerated, and to exercise and possess all powers, rights and privileges necessary or incidental to the purposes for which the Society is organized or to the activities in which it is engaged, including the right to use and enforce contracts; or exercise any right there under on behalf of its members; and in general to exercise all powers, rights, and prerogatives as may be granted or allowed by law now or hereafter to the corporation organized under the laws of the Philippines;

Third. -- That the place where the principal office of the corporation is to be established or located is in Metro Manila, Philippines;

Fourth. -- That the term for which said corporation is to exist is fifty years from and after the date of Incorporation and another fifty years from and after January 19, 2019; (as amended on October

10, 2014)

Fifth. – That the names and residences of the incorporators of said corporation are as follows:

NAMES	NATIONALITY	RESIDENCES
David L. Francisco	Filipino	[redacted]
Feliberto Cavosora	Filipino	[redacted]
Azucena Reyes	Filipino	[redacted]
Daniel Mercado, Jr.	Filipino	[redacted]
Isagani de Castro	Filipino	[redacted]
Antonio W. Diokno	Filipino	[redacted]
Alexander T. Brooks	British	[redacted]
Manuel Hizon	Filipino	[redacted]
Conrado Roa	Filipino	[redacted]
Enrique M. Zalamea, Jr.	Filipino	[redacted]

Sixth. – That the number of Governors to be henceforth called the Board of Governors, is ten (10) and that the names and residences of the Governors of the corporation who are to serve until their successors are duly elected and qualified as provided by the By-Laws, are as follows: (as amended on October 10, 2014)

NAMES	RESIDENCES
Feliberto Cavosora	[redacted]
Conrado Roa	[redacted]
Enrique M. Zalamea, Jr.	[redacted]
Dolores Gicaro	[redacted]
Tala Lazatin	[redacted]
Antonio W. Diokno	[redacted]
Alexander T. Brooks	[redacted]
David L. Francisco	[redacted]

Seventh. – That this corporation shall be non-stock, non-profit as aforesaid.

Eighth – That no part of the fund, income or asset which the Society may receive or may acquire as an incident to its operation shall inure or be distributed to the benefit of any specific individual including its trustees and officers. (as amended on October 10, 2014)

Ninth – That in the event of dissolution, the remaining assets of the organization shall be distributed to another corporation or organization created for similar purposes or to the Government to be used exclusively for public purposes or otherwise to be distributed in accordance with the determination made by a competent court which will best accomplish the purposes for which the corporation was organized or for such other tax exempt purposes. (as amended on October 10, 2014)

Tenth – That the present members appear in the list attached hereto as "ANNEX A." Additional members shall be admitted in accordance with the By-Laws. (as amended on October 10, 2014)

IN WITNESS WHEREOF, we have hereunto set our hands and signed these Articles of Incorporation at the City of Manila, Philippines, this 20th day of January, 1969.

(SGD.) DAVID FRANCISCO	(SGD.) AZUCENA REYES
(SGD.) ISAGANI DE CASTRO	(SGD.) ANTONIO W. DIOKNO
(SGD.) ENRIQUE M. ZALAMEA, JR.	(SGD.) DANIEL MERCADO, JR.
(SGD.) ALEXANDER BROOKS	(SGD.) CONRADO C. ROA
(SGD.) FELIBERTO CAVOSORA	(SGD.) MANUEL HIZON

SIGNED IN THE PRESENCE OF:

(SGD.) NERIA F. CIRIACO
(SGD.) JOSE SANTOS

A C K N O W L E D G E M E N T

REPUBLIC OF THE PHILIPPINES)
CITY OF MANILA) S.S.

On this 20th day of January 1989, before me, a notary public in and for the city of Manila, Philippines,

NAMES	RES CERT NO	DATE & PLACE ISSUED
David L. Francisco	A-90681	01-02-68, Manila
Feliberto Cavosorra	A-3599815	01-18-68, Quezon City
Azucena Reyes	A-47819	04-05-68, Manila
Daniel Mercado Jr.	A-75353	06-05-68, Manila
Isagani de Castro	A-3750083	01-08-68, Makati, Rizal
Antonio M. Diokno	A-3754278	01-11-68, Makati, Rizal
Alexander Brooke	A-211877	01-10-68, Manila
Manuel Hizon	A-56114	01-15-68, Manila
Conrado Roa	A-468205	04-03-68, Manila
Enrique M. Zalamea, Jr	A-4419441	02-15-68, Quezon City

Who are known to me to be the persons who subscribed and sworn to before me and the foregoing instrument and acknowledged to me that they understood its contents and executed the same as their act and deed.

IN WITNESS WHEREOF, I hereunto set my hand and affix my notarial seal on the date above-mentioned,

(Sgd.) DELFIN S. RIVERA

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Until Dec. 31, 1979

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DIRECTOR'S CERTIFICATE

We, the undersigned majority of the Board of Governors and the Corporate Secretary of the Actuarial Society of the Philippines, do hereby certify that the Articles of Incorporation of said corporation was amended by a majority vote of the Governors and the vote of two-thirds (2/3) of the total number of Fellow members at its Third General Membership Meeting held on October 10, 2014 at F1 Hotel, Bonifacio Global City, Taguig.

The amended provisions of the attached Amended Articles of Incorporation refer to the following:

That WE, all of whom are of legal age, majority are Filipinos, and residents of the Philippines, present members of the Actuarial Society of the Philippines, have this day met and unanimously decided to apply for the incorporation of this organization as a non-stock, <u>non-profit</u> corporation of actuaries, under the laws of the Philippines.

Second.
15. To make donations to other organizations having similar or parallel objective as the Society or to charitable organizations as may be approved by the Board of Governors;

Fourth. -- That the term for which said corporation is to exist is fifty years from and after the date of Incorporation and another fifty years from and after January 19, 2019;

Seventh. – That this corporation shall be non-stock, <u>non-profit</u> as aforesaid.

Eighth – That no part of the fund, income or asset which the Society may receive or may acquire as an incident to its operation shall inure or be distributed to the benefit of any specific individual including its trustees and officers.

Ninth – That in the event of dissolution, the remaining assets of the organization shall be distributed to another corporation or organization created for similar purposes or to the Government to be used exclusively for public purposes or otherwise to be distributed in accordance with the determination made by a competent court which will best accomplish the purposes for which the corporation was organized or for such other tax exempt purposes.

Tenth – That the present members appear in the list attached hereto as "ANNEX A." Additional members shall be admitted in accordance with the By-Laws.

We further certify that the attached Amended Articles of Incorporation are true and correct copy thereof.

In WITNESS WHEREOF, we have hereunto affixed our signature this 26th day of November, 2014, Makati, Metro Manila:

Maria Sachiko A. Pang
President – Governor
Tin no. [redacted]

Romeo H. Abada
Vice-President – Governor
Tin no. [redacted]

Katerina V. Suarez
Secretary - Governor
Tin no: [redacted]

Jesselyn V. Ocampo
Treasurer - Governor
Tin no. [redacted]

Henry Joseph M. Herrera
Governor
Tin no. [redacted]

Lyndon F. Fadri
Governor
Tin no. [redacted]

Froilan Emilio S. Racela Governor Tin no. [redacted]	Maria Victoria C. Lim Governor Tin no. [redacted]	Gerardo S. Salas Governor Tin no. [redacted]

Romeo G. Carabeo
Ex-Officio Governor
Tin no. [redacted]

REPUBLIC OF THE PHILIPPINES)
CITY OF____________) S.S.

Subscribed and sworn to before me on this________day of_____________affiants exhibiting to me their residence certificate as follows:

NAMES	PASSPORT NO.	DATE & PLACE ISSUED
Maria Sachiko A. Pang	EB 1030549	Manila Sept 27, 2010
Romeo H. Abada	EC 2604290	Manila Nov 3, 2014
Katerina V. Suarez	EB 3644411	Manila Sept 14. 2011
Jesselyn V. Ocampo	EB 9835326	NCR-South Dec 17, 2013
Romeo G. Carabeo	XX 4933259	Jakarta Nov 10, 2009
Henry Joseph M. Herrera	EB 7090779	Manila Jan 8, 2013
Lyndon F. Fadri	EB 7889200	Manila Apr 16, 2013
Maria Victoria C. Lim	EC2108591	Manila Sept 14, 2014
Gerardo S. Salas	EB9867308	Manila Dec 21, 2013
Froilan Emilio S. Racela	EB 2376281	Manila May 8, 2011

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BY LAWS OF THE ACTUARIAL SOCIETY OF THE PHILIPPINES, INC.

(Revised 2004, Ratified in the 2nd General Membership Meeting held June 23, 2004)

ARTICLE 1
NAME

The name of the organization shall be the ACTUARIAL SOCIETY OF THE PHILIPPINES, INC. (hereinafter referred to as the Society)

ARTICLE 2
PURPOSES

The objects and purposes of the Society shall be those set forth in its Articles of Incorporation

ARTICLE 3
OFFICE

The principal office of the Society shall be located in Metro Manila, Philippines.

ARTICLE 4
MEMBERSHIP

Members of the Society shall be classified as Fellow, Associate, Affiliate, and Honorary Member.

4.1. Any member in good standing on December 31, 2003 is deemed to have met the requirements for membership in the class under which he was classified.

4.2 After December 31, 2003 a person who

- 4.2.1 makes a written application for membership in the Society;
- 4.2.2 pays the admission and/or membership fee as prescribed in Section 4.7;
- 4.2.3 meets the requirements of Section 4.6 pertaining to the class of membership he or she is applying for; and;
- 4.2.4 is recommended by the Education and Eligibility Council;

shall become a member upon approval by the Board of Governors of such application, and ratification by a vote of at least two-thirds of the Fellows present in a regular or special meeting of the Society.

4.3 Notwithstanding the foregoing requirements of Section 4.2, the Education and Eligibility Council may, by a vote of at least a majority of all its members, recommend to the Board the modification of such requirements for a person for whom, owing to special and unusual circumstances, is deemed by the Council that such conditions would be inequitable and unreasonable unless so modified.

4.4 A person who is a member of an actuarial organization designated by the Board to be an affiliated organization, and with which the Society has a reciprocal membership arrangement, shall be qualified to apply as a member of the Society in the class equivalent to his or her designation in that organization, and shall be admitted as a member of the Society, subject to approval of two-thirds of the Fellows present in a meeting where there is quorum. The Board shall designate affiliated organizations, and effect agreements for mutual recognition and reciprocal membership as it may deem necessary, from the list of Full members of the International Actuarial Association.

4.5 The rights, privileges, and benefits of a member shall cease upon termination of membership.

4.6 Qualifications, Rights, and Privileges of a Member

4.6.1 Fellow

a) A person who has met the eligibility requirements, successfully completed the examination courses required for a Fellow, the Fellowship Admission or Advancement Sessions, and any other education and professional development requirement, given and as prescribed by the Board from time to time and approved by the members of the Society; has worked in the Philippines in the actuarial field for at least one year; and has paid the required admission and/or membership fees, shall be deemed to have met the requirements for Fellow designation, and may apply for membership as a Fellow.

b) A Fellow shall be entitled to exercise the right to vote, be elected into office, make actuarial certifications when qualified, as provided for in the Insurance Code and/or regulations promulgated by the Insurance Commission and any other government agency that requires such certifications. Only Fellows are authorized to append to their names the initials, F.A.S.P. indicating - Fellow of the Actuarial Society of the Philippines.

4.6.2 Associate

a) A person who has met the eligibility requirements of the Society for Associates, and/or has passed the examinations and other education requirements prescribed by the Board from time to time, where such requirements have been approved by the members of the Society and announced at a General Meeting and has paid the required admission and/or membership fee may apply for membership as Associate.

b) Associates may identify themselves or be identified as Associates of the Actuarial Society of the Philippines in any communication where there is certainty that intended recipient of the communication will be fully cognizant of the qualifications and limitations of an Associate of the Society. Under the same conditions, Associates may append to their names the designation A.A.S.P. or the title Associate, Actuarial Society of the Philippines. AnAssociate is not entitled to vote.

4.6.3. Affiliate

a) A person who has met the requirements for Affiliates set by the Eligibility and Education Council, where such requirements are approved by the Board, and has paid the required membership and/or admission fees, may apply for membership as Affiliate.

b) An Affiliate shall not be entitled to vote.

4.6.4. Honorary Member

This special designation is conferred on a person who has made a substantial contribution to the Society, in the advancement of its aims and objectives. He/she must have been nominated by the Board of Governors, by a vote of two-thirds of all the members thereof. Such nomination by the Board of Governors shall be ratified by a vote of two-thirds of all the Fellows present in a regular meeting of members. Honorary members may attend the meetings of the Society, but do not have the right to vote.

4.7. Fees

4.7.1 Each class of members shall pay such fees as may be established by the Board of Governors. These include a one-time admission fee payable upon admission as member and such annual fees payable not later than March 31 of each calendar year, or on a date as may be prescribed by the Board Members whose classifications change in a given year with a corresponding increase in membership fees shall pay the difference between the fees they have already paid for their previous classifications and the fees for their new classifications within three (3) months after approval of the change in classification. New members of any classification shall pay the fee for the full calendar year, regardless of the date of their admission as member.

4.7.2 The Membership Committee may, subject to the terms and conditions that the Board may prescribe from time to time, waive or defer all or a portion of the fee for a Member who applies for such waiver or deferral in case of situations that the Board considers waiver or deferral appropriate.

4.8. Resignation

4.8.1. A Fellow, Associate, or Affiliate member, who is not in default in payment of fees, and against whom no complaints or charges are pending, may resign by filing a written resignation letter with the Chairperson of the Membership Committee. If the Committee accepts such resignation, it shall become effective as of the date it was approved by the Board of Governors.

4.8.2. Notwithstanding the foregoing, the Board may at its discretion permit the resignation of a member against whom a complaint or charge is pending.

4.8.3. Failure to respond in writing, within three months, to the Society's request for confirmation of the continuation or cessation of the condition, which has resulted in a waiver of fees, will be deemed to be a request for resignation.

4.9 Termination

4.9.1 Three months after notice has been issued to a member of any unpaid annual fees, the membership, in respect of which the fee was payable shall terminate, subject to the review by the Membership Committee.

4.9.2 Membership in the Society may be terminated for cause, after due process, as prescribed in Article 5 with respect to disciplinary matters.

4.10. Reinstatement

The Membership Committee, on written application of any former Fellow, Associate, or Affiliate, whose membership has been terminated under the provisions of the By-laws, may recommend the reinstatement of such Fellow, Associate, or Affiliate, respectively, subject to such conditions as the Committee may prescribe, and approved by the Board.

ARTICLE 5
DISCIPLINE

5.1. The Board of Governors shall have the power to consider and take actions with respect to all questions, which may arise as to the conduct of a member in his/her relations with the Society or its members, or in his/her profession or in the practice thereof, or in any matter affecting the interest of the actuarial profession. In line with this, the Professional Standards and Review Council (PSRC) shall assist the Board of Governors, as provided in Article 9 hereof.

5.2. If it is found that misconduct of one of the members has occurred or that there are sufficient grounds for the imposition of disciplinary measures, the Board of Governors, upon recommendation of the PSRC may warn, admonish, reprimand, suspend, or expel the erring member, subject to the provisions of these By-laws and to the rules promulgated by the Board of Governors on the matter of disciplining members.

5.2.1. Any member of the Society may be subject to disciplinary measures or penalties, including suspension or expulsion, depending on the gravity of the offense, or on any of the following grounds:

(a) Violation of any of the provisions of these By-laws;
(b) Violation of the Professional Code of Conduct of the Society;
(c) Refusal to comply with any of the directives or orders of the Board of Governors or of the Professional Standards and Review Council or of any other committee/body especially deputized by the Board of Governors to enforce disciplinary measures.
(d) Failure to comply with the obligations corresponding to his/her status in the Society.
(e) Commission of any act inimical to the aims of and damaging to the reputation of the Society.

5.1.2 Procedure

A member of the Society may be subjected to disciplinary measures or penalties only after being accorded due process during proceedings conducted by the PSRC in accordance with the Guidelines and Procedure for Counseling and Discipline promulgated by the PSRC and approved by the Board of Governors, provided that, if the penalty is suspension or expulsion, such penalty shall only take effect if:

a) The PSRC recommends by a majority vote of all its members, such suspension or expulsion; and
b) The Board of Governors, by a two thirds (2/3) vote of its members, approves such suspension or expulsion; and
c) Such suspension or expulsion is approved by a two-thirds (2/3) vote of all the Fellows present in a meeting especially called for the purpose wherein a quorum is present.

If the penalty is other than suspension or expulsion, it shall be sufficient to impose the same if the conditions in paragraph a) and b), above, are met.

ARTICLE 6
MEETINGS

6.1. Meetings of the Board of Governors

6.1.1. Regular Meetings

The Board of Governors shall meet regularly once a month at the day, time and place agreed upon by a majority of the members of the Board of Governors. The Board has the prerogative to ask any member of the Society to be present at any Board meeting.

6.1.2. Special Meetings

The President may call special meetings of the Board of Governors to consider and act upon urgent matters.

6.2. Meetings of Members

6.2.1. There shall be a General Meeting of all members of the Society once every quarter at the day, time and place agreed upon by a majority of the members of the Board of Governors.

6.2.2. Special Meetings of the members of the Society may be called by the President or upon the written request of twenty percent (20%) of all the Fellows of the Society, to consider and act upon urgent matters.

6.2.3. The Annual Membership Meeting shall be held not later than the 18th of November of every year at a date that will be set by the Board. The agenda for the said Annual Membership Meeting shall include matters normally taken up during annual meetings of organizations. These shall include a report of the activities and operations of the Society, consideration, confirmation and ratification of all acts, and proceedings of the Board of Governors done and taken during the preceding year, and the Election of Officers and members of the Board of Governors for the ensuing year.

6.2.4. Notice of regular meetings shall be communicated in writing or electronic mail to members not later than fifteen (15) days before each meeting. For special meetings, a three (3) day notice shall be sufficient.

6.2.5. Quorum and Voting

a) Meetings of the Board of Governors

A majority of the members of the Board of Governors shall constitute a quorum for the transaction of any business. All decisions of the Board of Governors shall be approved by a majority of its members present in the meeting. Each member of the Board is entitled to one (1) vote.

b) Meetings of Members

A majority of the Fellows registered in the rolls of the Society, who are up-to-date in the payment of annual dues, and who are present or represented by proxy by another Fellow, shall constitute a quorum. A proxy appointment must be in writing, subscribed to by the Fellow making the proxy appointment, and delivered to the Secretary of the Society before the start of the meeting. All matters requiring decision by the Members in a meeting shall be approved by a majority of Fellows present in that meeting. Each Fellow is entitled to one (1) vote.

ARTICLE 7
BOARD OF GOVERNORS

7.1. Powers

The Society shall be governed by a Board of Governors, which shall administer and control the affairs of the Society, subject to the provisions of these By-laws. The Board of Governors may create committees or dissolve them, except those committees specifically mentioned in these By-laws, and confirm or disapprove appointments to the Committees made by the President of the Society.

7.2. Composition

The Board of Governors shall be composed of the incumbent President, Vice President, Secretary, and Treasurer of the Society, and five (5) elected Governors, who shall be elected in accordance with Section 11.2, of these By-laws. The immediate past President of the Society shall sit as an ex-officio member of the Board and shall have voting rights. The President, the Vice President, and the Secretary of the Society shall be Chairman, Vice Chairman, and Secretary, respectively, of the Board of Governors.

7.3. Term of Office and Vacancies

The Members of the Board of Governors are elected with a term of office of one (1) calendar year, or until their successors are elected and qualified. Any vacancy in the membership of the Board of Governors occurring before the following Annual Membership Meeting of the Society shall be filled by appointment by the remaining members of the Board, if still constituting a quorum, from among the Fellows of the Society. Such appointee shall serve only for the un-expired term of the former Governor.

7.4. Remuneration

The Members of the Board of Governors will not receive any form of remuneration or compensation for their service to the Society.

ARTICLE 8
OFFICERS

8.1. Election of Officers and Members of the Board of Governors

During the Annual Membership Meeting of the Society, the Fellows shall elect from among themselves, the following officers of the Society - a President, a Vice President, a Secretary, a Treasurer, and five members of the Board of Governors. To be eligible for election as officer and Governor, a candidate must be a Member who has not admitted guilt nor accepted a recommendation of sanction, or has not been found guilty of an offense in the last five years at the time of election.

8.2. Term of Office and Vacancies

The elected officers shall serve a term of office of one (1) calendar year or until their successors are elected and qualified. Any vacancy occurring before the following Annual Membership Meeting shall be filled by appointment of the President and approved by the Governors sitting in the Board at the time the vacancy has arisen.

8.3. Authorities and Responsibilities of Officers

8.3.1.President

The President shall be the chief executive officer of the Society and shall exercise general supervision over the other officers hereof, and over the administrative staff. He shall see to it that the provisions of these By-laws and the rules and regulations promulgated thereunder as wellas the resolutions of the Board of Governors are complied with. He shall preside at all meetingsof the Society and the Board of Governors. He shall represent the Society on all occasions and in all matters where it should be represented. He/she shall perform such other duties that the Board of Governors may define from time to time.

8.3.2. Vice President

The Vice President shall be vested with all the powers and authorities required to perform all the duties of the President during the absence or incapacity of the President for any cause. He/she shall perform such other duties as the President or the Board of Governors may assign to him/her from time to time.

8.3.3. Secretary

The Secretary, who shall be a citizen and resident of the Philippines, shall keep the minutes of the meetings of the Society and the Board of Governors. He/she shall give or cause to be given all notices required by law or by the By-laws, as well as notices of all the meetings of the Society and the Board of Governors. He/she shall be the custodian of the corporate seal and shall affix the same, attested by his/her signature, to such instruments as may require such seal. He/she shall make and submit reports as may be required of him/her, and perform such other duties as may be assigned to him/her by the Board of Governors or the President from time to time.

8.3.4. Treasurer

The Treasurer shall collect all fees and dues from the members as are required under these By-laws and as may be authorized by the Board of Governors. He/she shall receive any and all accounts receivable or dues to the Society from whatever source, take charge of all funds, properties and accounts of the Society, render financial and other pertinent reports periodically and as may be required by the President and/or the Board of Governors. He shall deposit in the name of the Society, in such banks as may be designated by the Board of Governors, all monies, funds and other valuable effects of the Society which may come under his/her control, subject to withdrawal therefrom only upon check or other written demand of the Society signed by said Treasurer and/or other duly designated signatories. The Treasurer may be required by the Board of Governors to post a bond in such amount as the Board may determine.

8.3.5. Other Officers – The Board of Governors may appoint the Society's auditor and such other officers, as it may deem necessary with such functions as it may assign.

ARTICLE 9
PROFESSIONAL STANDARDS AND REVIEW COUNCIL

9.1. Composition and Qualification of Members

The Professional Standards and Review Council (PSRC) shall be composed of 5 Members who are Fellows. The members of the PSRC are appointed by the Board, who shall elect the Chairman among themselves. The members must have been in the practice of the actuarial profession for at least 10 years, and must possess the following qualities:

9.1.1. Possess the highest degree of integrity and impeccable reputation;

9.1.2. Show continuing interest in the affairs of the Society;

9.2. Term of Office

The initial members of the PSRC shall be appointed for the terms of one, two, three, four and five years. Thereafter, the appointments of new members to replace a member whose term expires shall be made by the incumbent Board for a period of five (5) years. When a member fails to serve a full term resulting in a vacancy in the PSRC, the successor appointed to replace him/her shall serve the unexpired portion of the term.

9.3. Duties of the Professional Standards and Review Council shall be the following:

9.3.1. To provide interpretative opinions on the Standards of Practice, with the assistance of the Eligibility and Education Council, affecting the Code of Conduct and the Interpretations and Recommendations thereto, and to present recommendations to the Board concerning the repeal, enactment and implementation, alteration of, or addition to the Code of Conduct and the Interpretations and Recommendations on the Code of Conduct;

9.3.2. To ensure the adequate communication of any rules of professional conduct and standards of practice to the members, and when deemed prudent and necessary, to regulatory and judicial bodies of the government, and members of the public;

9.3.3. To review and/or amend the Interpretations on the Code of Conduct and the Standards of Practice with the assistance of the Eligibility and Education Council, and to endorse and publish in draft form the proposed new Interpretations, after providing a sufficient period of time, the length of which shall be set at its sole discretion, for review and commentary by the members. Following the period of time provided for review and commentary by the members, the PSRC shall proceed to endorse the proposed Rules of Professional Conduct and Standard of Practice and/or its modifications for approval by the Board;

9.3.4. To conduct Fellowship Advancement Sessions on professional ethics and standards of practice, at least twice a year, or more often as may be needed;

9.3.5. To receive, hear and investigate any complaint relating to the conduct of a member, and/or investigate, at its own initiative, questions, which may arise as to the conduct of a member, and;

9.3.6. To submit to the Board of Governors the results of any investigation it may undertake together with recommendations on actions to be taken.

9.4. Review of a Newly Adopted Standards of Practice

If a petition is signed by at least 10% of the Fellows and delivered to the President within ninety (90) days from adoption of newly adopted standards of practice by the PSRC, the Board shall review the Standards of Practice, as it deems appropriate. The review by the Board shall be completed within ninety (90) days after the receipt of such petition. Thereafter, the Board, upon receipt of a petition by at least 10% of the Fellows, may confirm, alter, or annul the Standards of Practice, subject to ratification by two-thirds (2/3) of the Fellows present during a meeting wherein a quorum is present. In all cases, the Standards of Practice, as promulgated by the PSRC, shall remain in force from the dateof adoption until revised as ratified by the Society. The Board shall notify the petitioners of the decision taken within a reasonable period of time.

9.5. Conflict of Interest

Where the matter being taken up in an investigation by the PSRC affects one of its members, such member shall not participate in the deliberations thereon. In such event, the Board of Governors shall appoint a substitute from among the members of the Society to participate in the deliberations for such matter only.

ARTICLE 10
EDUCATION AND ELIGIBILITY COUNCIL

10.1. Composition and Qualification of Members

The members of the Eligibility and Education Council (EEC) shall be composed of 5 Fellows who have been in the practice of the actuarial profession for at least 5 years, and who shall be appointed by the Board of Governors.

10.2. Term of Office

The Board of Governors shall initially appoint 5 members to the EEC with terms of office from one to five years. Each year thereafter, one new member will be appointed to replace the outgoing member for a term of five years.

10.3. Duties

The Council shall have the following duties and responsibilities, among others that may be prescribed to it by the Board.

10.3.1. To design and update the education and eligibility standards, and the examination syllabus in accordance with international best practices;

10.3.2. To define and enforce the eligibility and qualification requirements for admission of members;

10.3.3. To validate courses and seminars attended by the Members, with respect to the prescribed actuarial subjects, where such are used as bases for the education or examination of the actuary;

10.3.4. To develop a program of continuing education for the advancement of the knowledge of Fellows and Associates and to design a system for encouraging participation in the program and for monitoring such participation;

10.3.5. To assist the Professional Standards and Review Council in the development of the Standards of Practice in all areas of actuarial practice, and in rendering interpretative opinions of such Standards of Practice.

Such recommendations or actions as may be done by the Council in accordance with Sections 10.3.1 to 10.3.5 shall be implemented subject to the approval of the Board.

ARTICLE 11
NOMINATIONS COMMITTEE

11.1 Composition

At least 13 weeks before the Annual General Meeting, the President shall appoint two members, not necessarily Fellows, to constitute a Nominations Committee under his Chairmanship.

11.2 Duties

The Nominations Committee shall have the following duties:

11.2.1 It shall be responsible for preparing the rules and procedures for the conduct of elections, not in conflict with these By-laws and the Corporation Law, and for the actual conduct of the elections during the Annual General Meeting;

11.2.2 It shall be responsible for conferring with the Fellows of the Society for the purpose of drafting a list of candidates who have agreed to stand for election as officer or governor of the Society, and to ascertain that the qualifications of the candidates are in accordance with the By-laws.

ARTICLE 12
PERMANENT COMMITTEES

The following permanent committees shall be organized as soon as practicable after the annual election of officers. The Board may create other committees as may be needed to implement the Plans and Programs of the Society in each year. The Board may also dissolve such other committees when not needed, as recommended by the President of the Society.

12.1. Examination Committee

The Examination Committee shall be composed of a chairman, and the examiners for all the examinations given by the Society. The Chairman shall be a Fellow and appointed by the President. The examiners for each examination shall all be Fellows of the Society, who shall be selected by the Chairman and recommended to the Board of Governors for approval. The objectives, functions and authorities of the Examination Committee shall include among others, the following: [include exam catalogue]

12.1.1. Prescribe the study materials for each examination.

12.1.2. Prepare the set of questions for each course examination.

12.1.3. Prepare and publicize the Examination Catalogue, and arrange for the venue and schedule of all examinations.

12.1.4. Promulgate the rules and procedure for the conduct of the examinations.

12.1.5. Recommend to, and secure the endorsement of the Eligibility and Education Council for the passing score for each examination.

12.1.6. Implement the syllabus or coverage of the course examinations as recommended by the Eligibility and Education Council, and approved by the Board of Governors.

12.2. Programs and Arrangements Committee

The Chairman of the Program and Arrangements Committee for the year shall be the Vice President. The Vice President shall appoint the members of the Committee from the list of Fellows, Associates and Affiliates of the Society. The objectives and functions of the Committee shall include the following:

12.2.1. Organize and arrange all annual general meetings of members and the Annual Convention and Annual Membership Meeting of the Society.

12.2.2. Coordinate and arrange all seminars, sessions, workshops, and symposia proposed by the Councils and Committees, and approved by the Board of Governors.

12.3. Membership Committee

The Membership Committee shall be composed of the immediate past President, as the Chairman, and two Fellows as members. The objectives, functions, duties and authorities of the Committee shall include the following:

12.3.1. Formulate the rules for admission, resignation, and reinstatement of membership in accordance with the By-laws.

12.3.2. Receive and evaluate applications for admission or reinstatement of membership in the Society, or for changes in membership classification and to forward the same, together with its recommendations, to the Board of Governors for approval.

12.3.3. Implement a monitoring system for the continuing education of members, in coordination with the Eligibility and Education Council, as approved by the Board.

12.4. Records, Library, and Proceedings Committee

The Records Library and Proceedings Committee shall be composed of a Chairman who shall be appointed by the President. The Chairman shall appoint the members of the Committee, which shall be composed of the Office Secretarial Staff, and other Fellows, Associates or Affiliates of the Society. The objectives and functions of the Records, Library and Proceedings Committee shall include the following:

12.4.1. Keep records of all minutes of Meetings of the Board of Governors, and Annual General Meetings of Members of the Society, and implement a disposal schedule of the same, as approved by the Board.

12.4.2. Keep records of the test questions of the examinations and their results in such forms that will minimize storage space.

12.4.3. Publish the Proceedings of the Society containing the papers presented during the Annual Convention, and the corresponding discussions, in hard copy, or in such forms that will minimize storage space.

12.4.4. Keep files of study notes, books and references used or being used by Members for review and research.

12.5. Public Relations Committee

The Public Relations Committee shall be composed of a Chairman who shall be a Fellow of the Society and such other members who shall be recommended by the Chairman and approved by the Board. The following shall be the objectives and functions of the Public Relations Committee:

12.5.1. Promote the image of the Society and of the profession to the general public, including the regulatory bodies, the legislature and other public offices, which use or may use the services of an actuary.

12.5.2. Promote the profession of the actuary in the colleges and universities, which have actuarial programs or are planning to introduce actuarial courses in their curricula.

12.5.3. Perform such other activities related to external relations as may be assigned to it by the Board of Governors.

12.5.4. Attend hearings on legislation and other matters affecting the actuarial profession, with other invited members of the Society who can contribute to the purpose of said hearings.

ARTICLE 13
PROTECTIVE PROVISIONS

13.1. A member shall not have any lawful complaint or cause of action against the Society, the Board, any Committee, Council, President, or any officer or member, by reason of anything done or omitted to be done, or any other matter or thing in respect of any complaint of professional conduct, investigation inquiry, charge of professional misconduct, hearing, report, direction, decision, order, notice or publication made or done in good faith under Article 5 of these By-laws.

13.2. Any member who, as a result of involvement in any way with the activities of the Board, Professional Standards and Review Council, an investigation team, disciplinary tribunal, or any task force, obtains confidential information previously unknown to the Member or Associate, shall not use or disclose any such information except in the discharge of the member's duties and responsibilities arising from such involvement, or unless required by law to do so.

ARTICLE 14
PUBLIC PRONOUNCEMENTS OF OPINION

The Society may make public pronouncements of opinion on matters within the competence of actuaries, provided that the subject or issue has an important actuarial element or component and the public opinion, expressed is primarily actuarial in its content. Such public pronouncements shall be made in such manner and upon such terms and conditions as the Board may determine from time to time.

ARTICLE 15
CORPORATE SEAL

The corporate seal shall be in such form as shall be approved by the Board of Governors and shall contain the name – Actuarial Society of the Philippines.

ARTICLE 16
AMENDMENTS

These By-laws may be amended or repealed in whole or in part, upon the recommendation of the majority of all the members of the Board of Governors, and by the affirmative vote of the majority of the Fellows present at any regular or special meeting especially called for the purpose, or by the written assent of the majority of the Fellows. The power to repeal or amend these By-laws may be delegated to the Board of Governors in the manner provided by the Corporation Code of the Philippines.

VOTED AND ADOPTED in Manila, Philippines, the 3rd day of February, 1969 by the majority of the Fellows of the ACTUARIAL SOCIETY OF THE PHILIPPINES, INCORPORATED.

(SGD.) FELIBERTO CAVOSORRA	(SGD.) DAVID FRANCISCO
(SGD.) DOLORES GICARO	(SGD.) TALA LAZATIN
(SGD.) ENRIQUE M. ZALAMEA, JR.	(SGD.) ALEXANDER BROOKS

SECTION II: CODE OF CONDUCT

Code of Conduct

Interpretations and Recommendations on the Code of Conduct

Public Expression of Professional Opinion

Guidelines and Procedures for Counseling and Discipline

CODE OF CONDUCT

(Amended August 2000)

In order to assist the Society in achieving its objective, and more importantly to guide members of the Society when they encounter questions on professional conduct, the following "Code of Conduct" has been prepared by order of the Board of Governors and approved by the Society. As is true of codes of ethics, generally, these guides deal with precepts and principles only. They are not precise rules and are subject to interpretations in relation to the variety of circumstances that occur in practice. Any member wishing guidance in the application of these guides to a particular set of facts is urged to consult the Professional Standards and Review Council of the Society.

It is assumed that every member of the Society earnestly desires to serve his client or employer properly, to protect the public, and to maintain the prestige of the Society and its members. Accordingly, the following principles are set forth by which every member should be guided in his practice of the actuarial profession:

I. Professional Duty

1. All activities of a member in the practice of the actuarial profession must conform with high standards of honesty and decency and with the general requirement that public confidence in the actuarial profession does not suffer as a result, and that there can never be any ground for doubt about the integrity of the member concerned.

2. A member will not provide actuarial service for, or associate professionally with, any person or organization if he has reason to believe that the results of such service or association are likely to be used in a manner inimical to the public interest or the interest of the actuarial profession or to evade the law.

3. A member who is connected with, or is a consultant of any government agency or regulatory body, or serves in any other official capacity therein shall not accept any engagement for professional services with any company or association organized to conduct business that falls under the supervision of the said agency or body where he may have to intervene in matters arising from the aforementioned engagement of professional services.

II. Actuarial Principles and Practices

1. A member will give professional advice only when qualified to do so. The member will submit unqualifiedly an actuarial calculation, certificate, or report only if he knows it to be based on sufficiently reliable data and on actuarial assumptions and methods that in his judgment, are consistent with the sound principles expounded in the course of study of the Society or in recognized texts, sources or precedents relevant to the subject at hand. Where the Society has officially issued or adopted standards of actuarial practice applicable to the particular field that a member's services were engaged, the member shall apply such standards, and take into account the related guidelines issued or endorsed by the Society. If the member believers that other expert review is also desirable, his submission should include appropriate qualification of his findings.

2. A member will recommended for the use of his client or employer, premium or contribution rates, dividends, standards of valuation, or other related actuarial functions only if, in his opinion, they are based on adequate and appropriate assumption and methods. If, nonetheless, other assumptions or methods are specified by the client or employer, the member will include a qualification thereon in any applicable certification, communication or report which he may be called upon to issue in his name.

III. Actuarial Calculations and Communications

1. In any report or other actuarial communication quoting actuarial values, the actuary shall make a statement describing or clearly identifying the data and the actuarial methods and assumptions used.

2. The member shall exercise due diligence to ensure that calculations or recommendations made or opinions rendered by the member or under the member's direction, are based on sufficient and reliable data. Where the data were not readily available, the member should specify other sources and approximations that were employed, qualifying the adequacy and appropriateness thereof. The member shall also describe the methods employed, qualifying their consistency with "sound actuarial principles and practices established by precedence or common usage by the actuarial profession in comparable jurisdictions." If the member chooses, or is requested to prepare a study which, in the member's opinion, deviates from common practice, his/her report or other actuarial communication shall include an appropriate and explicit qualification.

3. The member shall have due regard to the requirements of the laws and rules and regulations, recognizing their intent with respect to the specific publics for they were formulated.

IV. Relationship with and Responsibility to Client or Employer

1. A member will act on professional matters for each client or employer with scrupulous attention to the trust and confidence that the relationship implies and will have due regard for the confidential nature of his work.

2. A member will indicate clearly in communicating professional findings to the client or employer for whom findings are made and in what capacity the member serves. He will also clearly indicate that he is the source of such findings and is available for supplementary explanations or information.

3. A member will not serve more than one client or employer where possible conflict of interest may be involved unless there is full disclosure to all parties concerned, and such parties agree to the engagement of his services.

4. A member shall timely disclose in writing to his client, all sources of income related to any service he is rendering on behalf of the client.

V. Relationship with Other Actuaries

1. A member will conduct his professional activities on a high plane. He will avoid unjustifiable or improper criticism of others and will recognize that there is substantial room for honest differences of opinion on many matters. However, if in the course of his work he finds that serious misconduct harmful to the public and the profession was committed by another actuary, he is expected to refer such misconduct to the Professional Standards and Review Council for its consideration and recommendation.

2. When a member is asked to take on professional services previously provided by another actuary, he shall consider whether it is appropriate to consult with the previous actuary to ensure that is suitable for him to take on this new responsibility.

VI. Advertising

1. A member will not engage directly or indirectly in any advertising or other activity which can reasonably be regarded as being likely to attract professional work in a deceptive manner, or where the content is false, fraudulent, misleading or unprofessional.

VII. Titles and Designations

1. A member may not append to his signature the designation “Actuary”, “Fellow of the Actuarial Society of the Philippines”, or “F.A.S.P.” or other equivalent titles unless he is so accredited. The member may not use a designation dependent upon elective or appointive qualification within the Society, such as “President”, “Member of the Board of Governors”, or “Member of the Examination Committee”, unless he is acting in such capacity in behalf of the Society.

INTEPRETATIONS AND RECOMMENDATIONS ON THE CODE OF CONDUCT

(Amended August 2000)

Editor's Note: In this copy, references to the ASP By Laws have been updated.

This supercedes the following Interpretations issued before February 10, 1999:

- Interpretation No. 1-91: Use of Titles and Designations (1991)
- Interpretation No. 2-91: Qualification to Give Advice (1991)
- Interpretation No. 3-93: Responsibility with Respect to Reports (1993)

Introduction

The interpretations and recommendations were the result of the workshops conducted among the Fellows of the Actuarial Society of the Philippines. Interpretative opinions from other actuarial organizations, principally from the American Academy of Actuaries, when appropriate, were also used to complete the interpretations and recommendations.

The interpretations were groups under the six principal sections of the Code of Conduct and are coded using two letters to identify the section. When referring to a specific interpretation or recommendation, the letters will identify the section, such as PP for Actuarial Principles and Practices, and the number following identify the particular paragraph being referred to. For example, PP2 refers to Actuarial Principles and Practices covering assumptions.

This set of interpretations incorporates, hence supercedes interpretations issued before February 10, 1999.

PP: Actuarial Principles and Practices

1. A member of the Actuarial Society of the Philippines (ASP) is qualified to give professional advice on a particular subject that is covered by the syllabus of the examinations of the ASP, when he is a Fellow of the ASP. He must also have working experience in the subject or field where he is to give professional advice; and he must have participated in continuing education seminars of the ASP on the subject or related subjects. The term 'subject', as defined by this interpretation, includes the following principal areas of focus of the course examinations:

    a) pricing of products and valuation of liabilities in life insurance and pre-need;
    b) determination of non-forfeiture values in life insurance and pre-need;
    c) distribution of surplus in life insurance;
    d) design and valuation of retirement plans;
    e) pricing of group life, health and accident insurance; and
    f) valuation of liabilities in a social insurance program, and design of the corresponding financing system.

Other subjects in the examination syllabus can be the subjects of professional opinion from a Fellow of the ASP, but the opinion shall be limited to the scope covered by the examination syllabus. If the actuary is invited to give advice on a subject beyond the scope covered by the syllabus, he may do so provided he has undertaken research and/or professional consultation on areas of the subject where he has had limited training or experience. The advice should be given only after a disclosure of his limitations to the client, and//or by disclosing any professional assistance he has utilized in undertaking the assignment.

Where accreditation is a requirement for rendering actuarial advice, for making recommendations, or for issuing certifications or reports, a member shall not accept such assignment unless he is so accredited.

2. Adequate and appropriate assumptions mean that they are based on the actuary's best assessment of future events formed from the historical experience of the case at hand, or from experience derived from other cases that are comparable. If the assessment is based on experience derived from other cases, a qualification statement should be made, justifying the applicability of the assumptions.

3. In the absence of standards of actuarial practice officially adopted by the ASP, the actuary shall exercise his best judgment in selecting what standards to use. Standards of actuarial practice in other actuarial associations that are members of the International Actuarial Association may be used as bases, provided that there are accompanying justifications that those standards are compatible with the specific situation.

4. An actuary shall issue a certification specific to a subject, and only on the work that he has done. He should avoid statements of generalization. General opinions as to "actuarial soundness" should be avoided, wherever possible, because "actuarial soundness" is neither an absolute nor a unique concept, and must be considered in relation to the specific problem and the accuracy with which future experience can be predicted. When a statement of adequacy is to be made, usually for a given financing arrangement, the opinion to be given should be with respect to specifically defined objectives, assumptions or requirements.

5. The statement of opinion on pricing of a financial product should disclose the bases of the assumptions and justifications for such assumptions. In preparing the certification, the actuary should be guided by the Guidelines issued by the ASP. He should not limit the statement to the minimum requirements of any sample certification issued by the regulatory agency.

6. The waiving of the fee for professional services either partially or totally does not relieve the actuary of the need to observe professional standards.

RC: Relationship with and Responsibility to Client or Employer

1. An actuary who is employed in a company should consider that his client is not just the company that employs him. He also has as client, the government regulator for the activities of his company, especially in the Philippines where the actuary is accredited by the government regulator. In case the actuary is employed with, or is a consultant of an insurance company, the policyholder is also his client, by virtue of the fact that the regulator exists principally to protect the policyholder. In a similar case, the planholder is also a client of the actuary if he is an employee or consultant of the pre- need company. An actuary who is self-employed and in the practice of consulting in a particular field, has for clients the general public who uses his services and the government regulating agency that accredits him to practice in that field.

2. Need for confidentiality and conflicts of interest can always arise in the performance of professional services. The need to keep confidential information will not usually be difficult to determine. Confidentiality has a specific meaning that professionals have good appreciation in particular situations and for particular services rendered. However, in case of doubt about when to treat work performed by the actuary as confidential, the opinion of, or clearance from the client should be solicited.

3. Conflict of interest is usually present when the actuary's ability to act fairly to all his clients is impaired. In case of doubt whether a conflict exists, a query may be sent to the PSRC for opinion. Certain assignments give rise to conflict of interest situations when several clients engage the services of the actuary to do the same or similar assignment. Even in assignments that are not similar, there is a conflict of interest when the actuary receives compensation from two clients, and there is a relationship or potential relationship between the clients that arises or will arise from the task that the actuary has done for each of them. The actuary should resolve conflicts of interest by clearly disclosing in writing to each party who is affected, that he is on assignment with another client or clients, and that he receives income for the service he is rendering. The actuary is advised to obtain the agreement of each client to this kind of multi-engagement.

4. If the service requested by a client or employer conflicts materially with the actuary's professional judgment, the actuary should advise the client or employer of the conflict and should include appropriate qualifications or disclosures in any related actuarial communication.

5. When an actuary acts, or may seem to be acting, as advocate for a client or employer, the nature of that relationship should be disclosed directly to interested parties. The actuary should support the position of the client or employer only to the extent that he is satisfied that the position is professionally supportable, recognizing that honest differences of opinion may exist. The actuary's professional judgment should not be subordinated to the judgment of others.

6. Actuaries in the Philippines are accredited to practice the actuarial profession in insurance, pre-need and retirement plan valuation, by the respective government agencies which regulate the financial service that falls under that government agency's supervision. The act of accrediting a Fellow of the ASP by a government agency delegates to the ASP the responsibility to qualify the applicant for accreditation and to impose adherence to appropriate standards of conduct and practice on the members accredited by that government agency. In the performance of professional work, whether as consultant or employee of a company, the accredited actuary is to be guided by the Code of Conduct, as well as its Interpretations and subsequent amendments.

7. There are tasks done by the actuary that he certifies for a regulator, where independence is required; for example, in the valuation of retirement plans for tax qualification. The following are examples where there is violation of the requirement for independence:

   a) The actuary is an employee of the company whose plan he is certifying.
   b) The actuary is an employee or partner of the external auditor of the company.
   c) The certifying actuary is an employee of the trustee, or investment manager of the retirement fund, or related to the trustee through their companies being related, by direct or indirect ownership or management control.

   When the actuary is an employee of a company, and he certifies a retirement plan of another company, which is related by direct or indirect ownership to the actuary's employer, independence may be questioned.

An actuary, who is an employee of a life insurance company in the business of selling Deposit Administration (DA) schemes, may certify for a client, the valuation of a retirement plan, which is not a DA, for the purpose of tax qualification. However, he should disclose this act to his employer and his client.

8. In resolving questions of conflict of interest involving "clients", the actuary should take as general guide, the declarations in the Society's Code of Conduct regarding his professional duty to render service in the following manner:

- it is not inimical to the public interest,
- does not evade the law,
- does not provide any ground for doubt about his integrity, and
- it is not inimical to the interest of the actuarial profession.

RA: Relationship with Other Actuaries

Basis of Interpretations:

Much of a professional's knowledge comes from what has been contributed to the profession by others before him. However, this knowledge does not cease with the past. There must be continual interchange of information and opinion, which enriches the total knowledge within the profession. Through professional articles and speeches, members of a profession contribute their knowledge to the improvement of the group. Such cooperation is essential so that the whole profession may keep up with the rapid changes of the business world and the demands of the profession. An individual actuary's particular experience must be augmented by what is provided by others in the profession in order to develop further knowledge of the theory and techniques of the profession. Thus there is the necessity, as well as the desirability, of cordial relations and mutual confidence among the members of a profession. This contributes to the advancement of the profession and to the improved quality of its service to its clients. Competence and concern for clients require that a professional be ready to refer work to specialists or consult with them, where appropriate.

1. Opinion on Disagreement and Differences of Opinion:

Differences of opinions among actuaries may arise, particularly in choices of assumptions and methods. It is expected that discussion of such differences, whether directly between actuaries or in observations made to a client by one actuary on the work of another, will be conducted objectively and with courtesy.

In the course of employment or an engagement, an actuary may encounter a situation where he could better serve the interest of the employer or client if he renders an alternative opinion to that expressed by the other actuary. He can do so with an explanation of the factors, which lend support to the alternative opinion. Paragraph IV.1 of the Code should not be construed as preventing the actuary from expressing such alternative to the employer or client.

If the actuary believes that incompetence or misconduct on the part of another actuary has engendered a material difference of findings, the procedures set forth in Article 5 of the ByLaws of the Actuarial Society of the Philippines should be invoked. Charges of incompetence or misconduct should not be circulated except in private communication to appropriate legal authorities or to those in the profession charged with supervision and judgment of such matters, unless such violations have already been publicly stated by those authorities.

2. Responsibility of Actuary if Illegal or Unprofessional Acts by Another Actuary is Suspected.

An actuary may have reason to suspect that another actuary may have acted illegally or unprofessionally or may have otherwise engaged in misconduct in the course of professional activity. In such cases, the actuary should confer with the PSRC, and if considered appropriate, the procedure set forth in Article V of the Bylaws, on discipline, should be invoked. In some cases, the issue may be a matter of law as well as of ethics. An actuary faced with such a case should consider seeking legal counsel. His action may bring the possibility of a defamation suit; while his inaction may bring civil charges.

Ethical conduct is not defined solely by admonitions and prohibitions, but requires commitment to honorable behavior even at the possible sacrifice of personal advantage or convenience.

3. Change of Actuary or Appointment of Additional Actuary

An actuary may provide service to any principal (any present or prospective client or employer) who requests it, even though such principal may be served by another actuary for the same matter, or may succeed another actuary at the request of the principal. A principal has an indisputable right to choose a professional adviser. A principal may have legitimate reasons to change advisers or to retain more than one adviser for the same matter. The purpose of a new appointment may not always be above criticism, however, and an existing adviser's freedom to fulfill an engagement in a professional way must be safeguarded.

Accordingly, if an actuary is invited to advise a principal, and he knows that another actuary has recently acted in a professional capacity with respect to the same matter, it would be a matter of professional courtesy and a prudent procedure to consult the other actuary to prepare adequately for the assignment and to make an informed judgment whether there are professional considerations, which might affect acceptance of the assignment.

The prospective new or additional actuary should request the principal's consent to such consultations. The withholding of such content could be a material factor affecting the propriety of accepting the appointment. In such consultations, the relevant items to discuss include thefollowing:

a) pertinent background and past history with respect to the assignment;
b) the reasons for the change of actuary;
c) any disagreements between the principal and the other actuary as to matters of actuarial concern; and
d) whether there are any professional reasons why the invitation should not be accepted.

Professional reasons include:

- the difficulties that acceptance might give rise to, such as any actuarial problems that have arisen because of the condition of the principal's records;
- facts that might have a bearing on the principal's judgment or integrity; and
- any actuarial matters that have required an inordinate amount of time in the past.

The proposed new or additional actuary should give weight to any such information before deciding whether to act.

When the principal has given consent to such discussion, the original actuary should cooperate in making available relevant information, provided the terms of cooperation are made clear and agreed upon, such as compensation to the original actuary. Such information would include any pertinent data and documents but need not include any items of proprietary nature.

The original actuary must not, without the consent of the principal, disclose to the new or additional actuary any information, which might involve the principal's confidential affairs.

Ad: Advertising

Advertising encompasses all communications, including oral communications, which may directly or indirectly influence any person or organization to decide whether there is need for actuarial services and to select a specific person or firm to perform actuarial services.

The intent of the Code is to discourage advertising that contains any statement or claim which is false, fraudulent, misleading or deceptive. It is not the intent to discourage advertising which serves the public by conveying information that is likely to be useful in deciding whether the services of any actuary are needed, and to select an actuary to perform the needed services.

A. Examples of acceptable forms of advertising:

(1) Advertising for the purpose of improving public understanding of actuarial services and of the availability of actuaries to perform such services.

(2) A list of names of actuaries and their professional qualifications and/or biological data and describing the kinds of actuarial services that each can provide.

(3) A statement of policy or position related to the practice of actuarial science or on a subject of public interest.

(4) Announcements of promotion of actuaries, or changes in personnel or affiliation, or change of address.

(5) Announcements of the sale or distribution of books, or other work of the actuary or the actuary's firm.

B. Examples of unacceptable forms of advertising:

(1) Advertising that falsely states or suggests that the services offered by another actuary are inferior to, or more expensive than, comparable services offered by the advertiser.

(2) Advertising that contains statements of subjective opinion, unless clearly declared as such, and those that create expectation of favorable results than an actuary with relevant experience would know to be unjustified.

(3) Advertising that deliberately underestimates the fees the actuary intends to charge for a specific assignment; or, describes the basis of charges without disclosing any additional factors which may result in additional costs to the client.

(4) Advertising that offers actuarial services at reduced rates, without disclosing that the cost of these services is included in whole or in part in the cost of other services or products provided to the client, either by the actuary or by another person or organization with whom the actuary has a direct or indirect financial affiliation.

Advertising that relates to professional actuarial services, which emanates from a client, employer, or other affiliate of the actuary, and which may result in personal advantage to the actuary, will be presumed to have been used on behalf of, and with the knowledge and consent of, the actuary. The actuary shares the responsibility for such advertising.

TD: Titles and Designations

1. A member may refer to designations dependent upon elective or appointive qualification within the Society, such as an officer or a committee chairperson, in biographical material of any type, including material in a book or article written by a member in published material.

2. A member may use such biographical material when announcing a member's promotion or change in employment or on any similar occasion. The ultimate test is whether the reader could be led to conclude that the member is speaking for the office or committee.

3. A member may use such designations in the Society when giving testimony in a court of law or before a public body, provided it is made clear that the member does not speak for the office or committee unless specifically authorized to do so.

4. Fellows or Associates shall use the title **Fellow** or **Associate** when referring to their qualification as well as membership in the Actuarial Society of the Philippines, as in the following examples:

   Pedro R. de la Cruz, F.A.S.P., *or* **Fellow**, ASP, *or* **Fellow**, Actuarial Society of the Philippines (followed by the Company title, such as – Vice President and Actuary)

   Ma. Ana G. Santos, A.A.S.P., *or* **Associate**, Actuarial Society of the Philippines (followed by the Company title, such as – Manager and Assistant Actuary)

   "Member of the Actuarial Society of the Philippines" shall not be used by a Fellow or Associate when referring to their affiliation with the Actuarial Society of the Philippines.

5. An Affiliate of the Actuarial Society of the Philippines, if given an actuarial title by his or her employer, such as Assistant Actuary, may use the title only in official communications strictly for his employer and involving only his work with such employer. He shall not add any references to the Society, such as – "Member, Actuarial Society of the Philippines" or "Affiliate, Actuarial Society of the Philippines".

PUBLIC EXPRESSION OF PROFESSIONAL OPINION

(Amended September 2018)

No opinion shall be publicly expressed by or on behalf of the Actuarial Society of the Philippines (ASP) except on matters within the special professional competence of actuaries and then only if such opinion has been approved by a majority of all the members of the Board of Governors.

A member of the ASP who wishes to express a professional opinion in his individual capacity may do so without obtaining prior clearance from the Board of Governors, provided that it is published with his name and under his own accountability.

An actuary or any member of the ASP should not represent the Actuarial Society of the Philippines unless duly appointed by the Board of Governors. When representing the Society, particularly to any government or other professional organizations, such representative should not express an opinion that is inconsistent with established standards of the ASP.

Whenever the opinion of the representative is sought on matters whereby the standards of ASP are not clear, such representative should seek the interpretation of the PSRC.

Actuaries and any member of the ASP must be especially careful in providing opinions to regulatory bodies and other professional organizations as these can be construed as a representation of the standards of the Society.

GUIDELINES AND PROCEDURES FOR COUNSELING AND DISCIPLINE

(Amended April 1998)

In accordance with the objective of the Actuarial Society of the Philippines (ASP) to continuously develop professionalism among its members, the Professional Standards and Review Council (PSRC) has prepared the following set of guidelines and procedures to help members understand the standards of professional actuarial practice as articulated in the Principles of Actuarial Science of the Society of Actuaries published in TSA volume XLIV.

The PSRC can provide counseling to the members of ASP by responding to their inquiries and requests for guidance. It can also conduct investigations and make recommendations on matters of disciplining members who violate the Code of Conduct of ASP.

A part of these guidelines and procedure was patterned after those of the Rules of Procedure for Counseling and Discipline of the Actuarial Board for Counseling and Discipline (ABCD) of the American Academy of Actuaries.

1. REQUEST FOR GUIDANCE AND INQUIRIES

1.1 The PSRC may accept and respond to inquiries and request for guidance from the members of the ASP (hereinafter referred to simply as "members"). Any member wishing to obtain guidance from the PSRC on the applicability of the Code of Conduct of ASP (hereinafter referred to as the "Code") or its interpretative provisions shall submit a written request which should include, among others, the following:

1.1.1 A statement of the circumstances underlying the request as he understands them.

1.1.2 Reference to the particular section of the code or to the specific interpretative provision which he believes to be relevant to the request.

1.1.3 Copies of any relevant supporting documents.

1.2 If the member requesting for guidance wishes to remain anonymous, except to the Chairperson of the PSRC, he may request that it be so. The Chairperson will exert reasonable effort, without any absolute guarantee, to safeguard the identity of such member. However, in some cases, the efforts to keep anonymity of the requesting member may hamper the ability of the PSRC to act efficiently on the request for guidance.

1.3 The PSRC reserves the right to refuse to respond to any request for guidance submitted by a member who refuses to be identified even to the Chairperson of the PSRC.

1.4 The PSRC reserves the right to investigate a request for guidance as if it were a complaint where the request raises a significant concern that a material breach of the Code has occurred.

1.5 The PSRC shall respond to verbal or written inquiries from a member either verbally or in writing as the case may be. However, if the PSRC deems that the inquiry should be more properly framed as a complaint or request for guidance, it will request that the member making the inquiry should resubmit the inquiry in writing in the form of a complaint or request for guidance.

2. INITIATION OF INVESTIGATION ON MATTERS OF DISCIPLINE

2.1 The PSRC may, at its own initiative or upon the complaint of any individual or entity who believes that a member has violated the provisions of the Code, investigate questions that may arise as to the conduct of such member.

2.2 If the investigation is at the instance of the PSRC, the PSRC shall send to the member concerned a letter, together with all relevant supporting documents, by registered mail, indicating the particular causes why the PSRC deems it necessary to conduct such inquiry or investigation and requesting the member to submit his written response or comments and present his side within fifteen (15) days from receipt of PSRC's letter.

2.3 If the investigation is at the instance of a third person, such person must submit a written complaint to PSRC which should include, among others, the following:

2.3.1 A statement of the circumstances underlying the complaint as the complainant understands them.

2.3.2 If the complainant is a member of the ASP, a reference to the particular section of the Code which he believes the member complained of (hereinafter referred to as the "subject members"), may have violated and/or to the specific interpretative provision which he believes to be relevant to the complaint.

2.3.3 Copies of any relevant supporting documents.

2.3.4 A signed statement granting the PSRC permission to inform the subject member of the identity of the complainant at the proper time.

(The attached form can also be used by any member/third party(ies) in submitting a formal complaint to the PSRC.)

2.4 As a general rule, the PSRC does not entertain complaints from anonymous complainants. However, it may, upon receipt of an anonymous complaint, initiate an investigation to determine if a violation of the Code or a material breach of the standards of professionalism has occurred so that the PSRC can make the proper recommendation to the Board of Governors for the appropriate action to be taken to protect the reputation of the ASP and its members in good standing.

3. PRELIMINARY EVALUATION OF A COMPLAINT

3.1 Upon receipt of a complaint, the PSRC shall immediately conduct a preliminary evaluation of the complaint. This may include a request to the complainant to clarify any of the allegations in the complaint.

3.2 The PSRC shall then meet to discuss whether to dismiss the complaint, refer it to another body or proceed with the investigation.

3.3 If the PSRC finds the complaint to be without merit, it shall dismiss the complaint, notify the complainant of such finding and consider the case closed.

3.4 If the PSRC determines the complaint to present a dispute other than violation of the Code or breach of standards of professionalism, it shall advise the complainant and the subject member and either dismiss the complaints or refer the matter to the proper arbitral body of the ASP.

3.5 If the PSRC finds that the complaint has substantial merit and appears to present a violation of the Code and/or a breach of standards of professionalism, it shall proceed with the investigation.

4. <u>INVESTIGATION OF THE COMPLAINT</u>

4.1 In the event that PSRC decides to proceed with the investigation of the case, it shall immediately send a letter to the subject member requesting the latter to submit his written answer to the complaint within fifteen (15) days from receipt of PSRC's letter. The PSRC shall attach to its letter copies of the complaint and all relevant supporting documents.

4.2 The subject member's answer should contain, at minimum, the following:

4.2.1 A statement of acts which rebut or explain the allegations in the complaint.

4.2.2 An explanation why any misconduct alleged in the complaint did not constitute a violation of the Code or breach of the standards of professionalism or why such conduct was immaterial or irrelevant.

4.2.3 A statement of the circumstances which the subject member wishes the PSRC to consider in formulating its recommendations to the Board of Governors.

4.2.4 Copies of any relevant supporting documents.

4.3 Upon receipt of the answer of the subject member, the PSRC may request the subject member for clarification on any matter raised in the answer. Thereafter, the PSRC shall determine if the answer satisfactorily rebuts or explains the allegations raised in the complaint and provides sufficient basis to dismiss the complaint, and shall immediately notify both the complainant and the subject member.

4.4 If the answer filed by the subject member does not provide sufficient basis to dismiss the complaint, the PSRC shall schedule as many meetings as necessary with the complainant and the subject member during which the PSRC shall allow the parties to present evidence to support their positions. During this meeting, the PSRC may propound questions to either party with the objective of establishing whether a violation at the Code and/or a breach of the standards of professionalism has occurred. The PSRC may also require the production of records, books or other documents which it deems appropriate and relevant to the resolution of the issues involved. It may also consider the testimony of persons other than the complainant and the subject member.

4.5 If, in the course of the investigation, the PSRC discovers evidence of one or more violations of the code and/or breaches of the standards of professionalism, other than those alleged in the complaint, the PSRC may include them as if they had been included in the complaint.

4.6 It shall be considered a violation of the Code for any member to mislead the PSRC by concealment or misrepresentation during the course of investigation of any complaint.

4.7 Where the complaint is also the subject of a case in a court of law or in a regulatory body, the PSRC may inhibit itself from conducting any investigation until the said court or body shall have rendered its decision. It can also adopt the findings of fact of that court or body as its own. However, this does not preclude the PSRC from proceeding with its own investigation or from recommending temporary disciplinary action on any member in accordance with the rules on discipline of the ASP.

4.8 The minutes of the entire proceedings shall be recorded by a secretary or stenographer to be assigned by the PSRC.

4.9 During the entire proceedings, the PSRC shall not be bound by any technical rules of evidence and judicial procedures, but shall be guided by fairness and equity.

4.10 The entire proceedings shall be treated with utmost confidentiality. There shall be no publication, in any form, of the fact that a particular member is being investigated until the Board of Governors has handed down its final decision on the case. The meeting(s) mentioned in Paragraph 4.4 above shall be conducted in private at a time and at the place determined by the PSRC. The meeting/s shall be attended only by the members of the PSRC, the Legal Counsel of the ASP, the complainant and the subject member, the witness(es) who will testify and the secretary or stenographer who will record the minutes of the meeting(s).

5. DELIBERATION AND DECISION OF PSRC

5.1 Within thirty (30) days from the conclusion of the last of the meetings mentioned in Paragraph 4.4 above, the PSRC shall conduct its deliberations on the case. During these deliberations the PSRC may consult confidentially with any member of the ASP or other persons who may have information or experience relevant to the matters under consideration. However, no information from these consultations may be used unless the information is made part of the records of the PSRC’s proceedings and the subject member is given an opportunity to comment on the same.

5.2 After the conclusion of the deliberations, the PSRC shall vote to decide the case. A majority vote of all the members of PSRC is required to approve a decision.

5.3 Once a decision has been reached, the PSRC shall assign one of its members the task of writing its report containing its recommendation(s) and any dissenting opinion to the Board of Governors. This report, which must be signed by all members who took part in the deliberations of the case, shall be submitted to the Board of Governors within thirty (30) days after the conclusion of the deliberations of the PSRC, together with all the records of the case.

5.4 If, in the judgment of a majority of the members of PSRC, the subject member has committed a violation of the Code and/or a breach of the standards of professionalism warranting public discipline, the PSRC shall recommend to the Board of Governors to warn, admonish, reprimand, suspend or expel the erring member.

5.5 If the majority of the entire PSRC does not vote to recommend public discipline, the PSRC may vote to counsel the subject member or to dismiss the complaint. If it is the judgment of the PSRC that remediation is more appropriate than dismissal of the complaint or public discipline, the subject member will be counseled. Such counseling may be conveyed to the subject member orally, in writing or both, and may be undertaken by the chairperson or any member of the PSRC, or any other individual appointed by the PSRC to counsel the subject member. The complainant will be advised that the PSRC reviewed the complaint and elected to counsel the subject actuary. However, the substance of the counseling shall be kept confidential between the PSRC, the subject member and any individual(s) appointed to counsel the subject member.

5.6 If, in the judgment of the PSRC, the charges appear to be without substantial merit, or if the necessary votes to impose public discipline or private counseling cannot be obtained, the PSRC shall dismiss the complaint. The complainant and the subject member shall be notified in writing of this decision and the case will be closed.

6. ACTION BY THE BOARD OF GOVERNORS

6.1 The Board of Governors may adopt the recommendations of the PSRC *en toto* or modify the same or reject the same altogether and conduct its own investigation.

6.2 The Board of Governors shall render its decision on the case within forty-five (45) days from receipt of the recommendation of PSRC. The complainant and the subject member shall be immediately informed, by registered mail, of the decision of the Board.

6.3 Should the subject member be found guilty of violating the Code or breaching the standards of professionalism, the Board may warn, admonish, reprimand, suspend or expel the member from the ASP, provided that no decision suspending or expelling the member shall take effect until the member had been afforded a period of appeal of thirty (30) days and until confirmed by a vote of at least two-thirds (2/3) of the Fellowsof the ASP present at a meeting called for the purpose wherein a quorum is present.

7. APPEAL BY A MEMBER SUBJECT TO DISCIPLINARY ACTION

7.1 Appeals from the disciplinary actions of suspension or expulsion by the subject member may be made, if there is obtained and submitted, new evidence(s) not presented before, or the previously submitted evidence(s) is deemed fraudulent based on new information, that could lead to a different recommendation and judgment for disciplinary action.

7.2 The appeal shall be made in writing, and shall include oral and documentary evidences taken on the issue involved. Oral evidences shall include names and identities of the witnesses.

7.3 Appeals shall be made directly to the Board which shall appoint an Appeals Committee consisting of two members, drawn by lot, from the members of the PSRC who rendered the original recommendation to the Board, plus three new members selected at large from the ranks of Fellows, who have not been involved in the original deliberation and recommendation.

8. ANNUAL REPORT BY PSRC

The PSRC shall submit to the Board of Governors, at the end of every year, an annual report of its activities on cases resolved, dismissed or pending.

SECTION III: MEMBERSHIP

Qualifications for Membership

Rights and Privileges of a Member

Procedure for Admission of Affiliates, Associates and Fellows

Guidelines for Retention of Membership

Termination of Membership

Reinstatement Guidelines

Policy on Waiving Membership Dues

Equivalency Rules on Eligibility of Fellows of Foreign Actuarial Associations for Membership in ASP

Continuing Education Program

QUALIFICATIONS FOR MEMBERSHIP

(Effective July 1992)

A. FELLOW

Any individual, at least 21 years of age, may become a Fellow of the Society provided:

- He/she is nominated by two Fellows of the Society in good standing;
- He/she is the holder of a university degree requiring at least 24 units of actuarial-related subjects;
- He/she has worked in the Philippines in the actuarial field for at least one year;
- He/she has completed the Fellowship examination requirements prescribed by the ASP;
- He/she has undergone the Fellowship Admission Session conducted by the Professional Standards and Review Council of the ASP; and
- He/she has complied with the procedures for admission as required by the ASP.

B. ASSOCIATE

Any individual, at least 18 years of age, may become an Associate of the Society, provided:

- He/she is nominated by two Fellows of the Society in good standing;
- He/she has successfully completed at the Associateship examination requirements prescribed by the ASP;
- He/she has undergone the Associateship Professionalism Course conducted by the Professional Standards and Review Council of the ASP; and
- He/she has complied with the procedures for admission as required by the ASP.

C. AFFILIATE

Any individual, at least 18 years of age, may become an Affiliate of the Society, provided:

- He/she is nominated by a Fellow or two Associates of the Society in good standing;
- He/she has successfully completed at least one examination prescribed by the ASP; and
- He/she has complied with the procedures for admission as required by the ASP.

RIGHTS AND PRIVILEGES OF A MEMBER

A. Rights Common to All Members

The members of the Society have the right to attend, participate in the discussions and present papers at all general meetings, including the Annual Convention. They shall also have the right to participate in all other activities of the Society which are not otherwise limited to specific classes of members.

B. Fellows

A Fellow shall be entitled to exercise the right to vote, be elected into office, make actuarial certifications when qualified, as provided for in the Insurance Code and/or regulations promulgated by the Insurance Commission and any other government agency that requires such certifications.

Only Fellows are authorized to append to their names the initials, F.A.S.P. indicating - Fellow of the Actuarial Society of the Philippines.

C. Associates

Associates may identify themselves or be identified as Associates of the Actuarial Society of the Philippines in any communication where there is certainty that intended recipient of the communication will be fully cognizant of the qualifications and limitations of an Associate of the Society. Under the same conditions, Associates may append to their names the designation A.A.S.P. or the title Associate, Actuarial Society of the Philippines.

An Associate is not entitled to vote.

C. Affiliate and Honorary Members

An Affiliate or Honorary Member is not entitled to vote.

PROCEDURE FOR ADMISSION OF AFFILIATES, ASSOCIATES AND FELLOWS

(Amended 2004)

A. An individual seeking admittance into the ASP shall:

1. Submit to the ASP Secretariat the following:

   a) Personal Data Sheet (Form 1)
   b) Application for Membership (Form 2)
   c) 2" x 2" ID photo taken not more than 6 months prior to application

   Forms may be downloaded from www.actuary.org.ph or requested from the ASP Secretariat.

2. Make himself available to the ASP Membership Committee for interview.

B. After checking for completeness, the ASP Secretariat forwards the application to the ASP Membership Committee. The ASP Membership Committee shall commence processing the application and do the following:

1. Conduct a thorough investigation.
2. Determine that the applicant is of good character.
3. Ascertain that the applicant has reached the required age.
4. Ascertain that the applicant has earned the minimum required units of actuarially-related subjects.
5. Ascertain that the applicant has passed the minimum required examinations.
6. Ascertain that the applicant has met the minimum number of years of involvement in actuarial work in the Philippines.
7. Ascertain that the applicant has completed all the Admission Requirements prescribed by the Board.

C. Action by the Membership Committee shall be forwarded to the Board of Governors.

D. The Membership Committee shall:

1. If the application is rejected, notify the applicant in writing and the reason for rejection.
2. If application is approved by the Board,
   a. send out Membership Banns to request information, favorable or otherwise, on the applicant from the Members of the Society.
   b. If no adverse information were received, endorse the application to the General Membership in its regular meeting for action.

E. If the General Membership approves, the applicant shall:

1. Pay the required membership dues.
2. Take the membership oath during one of the general membership meetings.

F. For new Fellows, the ASP Secretariat shall issue the Certificate of Fellowship. The date of Membership shall be the later of the date of ratification by the General Membership or the date of payment of applicable membership fee.

GUIDELINES FOR RETENTION OF MEMBERSHIP

(Amended 2004)

To retain membership in the Society, the following conditions must be met:

1. He must be prompt in the payment of membership dues and/or other fees/assessments.
2. He shall conduct himself in accordance with the ASP Code of Conduct.
3. He must abide by the rules and regulations of ASP.
4. A member retains his membership while on leave of absence, provide:
   a) such leave of absence is so approved by the Board of Governors upon the endorsement of the Membership Committee; and
   b) conditions (1), (2) and (3) are met.

   Leave of absence is allowed only for members who will take a temporary foreign assignment or who will study abroad or other reasons acceptable to the Board of Governors.

TERMINATION OF MEMBERSHIP

(Amended 2004)

Membership in the Society shall cease:

1. By resignation of the member filed in writing with the Membership Committee and approved by the Board of Governors;
2. By death of the member; or
3. By termination by the Board of Governors for:
   a) delinquency in the payment of membership dues and/or other fees/assessments within the prescribed period.
   b) failure to conduct himself in accordance with the ASP Code of Conduct.
   c) commission of a criminal act.

REINSTATEMENT GUIDELINES

(Amended October 1998)

A. A former member seeking readmittance into the ASP shall:

1. Submit to the ASP Secretariat the following:
   a) Personal Data Sheet (Form 1)
   b) Application for Membership (Form 2)
   c) 2" x 2" ID photo taken not more than 6 months prior to application

   (Forms may be downloaded from www.actuary.org.ph or requested from the ASP Secretariat.)

2. Make himself available to the ASP Membership Committee for interview.

B. The Membership Committee shall conduct a review of the member's records to determine:

1. circumstances of the member's non-renewal of membership;
2. any unpaid dues and/or assessments/fees; and
3. if all the minimum requirements stipulated in the by-laws and prescribed by the Board of Governors are met.

C. The findings and recommendations of the Membership Committee shall be presented to the Board of Governors for action.

If, in the past, a former member has committed any criminal act or any act violating the Code of Conduct, the Board of Governors shall refer to his application to the PSRC for evaluation.

D. The Board shall act on the case and the Membership Committee shall:

1. If the application for readmission is rejected, notify the applicant in writing and the reason for rejection.
2. If application is approved by the Board, notify the applicant and request the applicant to pay the required membership dues and reinstatement fees.

E. The date of reinstatement shall be the later of the date of approval of the Board of Governors or the date of payment of reinstatement and applicable membership fee.

POLICY ON WAIVING MEMBERSHIP DUES

(Approved by the ASP Board on June 2018)

Context and Purpose

The Article 4.7-Membership Fees of the By Laws of the Actuarial Society of the Philippines states that –

> *"The Membership Committee may, subject to the terms and conditions that the Board may prescribe from time to time, waive or defer all or a portion of the fee for a Member who applies for such or deferral in case situations that the Board considers waiver or deferral appropriate."*

This Policy outlines the conditions and categories under which a full or partial waiver of Membership Dues may be granted to the members of the ASP. This Policy does not cover Exam Accreditation Fees. All necessary exam accreditation fees must be paid to comply with membership requirements.

This Policy shall serve the following objectives:

(1) To recognize the contribution of senior Fellows in the Society who have embodied excellence in the actuarial profession.

(2) To motivate and encourage senior Fellows to participate in the ASP activities.

(3) To give support to government institutions for them to attract and retain actuarial talents.

Members on a partial or full waiver of membership dues must still comply with annual Continuing Education Program (CEP) requirements.

It is the Member's responsibility to inform the Secretariat of their intention to apply, continue or cease their request for the waiver of dues. Applications and renewals for waiver must be received by the ASP Secretariat no later than February 1 for the calendar year subject to confirmation of the Membership Committee on or before March 1. The Application for waiver is shown in Annex A.

Scope

This Policy applies to new applicants and members of the ASP.

Criteria

Applicants may be eligible for full or partial waiver of membership dues <u>under one of the following categories</u>, provided the criteria is met by March 1.

Category 1 – Retirement: A waiver of dues may be granted to <u>Fellows</u> who have been members in good standing for at least 10 years preceding the date of application, under one of the following conditions:

(a) Has reached the age of 65 years. 50% waiver of Fellow Membership dues may be granted.

(b) Has reached the age of 70 years. 100% waiver of Fellow Membership dues may be granted.

Annual confirmation of employment status is not required.

Category 2 – Government Employee: Full-time actuarial employee of Philippine government institutions that do not support membership fees to its professional employees. 100% of the membership fee for the current membership year will be waived.

The additional conditions under this category are:

(a) Philippine government institutions include but not limited to Insurance Commission (IC), Social Security System (SSS), Government Service Insurance System (GSIS), National Statistics Office (NSO), Securities and Exchange (SEC) and Philippine Health Insurance Corporation (PhilHealth). Additional government institutions can be covered subject to ASP Board approval.

(b) Annual confirmation of employment status is required.

(c) Only up to a maximum of 2 members of at least an Associate designation, for each government institution will be waived. The annual application must be endorsed by the Head of the Actuarial or Finance section.

(d) The government employee must have at least 3 full years of continuous service with the same government institution.

(e) If a government employee member resigns, the member needs to notify the ASP within 30 days from resignation. The current year dues become payable on a proportional basis to keep the member's status in good standing. If no payment is received by the ASP within one month from resignation, the membership will be terminated coinciding with the member's effective date of resignation.

Transition

The current Fellows enjoying on either a partial or full waiver of membership dues before the effectivity of this Policy will be grandfathered, i.e. not subject under the new Policy. These Fellows will continue to enjoy the discount notwithstanding the 10-year membership requirement for the waived membership dues.

ANNEX A -

Application for Waiver of Membership Dues

For Government Employee Discount

Membership Year Applied: ___________________ Membership Applied*:______Associate______Fellow

Name:

____

Name of Employer (Government Institution): ____

Designation:____ Date of Hire: _______________________

Responsibilities:

____

____

____

I confirm that my employer does not have a Policy with respect to paying the annual membership fees of its professional employees.

I understand that I have the responsibility to inform the ASP within one month of resignation from my employer. The current year membership dues become payable on a proportional basis to keep my membership status in good standing. If no payment is received by the ASP within one month from my resignation, my membership status will be terminated coinciding the date of my resignation.

_________________________________ ____

Applicant's signature over printed name Signature over printed name (Head of Actuarial/Finance Div)

ASP allows only up to maximum of two (2) members of at least an Associate designation to avail the 100% Waiver of Membership Dues.

EQUIVALENCY RULES ON ELIGIBILITY OF FELLOWS OF FOREIGN ACTUARIAL ASSOCIATIONS FOR MEMBERSHIP IN ASP

(by 2016 Education and Eligibility Council)

A Fellow of:

- the Society of Actuaries (SoA), and/or
- the Institute and Faculty of Actuaries (IfoA), and/or
- the Institute of Actuaries of Australia (IAAust), and/or
- the Canadian Institute of Actuaries (CIA), and/or
- the Casualty Actuarial Society (CAS)

may apply and qualify for Associateship in the ASP, provided that:

a. He attained Fellowship in his association/s by examination/exemption and not in recognition of membership of another actuarial association;
b. He is currently a member in good standing of his association/s;
c. He has satisfied the continuing education/ professional development requirements of his association/s for the last two (2) years;
d. He has completed the Associateship Admission Session (AAS) of the ASP, or has attended a similar course;
e. He has paid the corresponding ASP dues; and
f. He has taken his oath of membership during an ASP General Membership Meeting.

Once accepted as ASP Associate, he must complete all the requirements to attain ASP Fellowship in accordance with the prevailing qualification rules.

RATIONALE

1. The current ASP examination system is designed to align with the available examinations offered by the SoA and the CAS that will ensure the candidates' expertise on the relevant actuarial topics/ principles, but at the same time testing on the regulation and practices of the local life insurance, non-life insurance, social insurance, pre-need, retirement and health care industries.

   The IfoA, IAAust, CIA and CAS are all internationally-recognized actuarial associations whose education and examination requirements are also very similar/ aligned with that of SoA. In fact, the SoA currently has Mutual Recognition Agreements (MRAs) with both the IfoA and the IAAust, under which the SoA waives examinations and admits to Fellowship Fellows of IfoA and IAAust who meet certain minimum requirements.

2. The ASP currently does not have an MRA with any of these actuarial associations. As such, ASP may admit their Fellows only to Associateship because while they may already have the technical knowledge and the relevant experience derived from actual practice in their own country or other countries, they still may lack familiarity with local laws, rules and regulations and with the overall business practice in the Philippines which are required for effective local actuarial practice.

3. Fellows of these foreign associations who passed under an old syllabus which is not consistent with the ASP's current syllabus may still qualify provided they meet their respective associations' requirements for continuing education/professional development at least for the last 2 years. The continuing education/professional development program of an actuarial association promotes life-long learning and ensures that an association's actuaries are kept up to date with the more recent technical knowledge and trends in the actuarial field.

CONTINUING EDUCATION PROGRAM (CEP)

(Effective January 1, 2006; Amended in 2016, until revised)

(As endorsed by the ASP Board of Governors, and ratified by the General Membership during the 4th Quarterly General Membership Meeting, during the 46th Annual Convention held in Tagbilaran City, Bohol last November 17-18, 2005)

Minimum Number of Required CEP credit points is based on the average earned points during two (2) calendar years on a rolling basis:

For members who have been ASP Fellows for less than 25 years	18 points, 10 of which are earned from core actuarial sessions
For members who have been ASP Fellows for at least 25 years	12 points, 10 of which are earned from core actuarial sessions
For Associates and Affiliates	18 points, 10 of which are earned from core actuarial sessions

Affiliates and Associates who meet the required credit points will be entitled to membership fee discounts in the calendar year following the period for which such were earned. Fellows who will meet the required credit points will be included in the List of Fellows in Good Standing Recommended for Accreditation to the regulatory bodies.

Credit points shall be earned during a period of two (2) calendar years, on a rolling basis. For accreditation starting in 2019, credit points earned during 2017-2018 shall apply.

At least 50% of the credit points will have to come from formal activities as defined by the Society. Proof of Informal Activities should be submitted to the Membership Committee for proper evaluation and approval. The attached table shows examples of Formal and Informal activities. The member is requested to keep proofs or records of attendance in any activity for at least one year.

Any Fellow who fails to satisfy the required credit points may cover the deficiency in the succeeding 2-year period. Such credited points, however, will no longer be counted to satisfy the required credits for the succeeding rolling 2-year period. Upon satisfaction of the deficit, the concerned Fellow may request for a special certification to any regulatory body upon payment of an accreditation fee equivalent to 50% of the applicable annual membership fee.

CEP credit points for ASP Committee Work are to be assigned by the Committee Chairmen, with approval by their Governors-in-charge. The Chairmen are requested to submit to the ASP Secretary not later than October of each year, for proper recording.

These guidelines are to be posted at www.actuary.org.ph. Please check the website for updates.

FOR INQUIRIES: Contact the ASP Secretariat or the ASP Membership Committee at actuarial@pldtdsl.net.

Continuing Education Program (CEP)

	Formal Activities	Credit Points	
1	Serve as an examiner in the ASP Examination	10	Per exam. The assumption is an average of two examiners for a half-day (6 hour) exam.
2	Prepare Study Notes	Max 6	
3	Attend Convention of the ASP or IAA Member Association - sessions on core actuarial applications, per paper/session - other eligible sessions, per paper/session	2 1	Min. 45 minutes, else pro-rata Min. 45 minutes, else pro-rata
4	Teach an Actuarial Subject in Graduate or Undergraduate Studies, per topic	Max 6	2 points per unit, each unit is 20 hours of teaching
5	Attend Actuarial Seminar or Workshop - sessions on core actuarial applications, per half-day or per paper/session - other eligible sessions, per half-day or per paper/session	2 1	Min. 45 minutes, else pro-rata Min. 45 minutes, else pro-rata
6	Prepare Case Study for the Fellowship Admission Session	Max 4	Points to be determined by the PSRC Chairman
7	Attend Seminar or Workshop for Professional Ethics for Actuaries	4	Assumes a four-hour session
8	Serve as Seminar Speaker on any Actuarial Subject, per session	4	Assumes 45 to 80 minute session
9	Write Technical Paper for Publication - in the ASP newsletter or any journal, newspaper or newsletter - presented in the ASP Convention or convention of IAA member association	4 6	
10	Pass an Examination given by the ASP or IAA Member Association	Max 4	1 per hour of exam, max is per exam
11	Pass a Graduate Subject in Actuarial Science	Max 3	1 per Unit, max is per course
12	Attend a General Membership Meeting of ASP or IAA Member Association - with session on core actuarial applications, - with other eligible session, per session	2 1	Min. 45 minutes, else pro-rata Min 45 minutes, else pro-rata
13	Active Member of an ASP Committee engaged in: - Technical Work - Non-technical work	Max 3 Max 1	As recommended by Committee Chairman.
14	Serve as Lecturer in an ASP Exam Review Session, per session	2	For each 2 to 4 hours session, maximum of 8 points

15	Attend and Pass all the requirements of the Insurance Institute for Asia and the Pacific for the Basic Non-Life (BNL) Course	20	
16	Attend Insurance Summits or Conventions of local Non-Life Organizations, including but not limited to PIRA convention - on core non-life insurance or actuarial sessions - on other eligible topics	 2 1	 Per paper or per half-day session Per paper or per half-day session
17	Attend other regional insurance dialogues or conventions of non-life organizations from other countries- - on core non-life insurance or actuarial sessions - on other eligible topics.	 2 1	 Per paper or per half-day session Per paper or per half-day session
18	Attend non-life insurance forums, seminars or workshops, relating to non-life actuarial practice or other non-life topics - on core non-life insurance or actuarial sessions - on other eligible topics.	 2 1	 Per paper or per half-day session Per paper or per half-day session
	INFORMAL ACTIVITIES		
1	Private Reading on subject matter on Actuarial Application	1	
2	Passing LOMA Exam in subject matter on Actuarial Application	1	
3	Listening to recorded tapes of the Actuarial Seminars	1	

SECTION IV: ACTUARIAL PRINCIPLES, GUIDELINES AND STANDARDS OF ACTUARIAL PRACTICE

PROCESS FOR ADOPTING ACTUARIAL STANDARDS OF PRACTICE

Professional Standards and Review Council (PSRC)
Actuarial Society of the Philippines
(2018)

CONTENTS

I. Standards Development

A. General Process

The PSRC has established a process for the development of Actuarial Standards of Practice. This process is subject to changes at the discretion of the PSRC and approval of the Board. The process generally involves the following:

1) Preparation of a proposal for a new or amended for the new standard including a summary or synopsis of the major issues that the proposed standard will address to be reviewed and approved by PSRC. The standing committee will endorse to the Board for approval. Then, if the proposal is approved by the Board;

2) Preparation of a proposed exposure draft or drafts to be reviewed and approved by PSRC. Standing Committee will endorse such draft to the Board for exposure approval, Then, if the exposure draft is approved by the Board;

3) Release of the exposure draft to the actuarial community for comment and possible discussion through a Fellow's Forum. Then;

4) Preparation of a proposed final standard, which reflects comments received on the exposure draft and which is subject to further review, editing, and adoption or direction to re-expose the proposed standard for further comment and discussion before preparation and adoption of a final standard.

It is generally the responsibility of the chair of the Standing Committee to present a proposal, summary, exposure draft, or a final standard for review by both PSRC and Board, and to assist in the discussion thereof. Other members of the Standing Committee, task force or the PSRC may be asked by the Standing Committee chair to be the presenter or to assist in the discussion. A Standing Committee may also request the PSRC to review a draft at any stage during the development of a standard.

Guidance Notes can be viewed as an addendum or extension of an Actuarial Standard, or, an elaboration or clarification pertaining to an area of actuarial practice. Guidance Notes that contain principles and interpretations that require compliance from all members of the ASP shall follow this same actuarial standard adoption process.

The development of an actuarial standard can be a complex process. PSRC may participate throughout the development process and help ensure that the PSRC's procedures are followed, preferred formats are used, and language is consistent with other standards of practice.

B. Standing Committees

The Standing Committees are created and appointed by the ASP Board and may include the following:

1) Life Insurance Committee
2) Non-Life Insurance Committee
3) Social Insurance Committee
4) Retirement or Employee Benefit Committee

5) Preneed Committee
6) Health Insurance Committee

The Standing Committee shall be responsible in drafting and proposing actuarial standardsaffecting its respective committee. However, the PSRC may recommend to the ASP Board and any of its Standing Committee, the task of updating or studying possible changes in actuarial standards of practice.

From time to time, the PSRC may recommend to the Board the establishment of working committees or task forces as it deems appropriate to address special topics. A task force is generally established to address a particular issue, such as drafting an official interpretation of an existing standard, or drafting a new actuarial standard, or monitoring an emerging area of practice. A task force is dissolved after completing its task.

C. PSRC Liaison with Committees

The PSRC will appoint two or more of its members to serve as liaisons to each standing committee engaged in drafting an actuarial standard or any project that requires review of the PSRC. One of the PSRC members will serve as the primary liaison and have primary responsibility for carrying out the liaison role. The principal role of the liaison is to provide each standing committee chair with guidance with respect to PSRC procedures. Another role is to monitor the activities of the standing committee and to report on such activities to the PSRC. (See Appendix I for committee liaison job description.)

Liaison appointments are one-year assignments, but a member may be reappointed without limitation. A liaison may be appointed by the PSRC to any other committee or task force as it deems necessary.

D. Proposals for Standards

Each Standing Committee will regularly review standards assigned to their committee for continued appropriateness, and also review practices in its area to determine if a new standard may be required. The PSRC may also request a Standing Committee to investigate a particular area for possible development or modification of a standard.

Before beginning to develop a standard, the Standing Committee will generally submit to the PSRC for review, before endorsing to the Board, a proposal for a standard (see Appendix III), including: a description of the subject of the proposed new standard; an explanation of why a standard is needed; a description of the urgency, if any, associated with the project; a description of the possible effect the proposed standard may have on other standards; a proposed timetable for completion of the standard; and a description of any issues on which the PSRC should offer guidance to the committee. Outside organizations and individuals may also submit proposals for standards to the Standing Committee. The Standing Committee may proceed with the drafting of the new standard upon approval of the Board.

E. Solicitation of Input

The committee or task force developing a proposed standard is encouraged to seek a wide range of ideas and views on the subject, including input from non-committee members. In order to provide members with an opportunity to give input early in the process, a summary of an actuarial standard under development, as approved by the PSRC, may be distributed with an invitation to comment. The committee or task force may also wish to consider making a presentation concerning the proposed standard in an appropriate forum. The committee or task force may distribute a draft of the proposed standard as part of the presentation with the prior approval of both the Board and the PSRC. Discussion drafts should have the following heading on each page: "Discussion Draft – Not Approved or Adopted by the PSRC."

F. General Considerations

The primary purpose of a standard is to provide guidance to the actuary. It is, therefore, important that the standard be clear, concise, and thorough in describing the actuary's responsibilities. Standards should avoid unnecessary wordiness and repetition. Each new concept typically should get its own section, and it may be helpful to provide transition between the sections to make the text easier to read and more comprehensible.

In general, cross-references to other standards are discouraged, in part because they may suggest that only standards that are specifically cross-referenced apply when that may not be the case. If cross-references are used, it is typically to offer more specific guidance on a topic that is addressed more generally in the standard.

II. Exposure Drafts

A. Request for Exposure

1. If a Standing Committee or a task force has established to develop a proposed standard, upon completing its work on the proposed exposure draft, the Standing Committee or task force will determine, by two-thirds affirmative vote whether or not to forward the proposed exposure draft to the PSRC. The PSRC will review the proposed exposure draft. The PSRC may return the proposed exposure draft to the committee or task force to be revised, or take over further responsibility for completion of the proposed exposure draft.

2. The Standing Committee will present the proposed exposure draft to the PSRC with a request that the PSRC review and approve for the Standing Committee to endorse to the Board for approval. The standing committee should submit with the proposed exposure draft any background material appropriate to aid the PSRC in its review of the text, including a description of the project, identification of controversial issues (including any dissenting views), and a discussion of the Standing Committee's concerns, if any. When appropriate, the reasoning for any negative vote(s) should also be included.

3. The Standing Committee should complete its internal voting process and have the proposed exposure draft ready for review by the PSRC at least four weeks prior to the PSRC meeting at which the standing committee intends to present the proposed exposure draft.

4. All proposed standards that are to be considered for eventual adoption must undergo the exposure process of these procedures.

B. Format of Exposure Drafts

The PSRC has adopted a specific format for use by the standing committees in submitting proposed exposure drafts for approval. (See Appendix II).

C. PSRC Action

The PSRC reserves the right to return it to the Standing Committee with appropriate comment or direction (possibly including direction to terminate work on the project), or to make changes in the wording of the proposed standard and expose it upon securing the Board's approval. In performing its review of the proposed exposure draft, the PSRC will generally seek the guidance of a representative of the standing committee submitting the draft. The PSRC may appoint a review committee (generally including the PSRC liaison(s) to the standing committee submitting the draft and the committee representative presenting the draft) to assure, through appropriate post-meeting review, that the final exposure draft properly reflects the PSRC's intent.

D. Alternative Language

An exposure draft may contain alternative wording to solicit views of the membership. If alternative wording is included in an exposure draft, the fact of its inclusion should be highlighted in the transmittal memorandum accompanying the exposure draft. However, final standards cannot contain such alternative wording.

E. Minority Opinions

An exposure draft that is not unanimously approved by the PSRC, Board or the Standing Committee will contain appropriate recognition of the minority opinion, if determined appropriate by the PSRC. If minority opinions are expressed, they should contain a clear explanation of the reason for the opinion, and will be included in the transmittal memorandum accompanying the exposure draft.

F. Distribution of Exposure Draft

The Board-approved exposure draft will be posted on the ASP website and also announced by the ASP Secretariat to the membership via a blast email as soon as practicable.

The exposure draft may also be posted on other appropriate websites as determined by the Standing Committee.

III. Exposure Process

A. Deadline for Comment Letters

The deadline for comment letters is normally sixty to ninety days after the actual distribution date, unless the PSRC specifies a different date. A minimum of thirty days must be permitted under all circumstances.

B. Processing of Comments Letters

1. All comment letters concerning an exposure draft are to be sent to the Standing Committee or to the ASP Secretariat's e-mail address. The ASP will not accept anonymous comments. A file of all comment letters and e-mails is maintained in the ASP office until the final standard is adopted or the PSRC and Board determine not to adopt a proposed standard and withdraw the exposure draft. The Standing Committee distributes summary of comment letters to the PSRC and Board.

2. Oral comments will not be processed until they are received in writing by the Standing Committee or are sent specifically to the ASP Secretariat's e-mail address.

C. Communication with Commentators

1. The Standing Committee will send each individual submitting a comment an acknowledgment receipt.

2. All comments received by the comment deadline will be given due and impartial consideration by the Standing Committee or task force. Further communication with commentators to seek clarification, elaboration, establishment of common ground, etc., may occur at the discretion of the chair of the Standing Committee or task force.

3. A summary of the major issues discussed in the comments received, and the drafting group's responses to such, are printed in the last appendix to the final standard, or a subsequent exposure draft, if an additional exposure is deemed necessary.

D. Fellows Forum

1. A Fellows Forum may be conducted to facilitate discussions of a proposed standard. Factors to be considered in deciding whether a fellows forum should be held include the following:

   a) the complexity of the proposed standard;
   b) the anticipated level of controversy;
   c) the significance to the profession of the guidance contained in the proposed standard; and
   d) other relevant considerations, if any.

2. Arrangements for a Fellows Forum will be made by the Standing Committee

3. Fellows may be permitted to speak during the forum after all scheduled speakers, at the discretion of the appointed moderator.
4. The moderator may establish time limits for any or all speakers. Time will be allowed for questions and answers if practicable.
5. Fellows forum should be, as much as possible, tape recorded

E. Second (or Later) Exposure Draft

When comments received on an exposure draft have been analyzed, the Standing Committee or task force, or the PSRC itself, may determine that it would be appropriate to have a second (or later) exposure draft, or a second (or later) Fellow's Forum. This will generally occur when the Standing Committee or task force or the PSRC deems that more input from the profession is desirable.

IV. Standards Adoption

A. Request for Adoption

1. The Standing Committee, after a proposed standard has been exposed and comments considered, will prepare a proposed final standard. The standing committee or task force will then determine by affirmative majority vote whether to forward the proposed final standard to the PSRC. The PSRC will review the proposed final standard. The PSRC may return the proposed final standard to the standing committee or task force to be revised, or take over further responsibility for completion of the proposed final standard.

2. After reviewing, or itself preparing, the proposed final standard, the standing committee will determine by affirmative two-thirds majority vote whether to request the PSRC's endorsement to the Board of the proposed final standard. If at least two-thirds of the members of the standing committee vote in the affirmative, the standing committee will present the proposed final standard to the PSRC with a request that the PSRC endorse the final standard to the Board for approval. Any minority opinion within the committee should also be presented to the PSRC.

3. The Standing Committee should complete the voting process and have the proposed final standard ready for review four weeks prior to the PSRC meeting at which the standing committee hopes to present the proposed final standard.

4. By a majority vote, the PSRC may request that the Standing Committee submit a draft of a standard under development for the PSRC's review and possible action, even though the standing committee did not vote to submit the proposed standard for the PSRC's review.

B. Report from the Standing Committee

To be considered for adoption, a proposed final standard must be accompanied by a written report from Standing Committee advising the PSRC that (1) the proposed final standard has been prepared in accordance with PSRC procedural requirements; (2) it does not appear to pose any significant threat of violating laws. The report should also contain a discussion of the minority view in case the proposed standard was not unanimously approved for submission to the PSRC.

The proposed draft for adoption should follow the format specified in Appendix III.

C. Standing Committee Action

The Standing Committee must approve the submission of a final draft to the PSRC by a two-thirds majority vote. The committee should consider any issues raised, if deemed appropriate, modify the draft to address all concerns before submitting the draft to the PSRC.

D. PSRC Action

The PSRC reserves the right to endorse to the Board the proposed standard for adoption, to return it to the Standing Committee with appropriate comment or direction, or to make changes in the wording of the proposed final standard. In performing its review of the proposed final standard, the PSRC will generally seek the guidance of a representative of the standing committee submitting the proposed standard. The PSRC may appoint a review committee (generally including the PSRC liaison(s) to the standing committee submitting the proposed standard and the committee representative presenting the proposed standard) to assure through post-meeting review (and, as necessary, by making minor changes to the draft) that the final standard properly reflects the PSRC's intent.

A proposed final standard will not be released to the membership as a final standard until endorsed by PSRC and approved by the Board.

E. Minority Opinions

A final standard that is not unanimously approved by the PSRC will contain appropriate recognition of a PSRC member's minority views, if requested by a PSRC member and if determined appropriate by the PSRC. If minority opinions are expressed, they should contain a clear explanation of the reason for the dissent, and will be included in the transmittal memorandum accompanying the final standard.

F. Distribution of Final Standard

The final standard will be posted on the ASP website and also announced by the ASP Secretariat to the general membership via a blast email as soon as practicable. The final standard may also be posted on other appropriate websites as determined by the PSRC.

G. Review of Newly Adopted Standards of Practice

If a petition is signed by at least 10% of the Fellows and delivered to the ASP President within ninety (90) days from adoption of newly adopted standards of practice by the PSRC, the Board shall review the Standards of Practice, as it deems appropriate. The review by the Board shall be completed within ninety (90) days after the receipt of such petition. Thereafter, the Board, upon receipt of a petition by at least 10% of the Fellows, may confirm, alter, or annul the

Standards of Practice, subject to ratification by two-thirds (2/3) of the Fellows present during a meeting wherein a quorum is present. In all cases, the Standards of Practice, as promulgated by the PSRC, shall remain in force from the date of adoption until revised as ratified by the Society. The Board shall notify the petitioners of the decision taken within a reasonable period of time.

V. Amendments to Existing Standards

A. Proposals for Amendments to Standards

From time to time, the PSRC may deem it appropriate to amend an existing ASP Standard. A proposal for an amendment must include a sufficient portion of the surrounding text to permit the reader to understand the nature and effect of the proposed amendment.

B. Procedure for Adoption of Amendments

Proposals for amendments to an ASP Standard will generally follow the same process as for new ASP Standard. After the proposed amendment has been exposed and adopted by the PSRC, the entire standard will be reissued.

C. Reformatting of Existing Standards

The reformatting of an ASP Standard without any change in the technical content of the ASOP does not necessarily require that the ASOP be re-exposed for comment. Whether the reformatted ASOP will be exposed for comment will be decided by the PSRC.

VI. Public Presentations and Articles

Statements, representations, and expressions of opinions or views made by any individual member of the Professions Standards and Review Council (PSRC), standing committees, subcommittees, task forces, or staff are attributable only to the speaker or author and should not be construed as representing the views of the PSRC or the ASP, unless the speaker or author has been expressly authorized by the PSRC or the ASP Board to express its views.

If such a member is speaking or writing as an individual, or on behalf of the member's principal, the member should make a clear statement such as the following, clearly indicating that the member is not speaking or writing on behalf of the PSRC or ASP.

"I am a member of the [description of speaker or writer's role, i.e., member of the PSRC, its standing committees, task forces]; however, any statements, representations, and expressions of opinions or views that I make are attributable only to me and should not be construed as representing the views of the PSRC nor the ASP."

If the member *has* been expressly designated to express the views of the PSRC, the member should make a statement such as the following:

"I am a member of the [description of speaker or writer's role, i.e., member of the PSRC, its operating committees, subcommittees, task forces] and have been expressly authorized by the PSRC or ASP to [speak/write] on its behalf with respect to the subject of this [presentation/article]."

APPENDIX I - *Liaison Job Description*

Each standing committee has a primary and secondary liaison from the PSRC. For the most part, the primary liaison will be the main point of contact with the standing committee.

The purpose of having liaisons is to facilitate communication between the committee and the PSRC, to ensure that the work of the committee is consistent with expectations of the PSRC, and to provide guidance to the committee chair with regards to the process. It is essential that the committee has a clear understanding of what the PSRC is expecting, the time frame in which the task is to be accomplished and the role that PSRC is to play in helping meet those expectations. It is also important for the committee to have an understanding of what to expect from the PSRC in terms of support and interaction. In addition, the PSRC liaison can serve as an active member of the committee.

To be effective, the liaisons must be active participants in the standing committee's activities. This means attending committee meetings in person or by conference call. In addition to enabling the liaisons to be an active participant in the deliberations of the committee, attendance by the liaisons shows support for the process. As active participants in committee discussions, the liaisons can also provide guidance to the committee or task force as to the expectations of the
PSRC and can provide background and education on the Standards process itself as needed.

However, in being active members, the liaisons should take care not to take on the responsibilities of the committee chair. Being active participants in the standing committee's activities also will present the opportunity for the liaisons to review drafts prepared by the committee and its task forces. In this role the liaisons not only have an opportunity to influence the document, but also have the responsibility, along with the chair, to make sure the work product meets the quality standards set by the PSRC.

The liaisons role as mentors will:
- Counsel the committee chair on the workings of committees.
- Support the committee or task force chair in the presentation of any document to the PSRC.
- Help the chair in the assessment and recruiting of suggested new committee members.
- Help the committee chair understand how the PSRC works.

APPENDIX II - Format for Standards of Practice

A proposed exposure draft or final standard must be submitted to the PSRC according to the PSRC Style Guidelines in the following format:

1) Cover page, title, and table of contents

   The cover page is printed with the ASP logo and states whether the document is an exposure draft or final standard. It sets out the title, the comment deadline (for exposure drafts), the name of the drafting committee that developed the standard, and the date that the PSRC approved it for exposure or adopted it.

   If the proposal is a revision of an earlier standard, that fact should appear on the cover. The title should indicate to what practice area(s) the standard applies. Further, if the standard is being issued to help actuaries comply with a particular law, regulation or accounting requirement, the title should indicate that fact.

2) Transmittal memorandum for exposure draft, which includes, at a minimum:

   a) title of the proposed standard;
   b) date when approved for exposure by the Board;
   c) proposed deadline for submitting comments;
   d) forwarding addresses for comments, including e-mail and postal addresses;
   e) brief discussion of the development and history of the proposed exposure draft;
   f) any specific questions or issues on which the PSRC and its standing committee would like readers to provide commentary; and
   g) names of standing committee members (with no organizational affiliations shown)
   h) Transmittal memorandum for final standard, which includes, at a minimum:

      a. title of the final standard;
      b. date when adopted by the PSRC and the effective date;
      c. brief discussion of the development, history and exposure process of the final standard;
      d. statement thanking commentators and summarizing comments as appropriate; and
      e. names of standing committee members, PSRC members and members of any subgroup or task force (with no organizational affiliations shown).

   i) Sections 1 – 4 of the proposed exposure draft or final standard of practice, which include:

   a. Section 1

      i) Section 1.1, Purpose, describes the purpose that the standard is intended to achieve. Generally, the purpose should be stated as providing guidance to actuaries in performing a particular professional assignment.
      ii) Section 1.2, Scope, identifies the actuaries to whom the standard applies. If appropriate, this section also addresses conflict with applicable law, regulation or other binding authority by indicating whether compliance with the law, regulation or other binding authority constitutes a deviation from the standard and whether any special disclosure is required in the case of such a conflict.
      iii) Section 1.3, Cross-References, sets forth the following text: “When this standard refers to the provisions of other documents, the reference includes the referenced documents

as they may be amended or restated in the future, and any successor to them, by whatever name called. If any amended or restated document differs materially from the originally referenced document, the actuary should consider the guidance in this standard to the extent it is applicable and appropriate."

iv) Section 1.4, Effective Date, sets the effective date for the standard. It should make clear to what work the standard applies (in other words, to work performed after a certain date, to opinions rendered on or after a certain date, or to work for which the actuary is first engaged after a certain date). Exposure drafts should not set forth a particular date, but should contain a general statement that the standard will take effect four months (or more, if appropriate) after adoption by the PSRC.

b. Section 2 – Definitions

This section always begins with the sentence, "The terms below are defined for use in this actuarial standard of practice." This makes clear that the standard is a stand-alone document, and that the definitions in one standard do not necessarily apply to another.

Definitions in existing standards should be used wherever possible to minimize inconsistencies between actuarial standards of practice. All the important terms should be defined in this section, whether commonly understood by actuaries or not. Definitions should not be embedded in Sections 3 and 4 of the standard. Usually, it is particularly beneficial to define specialized terms of art or terms that are used differently than might otherwise be commonly understood. Any should be used consistently throughout the standard.

c. Section 3 – Analysis of issues and recommended practices/recommended compliance

This section sets forth specific guidance for an actuary with respect to practice covered by the standard. The guidance takes the form of "the actuary should" statements. The standard should not include purely educational material. Section 3 may also address problems arising from limited information, time constraints, and other challenges practitioners may face.

The standard should state the actuary's obligations as clearly as possible, avoid imposing unreasonable burdens upon the actuary or making the actuary responsible for things that are generally outside the actuary's authority, and avoid placing unreasonable restraints on the actuary's freedom to practice.

d. Section 4 – Communications and disclosures, including the deviation clause.

This section describes any documentation, disclosures and communications that the actuary should make with respect to the work performed under the standard.

j) Appendices, which include:

i) background and current practices; and,
ii) for final standards and for second or later exposure drafts, a summary of the major issues discussed in the comment letters received in response to the prior exposure draft, and the drafting committee's responses to such. Such a summary should include the extent to which such comments were incorporated and the rationale therefore. Such analysis should be general in nature and should preserve the confidentiality of each commentator.
iii) A bibliography or educational material may also be included if appropriate, as well as any other appropriate documentation.

APPENDIX III - Proposal Form for New or Revised Actuarial Standard of Practice

TO: Professional Standards and Review Council

FROM: [name of committee or task force]

DATE:

SUBJECT: [Description of Proposed Standard and affected practice area]

Contents of the Memorandum could include answers to the following questions:

1) What is the rationale for the drafting the proposed standard?
2) Who will develop the standard if the PSRC and Board approve this proposal?
3) Why is there a need for this standard?
4) What is the scope of the standard and to which actuaries or practice area(s) the standard would apply?
5) What is the Schedule of Proposed Timetable?

   Exposure Draft:
   Comment Deadline:
   Final:

6) What effects might this standard have on other standards?
7) Should the subject of this standard be handled as a multi-disciplinary project, i.e., should more than one committee participate in the drafting and review process?
8) Are there any specific issues on which you want PSRC comments or guidance?
9) To help gather information for this standard, are there any questions or issues you would put to practitioners?

GENERAL ACTUARIAL PRACTICE

Standard of Actuarial Practice 1
In Relation to

General Actuarial Practice

(Adopted 15 November 2019)

CONTENTS

Section 1. General

1.1. Purpose – This Standard of Actuarial Practice in relation to general actuarial practice provides guidance to members when performing actuarial services to give intended users confidence that

1.1.1 Actuarial services are carried out professionally and with due care;

1.1.2 The results are relevant to their needs, are presented clearly and understandably, and are complete; and

1.1.3 The assumptions and methodology (including, but not limited to, models and modelling techniques) used are disclosed appropriately.

1.2. Scope

1.2.1. This Standard of Actuarial Practice is a general standard. It applies to all actuarialservices performed by a member unless an element of guidance is explicitly superseded by another standard that the Society has officially issued or adopted, or by law.

1.2.2. Where the Society has officially issued or adopted standards of actuarial practice applicable to the particular field for which a member's services were engaged, the member shall apply such standards, and take into account the related guidelines issued orendorsed by the Society.

1.3. Compliance - A member may fail to follow the guidance in a standard of actuarialpractice but still comply with it where the member:

1.3.1. Complies with requirements of law that conflict with the standard of actuarialpractice;

1.3.2. Complies with requirements of the actuarial code of professional conductapplicable to the work that conflict with the standard of actuarial practice; or

1.3.3. Departs from the guidance in the standard of actuarial practice and provides, in every report to which it is relevant, an appropriate statement with respect to the nature, rationale, and effect of any such departure if the guidance is expressed as "should". If theguidance is expressed as "must", the member may not depart from it unless paragraph 1.3.1. or paragraph 1.3.2. applies.

1.4. Applicability – This Standard of Actuarial Practice provides guidance to members on general actuarial practice when performing actuarial services. Compliance with this Standard ofActuarial Practice is a prerequisite to compliance with all other standards of actuarial practice issued or adopted by the Society. A member who is performing these actuarial services may be acting in one of several capacities such as an employee, management, director, external adviser,auditor, or supervisory authority.

1.4.1. The application of this Standard of Actuarial Practice is clear when a single consulting member is performing actuarial services for a client who is not affiliated withthe member.

1.4.2. When a team is performing actuarial services, most paragraphs of this Standard of Actuarial Practice apply to every member on the team. However, requirements in some paragraphs need not be met by every member on the team personally (e.g., 2.1.1.). In the case of such paragraphs, each member on the team should identify, if relevant to that member's work, which member of the team is responsible for complying with such requirements and be satisfied that the other team member accepts that responsibility.

1.4.3. When a team is performing actuarial services, the team leader takes overall responsibility for the team's work product. A member who is not the team leader (and hence does not control the team's work product) should treat the team leader as the userand interpret this Standard of Actuarial Practice within that context.

1.4.4. If a member is performing actuarial services for an affiliated party (either individually or as a member of a team), the member should interpret this Standard of Actuarial Practice in the context of practices that apply normally within or in relation to the affiliated party, except that, if there are substantive inconsistencies between these practices and this Standard of Actuarial Practice, the member should endeavor to observethe spirit and intent of this Standard of Actuarial Practice as fully as possible.

a. The member should consider the expectations of the principal. These expectationsmight suggest that it may be appropriate to omit some of the otherwise required content in a report. However, limiting the content of a report may not be appropriate if that reportor the findings in that report may receive broad distribution.

b. If the member believes circumstances are such that including certain content in a report is not necessary or appropriate, the member should be prepared (if challenged by aprofessional actuarial body with jurisdiction over the actuarial services) to describe thesecircumstances and provide the rationale for limiting the content of that report.

1.5. Reasonable Judgement – The member should exercise reasonable judgment in applyingany standard of actuarial practice issued or adopted by the Society.

1.5.1. A judgment is reasonable if it takes into account:

a. The spirit and intent of the standards of actuarial practice;
b. The type of assignment; and
c. Appropriate constraints on time and resources.

1.5.2. Nothing in a standard of actuarial practice should be interpreted as requiring workto be performed that is not proportionate to the scope of the decision or the assignment towhich it relates and the benefit that intended users would be expected to obtain from the work (Principle of Proportionality).

1.5.3. Any judgment required by the standard of actuarial practice (including implicit judgment) is intended to be the member's professional judgment unless otherwise stated.

1.6. Language

1.6.1. Some of the language used in all standards of actuarial practice issued or adoptedby the Society is intended to be interpreted in a very specific way in the context of a decision of the member. In particular, the following words are to be understood to have the meanings indicated:

a. "Must" or "will" means that the indicated action is mandatory and failure to follow the indicated action will constitute a failure to comply with the standard of actuarial practice, unless the departure is due to a conflict with law (1.3.1.) or code ofprofessional conduct (1.3.2.).

b. “Should” or “shall” means that, under normal circumstances, the member is expected to follow the indicated action, unless the departure is due to a conflict with law (1.3.1.) or code of professional conduct (1.3.2.). However, in all other cases, if followingthe indicated action would produce a result that would be inappropriate or would potentially mislead the intended users of the actuarial services, the member should departfrom the guidance and disclose that fact and provide the reason for not following the indicated action as described in paragraph 1.3.3.

c. “May” means that the indicated action is not required, nor even necessarily expected, but in certain circumstances is an appropriate activity, possibly among other alternatives. Note that “might” is not used as a synonym for “may”, but rather with its normal meaning.

d. “Any” (as in e.g. “any report”) means all such items if they exist, while acknowledging they may not exist. Such a reference does not give rise to a requirement to create such an item.

1.6.2. This Standard of Actuarial Practice uses various terms whose specific meaningsare defined in the Glossary. These terms are highlighted in the text with a dashed underscore (e.g., member).

1.7. Cross-References – When a standard of actuarial practice refers to the content of anotherdocument, the reference relates to the referenced document as it is effective on the adoption date as shown on the cover page of the standard of actuarial practice. If the referenced document is amended or restated after the adoption date of the standard of actuarial practice, the member must consider the extent to which the guidance in the standard of actuarial practice is still applicable and appropriate.

1.8. Effective Date – This Standard of Actuarial Practice is effective for actuarial servicesperformed on or after [Adoption Date].

Section 2. Appropriate Practices

2.1. Acceptance of Assignment

2.1.1 When providing actuarial services, the member should confirm with the principal the nature and scope of actuarial services to be provided, including:

a. The role of the principal;
b. Any limitations or constraints on the member;
c. Any requirements that the member is required to satisfy;
d. Identification of the schedule and expected cost or resources needed (especially if they are substantial); and
e. The information needed to be communicated to and by the member, especially ifit is sensitive or confidential.

2.1.2 In accepting an assignment for actuarial services, the member shall:

a. Be qualified under the Society's By Laws and Code of Conduct to perform theservices, or become qualified before the services are delivered;

b. Be satisfied that the assignment can be performed under the applicable code ofprofessional conduct; and

c. Have reasonable assurance of time, resources, access to relevant employees andother relevant parties, access to documentation and information, and the right of the member to communicate information, as may be necessary for the work.

2.2 Knowledge of Relevant Circumstances – The member should have or obtain sufficient knowledge and understanding of the data and other information available, including the relevant history, processes, nature of the business operations, law, and business environment of the subject of the actuarial services, to be appropriately prepared to perform the actuarial services required by the assignment.

2.3 Reliance on Others – The member may use information prepared by another party. This information may include data, opinions of other professionals, and supporting analyses (but excludes assumptions and methodology). The member may select the party and information on which to rely, or may be given the information by the principal. The member may take responsibility for such information, or the member may state that reliance has been placed upon the source of this information and disclaim responsibility.

2.3.1 If the member selects the party on whom to rely, the member should consider thefollowing:

a. The other party's qualifications;

b. The other party's competence, integrity, and objectivity;

c. The other party's awareness of how the information is expected to be used;

d. Discussions and correspondence between the member and the other party regarding any facts known to the member that are likely to have a material effect uponthe information used; and

e. The need to review the other party's supporting documentation.

2.3.2 If the member uses information prepared by another party without disclaimingresponsibility for that information, the member:

a. Should determine that the use of that information conforms to accepted actuarialpractice in the jurisdiction(s) of the member's services;

b. Should establish appropriate procedures for the management and review of theinformation that the member intends to use; and

c. Does not need to disclose the source of the information.

2.3.3 If the member states reliance on the information prepared by another party anddisclaims responsibility for it, the member should:

a. Disclose in any report that fact (including identifying the other party);

b. Disclose in any report the nature and extent of such reliance;

c. Examine the information for evident shortcomings;

d. When practicable, review the information for reasonableness and consistency; and

e. Disclose in any report the steps, if any, that the member took to determinewhether it was appropriate to rely on the information.

2.3.4 If the information was prepared by the other party under a different jurisdiction,the member should consider any differences in the law or accepted actuarial practice between the two jurisdictions and how that might affect the member's use of the information.

2.4 **Materiality** – In case of omissions, understatements, or overstatements, the member should assess whether the effect is material. If the effect of any of these is material, the membershould disclose this in any report to which it is relevant. The threshold of materiality under which the work is being conducted should be determined by the member unless it is imposed byanother party such as an auditor or the principal. When determining the threshold of materiality,the member should:

2.4.1 Assess materiality from the point of view of the intended user(s), recognizing thepurpose of the actuarial services; thus, an omission, understatement, or overstatement is material if the member expects it to affect significantly either the intended user's decision-making or the intended user's reasonable expectations;

2.4.2 Consider the actuarial services and the subject of those actuarial services; and

2.4.3 Consult with the principal if necessary.

2.5 Data Quality

2.5.1 Sufficient and Reliable Data – The member should consider whether sufficient and reliable data are available to perform the actuarial services. Data are sufficient if theyinclude the appropriate information for the work. Data are reliable if they are substantially accurate. If sufficient and reliable data are not available, then the member should follow the guidance in paragraph 2.5.5. below.

2.5.2 Data Validation – The member should take reasonable steps to review theconsistency, completeness, and accuracy of the data used. These might include:

a. Undertaking reconciliations against audited financial statements, trial balances, or other relevant records, if these are available;
b. Testing the data for reasonableness against external or independent data;
c. Testing the data for internal consistency and consistency with other relevant information; and
d. Comparing the data to those for a prior period or periods.

The member should describe this review in any report.

2.5.3 Sources of Data for Assumptions – To the extent possible and appropriate whensetting assumptions, the member should consider using data specific to the organization or the subject of the actuarial services. Where such data are not available, relevant, or sufficiently credible, the member should consider industry data, data from other comparable sources, population data, or other published data, adjusted as appropriate.The data used, and the adjustments made, should be described in any report.

2.5.4 Data Modification – The member should disclose any modification of data beforeits use (such as interpolation, extrapolation, adjustment, or discarding of outliers) in any report.

2.5.5 Deficiencies in Data – The member should consider the possible effect of any data deficiencies (such as inadequacy, inconsistency, incompleteness, inaccuracy, and unreasonableness) on the results of the work. If such deficiencies in the data are not likelyto materially affect the results, then the deficiencies need not be considered further. If the member cannot find a satisfactory way to resolve the deficiencies, then the member should consider whether to:

a. Decline to undertake or continue to perform the actuarial services;
b. Work with the principal to modify the actuarial services or obtain appropriate additional data or other information; or
c. Subject to compliance with the member's code of professional conduct, performthe actuarial services as well as possible, and disclose in any report the data deficiencies (including an indication of the potential impact of those data deficiencies).

2.6 Assumptions and Methodology

2.6.1 The assumptions and methodology may be

a. Set by the member (2.7.);
b. Prescribed by the principal or another party (2.8); or
c. Mandated by law (2.9.).

2.6.2 Where a report is silent about who set an assumption or methodology, the memberwho authored that report will be assumed to have taken responsibility for such assumption or methodology.

2.7 Assumptions and Methodology Set by Member – Where the member sets theassumptions and methodology, or the principal or another party sets an assumption or methodology that the member is willing to support:

2.7.1 Selection of Assumptions and Methodology – The member should select the assumptions and methodology that are appropriate for the work. The member should consider the needs of the intended users and the purpose of the actuarial services. In selecting assumptions and methodology, the member should consider the circumstancesof the organization, the subject of the actuarial services, and the assignment, as well as relevant industry and professional practices. The member should consider to what extentit is appropriate to adjust assumptions or methodology to compensate for known deficiencies in the available data. The member should consider to what extent it is appropriate to use assumptions or methodology if they have a known significant bias to underestimation or overestimation of the result.

2.7.2 Appropriateness of Assumptions – The member should consider the appropriateness of the assumptions underlying each component of the methodology used.Assumptions generally involve significant professional judgment as to the appropriateness of the methodology used and the parameters underlying the application of such methodology. Assumptions may (if permitted in the circumstances) be implicit orexplicit and may involve interpreting past data and other information or projecting futuretrends.

2.7.3 Margins for Adverse Deviations – In cases where unbiased calculations are not required, the member should consider to what extent it is appropriate to adjust the assumptions or methodology with margins for adverse deviations in order to allow for uncertainty in the underlying data and other information, assumptions, or methodology.The member should disclose any incorporation of margins for adverse deviations in assumptions or methodology in any report.

2.7.4 Discontinuities – The member should consider the effect of any discontinuities inexperience on assumptions or methodology. Discontinuities could result from:

a. Internal circumstances regarding the organization or subject of the actuarialservices such as changes in an insurer's claims processing or changes in the mix ofbusiness; or

b. External circumstances impacting the organization or subject of the actuarialservices such as changes in the legal, economic, legislative, regulatory, supervisory, demographic, technological, and social environments.

2.7.5 Individual Assumptions and Aggregate Assumptions – The member should assesswhether an assumption set is reasonable in the aggregate. While assumptions might be justifiable individually, it is possible that prudence or optimism in multiple assumptions will result in an aggregate assumption set that is no longer valid. If not valid, the membershould make appropriate adjustments to achieve a reasonable assumption set and final result.

2.7.6 Internal Consistency of Assumptions and Methodology – The member should determine if the assumptions and methodology used for different components of the workare materially consistent, and that any significant interdependencies are modelled appropriately. The member should disclose any material inconsistencies in any report.

2.7.7 Alternative Assumptions and Sensitivity Testing – The member should considerand address the sensitivity of each methodology to the effect of variations in key assumptions, when appropriate. In determining whether sensitivity has been appropriatelyaddressed, the member should take into account the purpose of the actuarial services and whether the results of the sensitivity tests reflect a reasonable range of variation in the key assumptions, consistent with that purpose.

2.8 Assumptions and Methodology Prescribed (other than by Law) – Where theassumptions or methodology are prescribed by the principal or another party:

2.8.1 If the member is willing to support the prescribed assumption or methodology(following paragraph 2.7. as applicable), the member may disclose the party who prescribed the assumption or methodology and the member's support in any report

2.8.2 If the member is unwilling to support the prescribed assumption or methodologybecause:

a. It significantly conflicts with what would be appropriate for the purpose of theactuarial services; or
b. The member has been unable to judge the appropriateness of the prescribed assumption or methodology without performing a substantial amount of additional workbeyond the scope of the assignment, or the member was not qualified to judge the appropriateness of the assumption;

then the member should disclose in any report that fact, the party who prescribed the assumption or methodology, and the reason why this party, rather than the member, setthe assumption or methodology.

2.8.3 When the principal requests an additional calculation using an assumption set which the member does not judge to be reasonable for the purpose of the actuarial services, the member may provide the principal with the results based on such assumptions. If those results are communicated to any party other than the principal, themember should disclose in any report the source of those assumptions and the member'sopinion of their appropriateness.

2.9 Assumptions and Methodology Mandated by Law – When an assumption or methodology is mandated by law, the member should disclose in any report that the assumptionor methodology was mandated by law and whether such assumption or methodology may limit the relevance of the work for other purposes.

2.10 Model Governance – For the purpose of this paragraph and subparagraphs i. and j. of paragraph 3.2.2. "using" includes selecting, developing, modifying, and running models. This paragraph applies to all models used when performing actuarial services which support decisionmaking. It provides guidance to members on appropriate model governance to manage the risksinherent in using a model. Model governance is important for all models, from those using simple spreadsheets to those including complex simulations. The level of governance should beproportionate to the risk to the intended users as a result of an incorrect conclusion being drawn from the results of the model.

The member involved in using models should:

2.10.1 Be satisfied that the model risks have been identified, assessed, and that there areappropriate actions to mitigate these risks such as adequate model validation, documentation, and process controls.

2.10.2 Be satisfied that an appropriate model validation has taken place. The modelvalidation includes assessments that:

a. The model reasonably fits its intended purpose. Items that the member should consider, if applicable, include the availability, granularity, and quality of data and inputsrequired by the models, the appropriateness of the relationships recognized, and the model's ability to generate an appropriate range of results around expected values;
b. The model meets its specifications; and
c. The full or partial results of the model can be reproduced or any differences canbe explained.

The model validation should be performed by individual(s) who did not develop themodel, unless to do so imposes a burden that is disproportionate to the model risk.

2.10.3 Understand the model, the conditions under which it is appropriate for the modelto be used including any limitations of the model for the intended use, the context in which the model will be used, how model inputs will be provided, and how the memberexpects the results of the model will be used. The member should disclose relevant limitations or uncertainties and their broad implications in any report.

2.10.4 Be satisfied that there is adequate documentation of the model design, construction, and operation and of the conditions under which it is appropriate to use the model, including any limitations of the model. This documentation should include, whereappropriate, scope, purpose, methodology, statistical quality, calibration, and fitness for intended purpose, and reflect changes to the model (if any) made by the member.

2.10.5 Be satisfied that the model is subject to appropriate controls. This should typicallyinclude a change control process that:

a. Avoids unauthorized changes to the model;
b. Documents any changes made and any material impact on the model; and
c. Allows any changes to be reversed.

2.10.6 When the results or output of a model run are to be used:

a. Be satisfied that the conditions to use the model are met;
b. Be satisfied that there are appropriate controls on inputs and outputs of the model;
c. Consider whether the model validation described in paragraph 2.10.2. should beperformed in whole or in part;
d. Understand, and where appropriate explain, material differences between differentruns of the model, and be satisfied that there is an adequate control process for productionruns. In the case of stochastic models, be satisfied that a sufficient number of runs of the model are made and understand the significant differences between different runs of the model;
e. Understand any management actions or responses assumed within the model. Themember should disclose such management actions or responses assumed and their broad implications in any report; and
f. Document, where appropriate, limitations, inputs, key assumptions, intended uses,and model output.

2.11 Process Management

2.11.1 Process Controls – The member should consider to what extent, if any, theprocedures used to carry out the work should be controlled, and if so, how.

2.11.2 Reasonableness Checks – The member should review the results produced by theselected assumptions and methodology for overall reasonableness.

2.12 Peer Review – The member should consider to what extent, if at all, it is appropriate forany report to be independently reviewed, in totality or by component, before the final report is delivered to the principal or distributed to the intended users. The purpose of peer review is to ensure the quality of a report, with the process tailored to the complexity of the work and the specific environment in which the member works. If a peer review is deemed to be appropriate:

2.12.1 The member should select a reviewer who is independent of involvement with thespecific component(s) reviewed and is knowledgeable and experienced in the practice area of the actuarial services.

2.12.2 If the reviewer is a member, the reviewer should comply with the guidance in anyapplicable actuarial standard, in performing the review.

2.13 Treatment of Subsequent Events – The member should consider any subsequent eventthat has the potential of materially changing the results of the actuarial services if the event had been reflected in the work and disclose such an event in any report.

2.14 Retention of Documentation

2.14.1 The member should retain, for a reasonable period of time, sufficientdocumentation for purposes such as:

a. Peer review, regulatory review, and audit;
b. Compliance with law; and

c. Assumption of any recurring assignment by another member.

2.14.2 Documentation is sufficient when it contains enough detail for another memberqualified in the same practice area to understand the work and assess the judgments made.

2.14.3 Nothing in any standard of actuarial practice is intended to give any person accessto material beyond the access that they are already authorized to have.

Section 3. Communication

3.1 General Principles – Any communication should be appropriate to the particular circumstances and take the skills, understanding, levels of relevant technical expertise, and needsof the intended user into consideration to allow the intended user to understand the implications of the member's communication.

3.1.1 Form and Content – The member should determine the form, structure, style, level of detail, content, and relevant disclosures of each communication to be appropriateto the particular circumstances, taking into account the intended users.

3.1.2 Clarity – The member should word each communication to be clear and use language appropriate to the particular circumstances, taking into account the intendedusers.

3.1.3 Timing of Communication – The member should issue each communication within a reasonable time period. The timing of the communication should reflect any arrangements that have been made with the principal. The member should consider theneeds of the intended users in setting the timing.

3.1.4 Identification of the Member – A communication shall clearly identify the issuingmember. When two or more individuals jointly issue a communication, at least some of which is actuarial in nature, the communication shall identify all responsible members, unless the members judge it inappropriate to do so. The name of an organization with which each member is affiliated may also be included in the communication, but the member's responsibilities are not affected by such identification. Unless the member judges it inappropriate, any communication shall also indicate to what extent and how supplementary information and explanation can be obtained from the member or another party.

3.2 Report – The member should complete a report, including relevant disclosures, unless any intended users will otherwise be adequately informed about the output of actuarial services (including access to the supporting information which is necessary to understand the outputs anddisclosures). The member should present all information with sufficient detail that another member qualified in the same practice area could make an objective appraisal of the reasonableness of the member's work.

3.2.1 Content – The member should include in any report, if applicable:

a. The scope and intended use of the report;

b. The output from the actuarial services, including the potential impact ofvariability on those outputs;

c. The methodology, assumptions, data and other information used;

d. Any restrictions on distribution;
e. The date of the report; and
f. Identification of the authorship of the report.

3.2.2 Disclosures – The member issuing a report should disclose in that report, ifapplicable:

a. Any material deviation from the guidance in the standard of actuarial practice(1.3.3.);
b. Any reliance on information prepared by another party for which the memberdisclaims responsibility (2.3.3.);
c. Any material omissions, understatements, or overstatements (2.4.)
d. Any data validation (2.5.2.), adjustments (2.5.3.), modification (2.5.4.), anddeficiencies (2.5.5.);
e. Any margins for adverse deviations in assumptions or methodology (2.7.3.);
f. Any material inconsistency in the assumptions and methodology used (2.7.6.);
g. Assumptions and methodology that have been prescribed by another party whichthe member does not support (2.8.2 and 2.8.3.);
h. Assumptions and methodology that are mandated by law (2.9.);
i. The limitations, and uncertainties, of any model used for the work, and their broad implications (2.10.3.);
j. The management actions or responses assumed in any model used for the work,and their implications (2.10.6.e.); and
k. Any material subsequent event (2.13.).

3.2.3 Authorship – The member issuing a report should include in the report:

a. The member's name;
b. If applicable, the name of the organization on whose behalf the member is issuingthe report, and the member's position held;
c. The capacity in which the member serves;
d. The member's qualifications;
e. The code of professional conduct and actuarial standards under which the workwas performed, if there is any possible ambiguity; and
f. If applicable, attestations and reliances.

3.2.4 Form – A report may comprise one or several communications that may exist in several different formats. Where a report comprises multiple communications, the member should communicate to each intended user which communications compose thereport. The member should ensure that report components (especially those in electronicmedia) are such that they can be reliably reproduced for a reasonable period of time.

3.2.5 Constraints – The content of a report may be constrained by circumstances such as legal, legislative, regulatory, or supervisory proceedings. Constraints could also include other standards such as financial reporting standards or an organization's accounting policy. The member should follow the guidance on disclosure in any actuarialstandard applicable to the member, to the extent reasonably possible within such constraints.

Glossary

The terms below are defined for use in this Standard of Actuarial Practice.

Accepted Actuarial Practice - A practice or practices that are generally recognized within theactuarial profession as appropriate to use in performing actuarial services within the scope of astandard of actuarial practice or the applicable professional standards of practice.

Actuarial services - Services based upon actuarial considerations provided to intended users thatmay include the rendering of advice, recommendations, findings, or opinions.

Adoption Date - The date on which this Standard of Actuarial Practice was adopted as a finaldocument by the Actuarial Society of the Philippines.

Communication - Any statement (including oral statements) issued or made by a member withrespect to actuarial services.

Data - Facts often collected from records, experience, or observations. Data are usually quantitative but may be qualitative. Examples of data include membership or policyholder details, claims details, asset and investment details, operating expenses, benefit definitions, andpolicy terms and conditions. Assumptions are not data, but data are commonly used in the development of actuarial assumptions.

Intended user - Any legal or natural person (usually including the principal) whom the memberintends, at the time the member performs actuarial services, to use the output of the actuarial services.

Law - Applicable acts, statutes, regulations or any other binding authority (such as accountingstandards and any regulatory guidance that is effectively binding).

Member - An Affiliate, Associate or Fellow member, in good standing, of the Actuarial Societyof the Philippines.

Model - A simplified representation of relationships among organizations or events using statistical, financial, economic, or mathematical concepts. A model has a specification, usesassumptions, data, and methodologies to produce results that are intended to provide usefulinformation on that system.

Model Governance - The application of a set of procedures and an organizational structuredesigned so that intended users can place their confidence in the results of the model.

Model Risk - The risk that, due to deficiency in the model or in its use, an intended user of theresults of the model will draw an incorrect conclusion from those results.

Opinion - An opinion expressed by a member and intended by that member to be relied upon bythe intended users.

Principal - The party who engages the provider of actuarial services. The principal will usuallybe the client or the employer of the member.

Professional Judgment - The judgment of the member based on actuarial training andexperience.

Report - The member's communication(s) presenting some or all of the output of actuarial services to an intended user, including any results, advice, recommendations, findings and opinions in any recorded form, including paper, word processing or spreadsheet files, e-mail,website(s), slide presentations, and audio or video recordings.

Society – The Actuarial Society of the Philippines.

Subsequent Event - An event of which the member becomes aware after the valuation date (or date to which the actuarial services refer) but before the member's communication on the resultsof these actuarial services is delivered.

Work - All actuarial activities performed by a member related to actuarial services. It usually includes acquisition of knowledge of the circumstances of the assignment; obtaining sufficientand reliable data; selection of assumptions and methodology, calculations, and examination of
the reasonableness of their result; use of other persons' work; formulation of opinion and advice;documentation; reporting; and all other communication.

PRINCIPLES OF ACTUARIAL SCIENCE

Editor's Note: This paper, mentioned in the first paragraph of the *Guidelines and Procedures for Counseling and Discipline*, is reprinted from the Transactions of the Society of Actuaries, Vol. XLIV 1992, pp. 565-591.

PRINCIPLES OF ACTUARIAL SCIENCE

SOCIETY OF ACTUARIES COMMITTEE ON ACTUARIAL PRINCIPLES*

ABSTRACT

The Committee on Actuarial Principles is charged with identifying, circulating and organizing actuarial principles (as distinct from standards) and recommending the resulting statements of principles to the Board of Governors for review and adoption. In October 1991, the Board accepted the Committee's statement entitled "Principles of Actuarial Science." This statement, which constitutes the following paper, is an expression of opinion by the Committee on Actuarial Principles and has been authorized by the Board of Governors. It has not been submitted to the vote of the membership and thus should not be construed as an expression of opinion by the Society of Actuaries.

PREAMBLE

Actuarial science, the foundation for the actuarial profession, is an *applied science.* As an applied science, its theory is grounded in certain observations about the real world.

The practice of any profession is shaped by the experience of its members, as well as by accumulated scientific knowledge. The practice of the actuarial profession is based on:

- **Principles** – Statements grounded in observation and experience. Principles will be subject to change only if fundamental changes occur in our understanding of the observed world.
- **Methodologies** – Descriptions of applications of the Principles to defined areas of practice. Since Methodologies represent the state of the art, they are likely to change as new techniques are developed in various practice areas.
- **Standards** – Rules of behavior, including, in particular, directives as to when and how professional judgment should be employed. Some Standards are prescriptions of professional conduct and are usually not subject to change. Others involve judgments needed to apply Principles or Methodologies to circumstances of practice and may change as practice circumstances change.

Note: This paper has been written by members of the Society of Actuaries. Its application should be limited to the areas of actuarial practice which fall within the purview of that Society. It is not intended to include the areas of property and casualty insurance.

* Arnold A. Dicke, *Chairperson*, Wayned Bergquist, Robert P. Clancy, Robert A. Miller III, Harry H. Panjer, Donald M. Peterson, Charles Barry H. Watson, and Warren Luckner, SOA Staff Liaison.

I. Principles

This paper attempts to set forth the fundamental principles that underlie actuarial science. Their statement is intentionally broad and rather formal. The intended audience is practicing actuaries, researchers and others, such as regulators and standard-setting bodies. Care has been taken to define its terms with precision. Since actuarial science is rooted in mathematics, the exposition is similar to that of a mathematical monograph. To improve understanding, however, numerous clarifying Discussions of both Principles and Definitions have been provided.

The Principles have been grouped according to their basic subject matter. Statistical and Economic and Financial Principles have been borrowed from related disciplines and are limited to those necessary as background to actuarial science. Actuarial Modeling and Risk Management Principles delineate the foundations of the profession common to all practice areas.

The subject matter of this paper is similar to that of the 1989 monograph, *Fundamental Concepts of Actuarial Science,* by C.L. Trowbridge [1]. The purpose and thus the organization and content are somewhat different, although not conflicting. The Trowbridge monograph is intended for a broad spectrum of readers, including nonactuaries, who are interested in the development of the fundamental concepts of actuarial science from its philosophical, economic and sociological roots. On the other hand, this paper is written to meet the practical needs of those for whom precise definition and formal development are essential, including, in particular, those involved in the standard-setting process.

II. Methodologies

Application of the Principles to situations encountered by practicing actuaries leads to new and continually evolving models and techniques. Each such model or technique applies one or more of the Principles to the practice situation. These applications are referred to as Methodologies.

Each practice are has its own Methodologies. It is intended that a series of papers will be developed to formalize the Methodologies pertaining to the various practice areas of Society of Actuaries members.

III. Standards

The proper application of Principles and Methodologies to actuarial practice situations requires the exercise of judgment regarding the choice of methods and assumptions. Standards are statements which define the methods and assumptions believed to be reasonable for particular situations. When adopted and promulgated by professional organizations, regulators, lawmakers, or others in authority, these become Guides to Professional Conduct, Standards of Practice, Technique Papers, Regulations, etc.

The development of Standards is beyond the scope of the work assigned to the Committee on Actuarial Principles.

PRINCIPLES OF ACTUARIAL SCIENCE

The following table gives the organization of the remainder of the paper.

1. *Statistical Principles*

DEFINITIONS. *Phenomena* are occurrences which can be observed. An *experiment* is an observation of given phenomenon made under specified conditions. The result of an experiment is called an *outcome*; an *event* is a set of one or more possible outcomes.

1.1 PRINCIPLE (Statistical Regularity). Phenomena exist such that, if a sequence of independent experiments is held under the same specified conditions, the proportion of occurrences of a given event stabilizes as the number of experiments becomes larger.

DEFINITIONS. A phenomenon to which Principle 1.1 applies is said to display *statistical regularity.*

Probability is a measure which takes on values from zero to one and gives the likelihood of occurrence of an event.

A rule which assigns a numerical value to every possible outcome is called a *random variable*. The probably-weighted average of the numerical values taken on by a random variable is called the *expected value'* of the random variable.

DISCUSSION. If a phenomenon displays statistical regularity, an estimate of the probability of an event associated with the phenomenon is the proportion of occurrences of the event in a long sequence of experiments. Alternatively, the probability of an event may be estimated subjectively using other criteria.

A random variable is a variable that takes on each of a set of numerical values with a given probability.

DEFINITIONS. A *scientific model* is an abstract and simplified representation of a given phenomenon. A *mathematical model* is a scientific model in which the representation is expressed in mathematical terms.

1.2 PRINCIPLE (Stochastic Modeling). A phenomenon displaying statistical regularity can be described by a mathematical model that can estimate within any desired degree of uncertainty the proportion of occurrences of a given event in a sufficiently long sequence of experiments.

DEFINITION. A model satisfying Principle 1.2 is called a *stochastic model.*

DISCUSSION. A stochastic model cannot predict with certainty the outcome of a single experiement prior to its being carried out.

A stochastic model can estimate the expected value of a random variable, provided the sequence of values that arises from the sequence of experiments converges.

DEFINITION. A *deterministic model* is a simplified stochastic model in which the proportion of occurrences of a given event estimated by the stochastic model is assumed to occur with probability one.

DISCUSSION. The stochastic aspect of a model may not be relevant to a given application; in such situations a deterministic model might be used. A deterministic model is a stochastic model with degree of uncertainty zero.

The uncertainty associated with a stochastic model has two distinct sources:

- the inherent variability of the phenomenon, and
- incomplete knowledge and/or inaccurate representation of the probabilities of alternative sets of outcomes.

Sometimes these are referred to as "process risk" and "parameter risk," respectively. The terms "risk" and "uncertainty," respectively, have also been used; however, in this paper, these terms have been assigned other meanings.

Stochastic models may be based on results obtained from previous experiments or may utilize initial assumptions about the probabilities of various sets of outcomes which may be systematically revised as results of experiments are obtained.

Before a model is used, it must be checked for consistency with available information. This process is commonly referred to as "validation."

DEFINITION. A mathematical model is said to be *valid within a specified degree of accuracy* relative to certain observed results if it reproduces these results within that degree of accuracy.

DISCUSSION. Observed results involving the phenomenon which is represented by a model may not be available or sufficiently voluminous to allow the model to be validated within a specified degree of accuracy. In this case, the usefulness of the model may be established initially by comparison with results of the observation of some similar phenomenon. It would be expected that such "judgmentally validated" models could be validated if sufficient data were available.

Not all observable aspects of the modeled phenomena must be reproduced in order for the model to be valid. For example, a model used in the appraisal of an insurance company may be validated only with respect to a few quantities, such as aggregate reserves and total policy count.

DEFINITION. A mathematical model is *potentially valid* if it produces results that are consistent with available observations of the modeled phenomena and of similar phenomena and is capable of being validated relative to the specified observed results when sufficient data are available.

DISCUSSION. The statistical definitions and principles of this section are important to actuaries for two reasons:

- Most phenomena studies by actuaries are assumed to exhibit statistical regularity. In the real world, "experiments" cannot be replicated precisely. The idealized model which serves as an approximate representation of real world phenomena has the property of statistical regularity.
- Stochastic models (along with other mathematical models) are among the actuary's key tools. They are used to draw conclusions about real world phenomena. Specifically, a stochastic model can be used to make probability statements in connection with a single experiment or multiple experiments.

2. Economic and Financial Principles

DEFINITIONS. An *economic good* is something which has value to a person and which the person may consider exchanging for something else. *Money* is a means of exchange which may be traded for economic goods. The amount of money a person is willing to trade for a good at a specific point in time is the good's *current monetary value* to that person.

2.1 PRINCIPLE (Diversity of Preferences). Different people may assign different current monetary values to the same economic good.

2.2 PRINCIPLE (Time Preference). Money has time value; that is, people tend to prefer receiving money in the present to receiving that same amount of money in the future.

DISCUSSION. Time preference is normally represented by an interest rate, or a system of interest rates, used to discount future receipts or disbursements of money so that they may be compared to amounts of money currently held. The appropriate representations of time preference for a given application will be covered under Methodologies.

DEFINITIONS. A *cash flow* is the receipt or disbursement at a point in time of an amount of money (or of an economic good with a monetary value). A cash flow whose occurrence or amount depends on the occurrence of an event that is not certain to occur is said to be *contingent*. An *asset* is money or economic goods held, or a right to receive future cash flows; an *obligation* is a duty to provide current or future cash flows.

2.3 PRINCIPLE (Present Value Modeling). For many persons, there exists a mathematical model that can estimate the current monetary value that the person would assign to any future cash flow.

DEFINITIONS. A model described by Principle 2.3 is called a *present value model*. The estimate of the current monetary value of a future cash flow given by a present value model under a fixed assumption regarding future economic conditions is called the *present value* of the cash flow relative to that assumption. Such a fixed assumption regarding future economic conditions is called a *scenario.*

DISCUSSION. If there is uncertainty regarding future economic conditions, the estimates made by a present value model may represent expected values. Such expected values may be thought of as averages of the present values over various scenarios. In this case, the present value may be thought of as a random variable whose expected value is the current monetary value.

3. Actuarial Modeling Principles

DEFINITIONS. An *actuarial risk* is a phenomenon that has economic consequences and that is subject to uncertainty with respect to one or more of the *actuarial risk variables*: occurrence, timing and severity.

3.1 PRINCIPLE (Modeling of Actuarial Risks). Actuarial risks can be stochastically modeled based on assumptions regarding the probabilities that will apply to the actuarial risk variables in the future, including assumptions regarding the future environment.

DEFINITIONS. A model described by Principle 3.1, together with a present value model if applicable, is called an *actuarial model.* The assumptions upon which an actuarial model is based are called *actuarial assumptions.*

3.2 PRINCIPLE (Validity of Actuarial Models). The change over time in the degree of accuracy of an initially valid actuarial model depends upon changes in:

a. the nature of the right to receive or the duty to make a payment;

b. the various environments (regulatory, judicial, social, financial, economic, etc.) within which the modeled events occur; and

c. the sufficiency and quality of the data available to validate the model.

DEFINITION. The *actuarial value* of a future cash flow that is contingent upon actuarial risk variables is the present value developed by an actuarial model associated with the actuarial risk variables.

DISCUSSION. Recall that the present value, and hence the actuarial value, of a future cash flow is, in general, a random variable. The actuarial value of any asset or obligation is determined by the actuarial value of the associated cash flows, including money currently held. In general, the componentcash flows not only have uncertain values but also are not independent of one another.

3.3 PRINCIPLE (Combinations of Cash Flows). The degree of uncertainty of the actuarial value of a combination of cash flows reflects both the uncertainties affecting each underlying actuarial risk variable and the process of combination.

4. Risk Management Principles

DEFINITIONS. A person or object involved in an event associated with an actuarial risk is called a *risk subject* or *risk*. *Risk identification* is a process for determining whether a given person or object is a risk subject for a given actuarial risk. *Risk control* is a process that reduces the impact of one or more of the actuarial risk variables associated with the actuarial risk. *Risk transfer* or *risk financing* is a mechanism that provides cash flows that are contingent upon the occurrence of an event associated with the actuarial risk and that tend to offset undesirable economic consequences. A *risk management system* is an arrangement involving one or more of risk identification, risk control, and risk transfer or risk financing.

A *financial security system* is an arrangement for risk financing in which one person assumes the obligation to make a payment (or series of payments), called a *benefit (benefits)*, that offsets undesirable economic consequences that may be experienced by a second person in return for the payment, by or on behalf of the second person, of one or more amounts, called *considerations*.

DISCUSSION. "Person" may indicate either a human being or a corporate or other entity. The term "financial security system" applies to insurance, annuity, retirement, and health care financing systems.

In general, there is a period of time between the date a consideration is received under a financial security system and the date a benefit is paid. During this period, at least part of the consideration may be invested in one or more types of assets.

For annuities and retirement systems, benefits are provided to reduce the uncertainty regarding the availability of income during part or all of the remaining lifetime of one or more persons. The event referred to in the definitions above is survival to a succession of specified ages following the commencement of income or the date of retirement, and the undesirable economic consequence is outliving one's resources.

DEFINITIONS. An event is said to be *insurable* if:

a. it is associated with a phenomenon that is expected to display statistical regularity;
b. it is contingent with respect to number of occurrences, timing and/or severity;
c. the fact of its occurrence is definitely determinable;
d. its occurrence results in undesirable economic consequences for one or more persons; and
e. its future occurrence, timing and/or severity are neither precisely known nor controllable by these persons.

A person is said to have an *insurable interest* in an insurable event to the extent that the occurrence of the event creates an economic need involving that person.

DISCUSSION. An insurance policy may pay "benefits" related to occurrences that do not fit the definition of "insurable event." For example, a group health plan may pay for elective surgery or annual physicals. In such cases, the "premium" for the plan may contain a pass-through of charges that arise from events other than insurable events; or it may be that, group basis, since the number of participants who will utilize the benefit each year is not precisely known. While an insurance policy or contract may combine payments resulting from insurable events and other payments, it nevertheless may be desirable to be able to distinguish between them.

The term "economic need" covers a wide range. For example, the future welfare of a person's family is an economic need involving that person, and the increased longevity of a group of retirees could create an economic need for a pension plan sponsor.

Another important aspect of insurance systems is the classification of the risk subjects associated with the actuarial risk. In this context, the term "risk" is commonly used to refer to risk subjects.

4.1 PRINCIPLE (Risk Classification). For a group of risks associated with a given actuarial risk, it is possible to identify characteristics of the risks and to establish a set of classes based on these characteristics so that:

a. each risk is assigned to one and only one class; and

b. probabilities of occurrence, timing and/or severity may be associated with each class in a way that results in an actuarial model which, for some degree of accuracy, is:

(1) valid relative to observed results for each class or group of classes having sufficient available data, and

(2) potentially valid for every class.

DEFINITIONS. A set of classes, a set of characteristics and a set of rules for using the characteristics to assign each risk to a class in such a way that the conditions of Principle 4.1 are satisfied with respect to a given group of risks is called a *risk classification system*. These classes are called *risk classes*, and the rules used for assigning risks to risk classes are called *underwriting rules*.

DISCUSSION. A classification system that cannot be associate with an actuarial model that can be validated relative to observed results when appropriate observed results are available is not a risk classification system.

An actuarial model associate with a risk classification system will reproduce any closely comparable observed values for appropriate groups of classes within a specified degree of accuracy. For example, if the insurable event is the occurrence of death within one year and the classes were determined by current age, policy year, sex, smoker/nonsmoker status, state of health, and occupation, the result would be the association with each age (and policy year, perhaps) of probabilities of death within one year. The model associated with this classification system is a mortality table. In order to be a valid model, the mortality table would have to be consistent with relevant observed rates of death for those groups of classes (such as standard class females aged 20-29 at issue, or all substandard males and females combined with issue ages 20-29) for which sufficient data are available.

A risk classification system is defined at a given point in time. Its continued appropriateness for a specific use depends on the continued availability of a valid associated actuarial model.

It should be noted that different insurable events (that is, different coverages) may require different risk classification systems.

DEFINITIONS. An *insurance system* is a financial security system in which:

a. the actuarial risks to be financed arise from insurable events;
b. the risk subjects are grouped according to a risk classification system;
c. the benefits payable are related to an insurable interest;
d. the actuarial value of benefits payable, developed by an actuarial model associated with the risk classification system, is finite; and
e. considerations are consistent with the actuarial value of the associated benefits.

An insurance system is *mandatory* if all persons in a group or in society are required legally or otherwise to participate; otherwise, it is *voluntary*. It is a *personal insurance system* if the decision to participate is made by each insured individually; it is a *group insurance system* if the decision is made on behalf of a group, although participation may be mandatory or voluntary for the members of the group; and it is a *social insurance system* if all members of society (or a defined subgroup of society) are eligible to participate. The entities to which actuarial risk is transferred in an insurance system (whether private or governmental) are called *insurers*.

DISCUSSION. To say that considerations are "consistent with" the actuarial value of benefits means, in effect, that they are risk-related. Some programs that do not fit the above definition of an insurance system are nevertheless included in the class of financial security systems. Examples include programs in which the considerations charged are not risk-related, as well as programs that make payments that are unrelated to insurable events.

In an insurance system, underwriting rules may be formulated for most actuarial risks so that actuarial value of benefits is different for different risk classes. In some cases, however, either the actuarial value of benefits associated with a risk class or the uncertainty inherent in the underlying actuarial risk variables is so great that coverage is deemed inappropriate.

DEFINITIONS. A *refinement of a risk classification system* is a risk classification system formed from another by subdividing one or more classes. If there are actuarial models associated with the original risk classification system and with the refinement such that these models assign the same probabilities of occurrence, timing and/or severity to classes that were not subdivided, but they assign differing probabilities to one or more of the subdivisions of at least one class, the refinement is said to be *more homogeneous* than the original system.

DISCUSSION. For a given set of observed results, the actuarial model associated with a more homogenous risk classification system may have a reduced degree of accuracy since fewer data points are available for each class of the refinement. For some purposes, it is necessary to ensure that a minimum degree of accuracy is attained.

4.2 PRINCIPLE (Pooling). If the actuarial risk associated with a risk classification system displays statistical regularity, it is possible to combine risk classes so as to ensure that there is an actuarial model associated with the new set of risk classes that is valid within a specified degree of accuracy.

DEFINITION. The process of combining risk classes described in Principle 4.2 is called **pooling**.

DISCUSSION. It is clear from Principle 4.2 that there is a trade-off between pooling and homogeneity in insurance systems. Moreover, increased homogeneity generally leads to increased cost of information. This and other practical factors tend to limit the degree of homogeneity which is achievable. The extent of trade-off chosen is a judgment based on the specific situation. Guidelines for the exercise of judgment fall in the category of Standards and are specifically excluded from consideration here. Statistical techniques and economic concepts such as utility theory may be used to inform these judgments.

The trade-off between pooling and homogeneity is implemented by underwriting rules. Some of the distinctions made by these rules result in classes for which the difference in probabilities remains constant over time. For other distinctions, the probabilities of two or more classes may converge over time. The ability to make such temporary distinctions (based on current health status, etc.) is useful, because it decreases the degree of uncertainty regarding current status and allows insureds to be charged more appropriate initial considerations. Thus, the knowledge that all members of a class had normal blood pressure on a certain day might allow that class to be offered lower considerations for life and health insurance. Typical selection criteria are the results of a current medical examination, current employment status and any history of occurrences of the insurable event.

In some forms of insurance, the selection process is repeated periodically, based on the accumulating information available for each risk. This process is called "renewal underwriting."

DEFINITIONS. The *premium structure* of an insurance system is a set of considerations that reflect the assignment of risks to various risk classes. A *refinement of a premium structure* is a premium structure based on a refinement of a risk classification system.

DISCUSSION. An insurance system may provide for dividends or experience refunds that may be thought of as offsets to considerations. The considerations which define a premium structure for such a system are then net of such dividends or experience refunds.

4.3 PRINCIPLE (Antiselection). If the premium structure of a voluntary insurance system is based on a risk classification system such that a refinement of the system could result in significant differentials in considerations between risks originally assigned to the same class, there will be a tendency for relatively greater participation by those whose considerations would increase if the refinement were put in place.

DISCUSSION. One implication of Principle 4.3 is that, if one insurer offers more premium classes than another, and if this results in significant differentials in considerations, antiselection is likely to occur, with the risks that would be required to pay higher considerations in the first company tending to gravitate to the insurer with fewer classes.

Once a premium structure has been determined, another actuarial concept comes into play: the use of emerging experience to modify the premium structure, insofar as allowable, for both new and existing insureds.

DEFINITIONS. The *experience* of a financial security system is the data obtained in the operation of the system.

Estimates, based on such data, of rates of occurrence or amounts of payment related to an actuarial risk are called *experience rates.*

4.4 PRINCIPLE (Induced Experience). The experience rates for events associated with a financial security system will tend to differ from those for the same events in the absence of any such system.

4.5 PRINCIPLE (Insured Experience). The experience rates for the insurable events of an insurance system will tend to differ from the overall rates of occurrence of the same events among all those subject to a given actuarial risk.

DEFINITIONS. An *experience adjustment* is a change in considerations or benefits applicable to the various risk classes to reflect the experience of the financial security system. *Credibility* is the importance assigned to the experience of a given risk class or group of risk classes relative to other information for the purpose of experience adjustment.

DISCUSSION. The inability to establish “true” underlying rates makes the use of experience adjustments essential.

Experience adjustments may reflect only the current period or may involve a recalculation of the considerations or benefits based on the assumption that the future experience rates of the financial security system will be more like its past experience rates than the rates previously assumed.

DEFINITIONS. The *actuarial value of a financial security system* relative to a given actuarial model is the actuarial value, developed by the model, of the combination of cash flows associated with assets, obligations, and considerations of the system. The process of determining the actuarial value of a financial security system is called a *valuation*. If the actuarial value can be expressed as a function of any variable associated with the financial security system and independent of the actuarial model, that variable is called a *financial parameter* of the financial security system. The amounts by which the values of financial parameters can be changed without reducing the expected actuarial value of the financial security system below zero are called *margins*.

DISCUSSION. Actuaries are often called upon to place a value on future contingent cash flows related to the operations of a financial security system. Because the actuarial value is, in general, a random variable, it may be preferable to state the conditions under which the actuarial value may be expected to fall within a given range.

Actuaries perform valuations in at least three contexts: pricing (or rate-making), reserving and appraisal. Typically, when the actuary performs a valuation, the purpose is to determine the values of one or more of the financial parameters that produce actuarial values in a specified range. In pricing, the parameters are the set of considerations or "premium rates," while in reserving the parameter is called a "reserve." In appraisals, the financial parameter is the price to be paid or received for the right to the cash flows being valued.

A set of financial parameters that is often important is the set of accounting values of the assets of the financial security system. The amount by which the accounting value of assets exceeds the sum of reserves and the accounting value of other obligations is called "surplus."

When setting the financial parameters, actuaries take account of other information in addition to the actuarial value. For example, the financial security system may have to meet certain criteria to be allowed (by regulators, creditors, shareholders, etc.) to continue operations.

Moreover, actuaries take account of the uncertainty inherent in actuarial values.

DEFINITIONS. *Ruin* occurs when a financial security system first fails to satisfy all conditions required to remain in operation. The statement of the conditions under which ruin occurs is called the *ruin criterion*. The probability that ruin will occur within a specified period of time, as calculated using an actuarial model, is called the *ruin probability* of the financial security system relative to that model within that period of time.

4.6 PRINCIPLE (Avoidance of Ruin). For most ruin criteria, there are combinations of values of the financial parameters that will reduce, below a given specified positive level, the ruin probability relative to an actuarial model.

DEFINITION. A measure of the probability that a financial security system is likely to be able to pay all benefits as promised is called the **degree of actuarial soundness** of the financial security system.

4.7 PRINCIPLE (Actuarial Soundness). For most financial security systems, there are combinations of margins that will produce, relative to a valid actuarial model, a degree of actuarial soundness that exceeds a given specified level less than one.

DISCUSSION. One way to define the degree of actuarial soundness is as the complement of the ruin probability, where ruin is defined to be the failure to pay benefits as promised.

Note that actuarial soundness is defined relative to a financial security system. It may be quite different for a subsystem. For example, a governmental pension plan may be designed to be funded through participant contributions, but may enjoy a governmental guarantee of solvency. This system may be analyzed with or without taking account of the guaranteed; the degree of actuarial soundness could differ significantly.

Principle 4.7 requires the actuarial model to be valid, which in turn means the model reproduces observed results within a specified degree of accuracy. This requirement applies to the modeling of the assets as well as the obligations. Both assets and liabilities must be validly modeled before a conclusion can be reached regarding the actuarial soundness of a financial security system.

In practical situations the level of margins, and thus the degree of actuarial soundness attainable, may be constrained by market conditions.

BIBLIOGRAPHY

1. TROWBRIDGE, C.L. *Fundamental Concepts of Actuarial Science*. Schaumburg, Ill.: Actuarial Education and Research Fund, 1989.
2. CASUALTY ACTUARIAL SOCIETY. "Statements of Principles Regarding Property and Casualty Valuations," in *1991 Yearbook*. Arlington, Va.: 1991, 144-50.

GLOSSARY

PRINCIPLES OF ACTUARIAL SCIENCE

1.1 PRINCIPLE (Statistical Regularity). Phenomena exist such that, if a sequence of independent experiments is held under the same specified conditions, the proportion of occurrences of a given event stabilizes as the number of experiments becomes larger.

1.2 PRINCIPLE (Stochastic Modeling). A phenomenon displaying statistical regularity can be described by a mathematical model that can estimate within any desired degree of uncertainty the proportion of occurrences of a given event in a sufficiently long sequence of experiments.

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2.2 PRINCIPLE (Time Preference). Money has time value; that is, people tend to prefer receiving money in the present to receiving that same amount of money in the future.

2.3 PRINCIPLE (Present Value Modeling). For many persons, there exists a mathematical model that can estimate the current monetary value that the person would assign to any future cash flow.

3.1 PRINCIPLE (Modeling of Actuarial Risks). Actuarial risks can be stochastically modeled based on assumptions regarding the probabilities that will apply to the actuarial risk variables in the future, including assumptions regarding the future environment.

3.2 PRINCIPLE (Validity of Actuarial Models). The change over time in the degree of accuracy of an initially valid actuarial model depends upon changes in:

a. the nature of the right to receive or the duty to make a payment;

b. the various environments (regulatory, judicial, social, financial, economic, etc.) within which the modeled events occur; and

c. the sufficiency and quality of the data available to validate the model.

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b. probabilities of occurrence, timing and/or severity may be associated with each class in a way that results in an actuarial model which, for some degree of accuracy, is:

   (1) valid relative to observed results for each class or group of classes having sufficient available data, and

   (2) potentially valid for every class.

4.2 PRINCIPLE (Pooling). If the actuarial risk associated with a risk classification system displays statistical regularity, it is possible to combine risk classes so as to ensure that there is an actuarial model associated with the new set of risk classes that is valid within a specified degree of accuracy.

4.3 PRINCIPLE (Antiselection). If the premium structure of a voluntary insurance system is based on a risk classification system such that a refinement of the system could result in significant differentials in considerations between risks originally assigned to the same class, there will be a tendency for relatively greater participation by those whose considerations would increase if the refinement were put in place.

4.4 PRINCIPLE (Induced Experience). The experience rates for events associated with a financial security system will tend to differ from those for the same events in the absence of any such system.

4.5 PRINCIPLE (Insured Experience). The experience rates for the insurable events of an insurance system will tend to differ from the overall rates of occurrence of the same events among all those subject to a given actuarial risk.

4.6 PRINCIPLE (Avoidance of Ruin). For most ruin criteria, there are combinations of values of the financial parameters that will reduce, below a given specified positive level, the ruin probability relative to an actuarial model.

4.7 PRINCIPLE (Actuarial Soundness). For most financial security systems, there are combinations of margins that will produce, relative to a valid actuarial model, a degree of actuarial soundness that exceeds a given specified level less than one.

GLOSSARY DEFINITIONS

Note: In this glossary, the parenthetical reference a the end of each paragraph gives the relative location of the definition(s) in the main body of the paper: "p. P4.1" indicates that the definition can be found preceding *Principle 4.1, and "f. P4.1" indicates that the definition can be found* following *Principle 4.1*

The assumptions upon which an actuarial model is based are called **actuarial assumptions**. (f. P3.1)

A model described by Principle 3.1, together with a present value model if applicable, is called an **actuarial model**. (f. P3.1)

An **actuarial risk** is a phenomenon that has economic consequences and that is subject to uncertainty with respect to one or more of the **actuarial risk variables**: occurrence, timing, and severity. (p. P3.1)

The **actuarial value** of a future cash flow that is contingent upon actuarial risk variables is the present value developed by an actuarial model associated with the actuarial risk variables. (f. P3.2)

The **actuarial value of a financial security system** relative to a given actuarial model is the actuarial value, developed by the model, of the combination of cash flows associated with assets, obligations, and considerations of the system. (p. P4.6)

An **asset** is money or economic goods held, or a right to receive future cash flows; an *obligation* is a duty to provide current or future cash flows. (p. P2.3)

A *financial security system* is an arrangement for risk financing in which one person assumes the obligation to make a payment (or series of payments), called a **benefit (benefits)**, that offsets undesirable economic consequences that may be experienced by a second person in return for the payment, by or on behalf of the second person, of one or more amounts, called *considerations*. (p. P4.1)

A **cash flow** is the receipt or disbursement at a point in time of an amount of money (or of an economic good with a monetary value). (p. P2.3)

A *financial security system* is an arrangement for risk financing in which one person assumes the obligation to make a payment (or series of payments), called a *benefit (benefits)*, that offsets undesirable economic consequences that may be experienced by a second person in return for the payment, by or on behalf of the second person, of one or more amounts, called **considerations**. (p. P4.1)

A cash flow whose occurrence or amount depends on the occurrence of an event that is not certain to occur is said to be **contingent**. (p. P2.3)

Credibility is the importance assigned to the experience of a given risk class or group of risk classes relative to other information for the purpose of experience adjustment. (f. P4.5)

The amount of money a person is willing to trade for a good at a specific point in time is the good's **current monetary value** to that person. (p. P2.1)

A measure of the probability that a financial security system is likely to be able to pay all benefits as promised is called the **degree of actuarial soundness** of the financial security system. (f. P4.6)

A **deterministic model** is a simplified stochastic model in which the proportion of occurrences of a given event estimated by the stochastic model is assumed to occur with probability one. (f. P1.2)

An **economic good** is something which has value to a person and which the person may consider exchanging for something else. (p. P2.1)

The result of an experiment is called an *outcome*; an **event** is a set of one or more possible outcomes. (p. P1.1)

The probability-weighted average of the numerical values taken on by a random variable is called the **expected value** of the random variable. (f. P1.1)

The **experience** of a financial security system is the data obtained in the operation of the system. (p. P4.4)

An **experience adjustment** is a change in considerations or benefits applicable to the various risk classes to reflect the experience of the financial security system. (p. P4.5)

Estimates, based on such data, of rates of occurrence or amounts of payment related to an actuarial risk are called **experience rates**. (p. P4.4)

An **experiment** is an observation of a given phenomenon made under specified conditions. (p. P1.1)

If the actuarial value can be expressed as a function of any variable associated with the financial security system and independent of the actuarial model, that variable is called a **financial parameter** of the financial security system. (p. P4.6)

A **financial security system** is an arrangement for risk financing in which one person assumes the obligation to make a payment (or series of payments), called a *benefit (benefits)*, that offsets undesirable economic consequences that may be experienced by a second person in return for the payment, by or on behalf of the second person, of one or more amounts, called *considerations*. (p. P4.1)

An event is said to be **insurable** if:

a. it is associated with a phenomenon that is expected to display statistical regularity;
b. it is contingent with respect to number of occurrences, timing and/or severity;
c. the fact of its occurrence is definitely determinable;
d. its occurrence results in undesirable economic consequences for one or more persons; and
e. its future occurrence, timing and/or severity are neither precisely known nor controllable by these persons. (p. P4.1)

A person is said to have an **insurable interest** in an insurable event to the extent that the occurrence of the event creates an economic need involving that person. (p. P4.1)

An **insurance system** is a financial security system in which:

a. the actuarial risks to be financed arise from insurable events;
b. the risk subjects are grouped according to a risk classification system;
c. the benefits payable are related to an insurable interest;
d. the actuarial value of benefits payable, developed by an actuarial model associated with the risk classification system, is finite; and
e. considerations are consistent with the actuarial value of the associated benefits.

An insurance system is **mandatory** if all persons in a group or in society are required legally or otherwise to participate; otherwise, it is voluntary. It is a **personal insurance system** if the decision to participate is made by each insured individually; it is a **group insurance system** if the decision is made on behalf of a group, although participation may be mandatory or voluntary for the members of the group; and it is a **social insurance system** if all members of society (or a defined subgroup of society) are eligible to participate. (f. P4.1)

The entities to which actuarial risk is transferred in an insurance system (whether private or governmental) are called **insurers**. (f. P4.1)

The amounts by which the values of financial parameters can be changed without reducing the expected actuarial value of the financial security system below zero are called **margins**. (p. P4.6)

A **mathematical model** is a scientific model in which the representation is expressed in mathematical terms. (p. P1.2)

Money is a means of exchange which may be traded for economic goods. (p. P2.1)

A *refinement of a risk classification system* is a risk classification system formed from another by subdividing one or more classes. If there are actuarial models associated with the original risk classification system and with the refinement such that these models assign the same probabilities of occurrence, timing and/or severity to classes that were not subdivided, but they assign differing probabilities to one or more of the subdivisions of at least one class, the refinement is said to be **more homogeneous** than the original system. (f. P4.1)

An *asset* is money or economic goods held, or a right to receive future cash flows; an **obligation** is a duty to provide current or future cash flows. (p. P2.3)

The result of an experiment is called an **outcome**; an *event* is a set of one or more possible outcomes. (p. P1.1)

Phenomena are occurrences which can be observed. (p. P1.1)

The process of combining risk classes described in Principle 4.2 is called **pooling**. (f. P4.2)

A mathematical model is **potentially valid** if it produces results that are consistent with available observations of the modeled phenomena and of similar phenomena and is capable of being validated relative to the specified observed results when sufficient data are available. (f. P1.2)

The **premium structure** of an insurance system is a set of considerations that reflect the assignment of risks to various risk classes. (p. P4.3)

The estimate of the current monetary value of a future cash flow given by a present value model under a fixed assumption regarding future economic conditions is called the **present value** of the cash flow relative to that assumption. (f. P2.3)

A model described by Principle 2.3 is called a **present value model**. (f. P2.3)

Probability is a measure which takes on values from zero to one and gives the likelihood of occurrence of an event. (f. P1.1)

A rule which assigns a numerical value to every possible outcome is called a **random variable**. (f.
P1.1)

A **refinement of a premium structure** is a premium structure based on a refinement of a risk classification system. (p. P4.3)

A **refinement of a risk classification system** is a risk classification system formed from another by subdividing one or more classes. (f. P4.1)

A set of classes, a set of characteristics and a set of rules for using the characteristics to assign each risk to a class in such a way that the conditions of Principle 4.1 are satisfied with respect to a given group of risks is called a **risk classification system**. These classes are called **risk classes**, and the rules used for assigning risks to risk classes are called *underwriting rules*. (f. P4.1)

Risk control is a process that reduces the impact of one or more of the actuarial risk variables associated with the actuarial risk. (p. P4.1)

Risk identification is a process for determining whether a given person or object is a risk subject for a given actuarial risk. (p. P4.1)

A **risk management system** is an arrangement involving one or more of risk identification, risk control, and risk transfer or risk financing. (p. P4.1)

A person or object involved in an event associated with an actuarial risk is called a **risk subject** or
risk. (p. P4.1)

Risk transfer or **risk financing** is a mechanism that provides cash flows that are contingent upon the occurrence of an event associated with the actuarial risk and that tend to offset undesirable economic consequences. (p. P4.1)

Ruin occurs when a financial security system first fails to satisfy all conditions required to remain in operation. (p. P4.6)

The statement of the conditions under which ruin occurs is called the **ruin criterion**. (p. P4.6)

The probability that ruin will occur within a specified period of time, as calculated using an actuarial model, is called the **ruin probability** of the financial security system relative to that model within that period of time. (p. P4.6)

The estimate of the current monetary value of a future cash flow given by a present value model under a fixed assumption regarding future economic conditions is called the *present value* of the cash flow relative to that assumption. Such a fixed assumption regarding future economic conditions is called a **scenario**. (f. P2.3)

A **scientific model** is an abstract and simplified representation of a given phenomenon.

(p. P1.2) A phenomenon to which Principle 1.1 applies is said to display **statistical**

regularity. (f. P1.1) A model satisfying Principle 1.2 is called a **stochastic model**. (f.

P1.2)

The rules used for assigning risks to risk classes are called **underwriting rules**. (f. P4.1)

A mathematical model is said to be **valid within a specified degree of accuracy** relative to certain observed results if it reproduces these results within that degree of accuracy. (f. P1.2)

The process of determining the actuarial value of a financial security system is called a **valuation**. (p.P4.6)

LIFE

Republic of the Philippines
Department of Finance
INSURANCE COMMISSION
1071 United Nations Avenue
Manila

CN: AJA16-0061

Circular No.:	2016-66
Date:	28 December 2016
Superseding:	CL No. 2014-42 – A; CL No. 2016-26

CIRCULAR LETTER

TO : **ALL LIFE INSURANCE COMPANIES AND MUTUAL BENEFIT ASSOCIATIONS DOING BUSINESS IN THE PHILIPPINES**

SUBJECT : **VALUATION STANDARDS FOR LIFE INSURANCE POLICY RESERVES**

Pursuant to Sections 216 and 423 of the Amended Insurance Code (RA 10607), attached is the valuation standards for life insurance policy reserves to be implemented effective 01 January 2017.

This Circular supersedes Circular Letter Nos. 2014-42-A and 2016-26.

For strict compliance.

DENNIS B. FUNA
Insurance Commissioner

VALUATION STANDARDS FOR LIFE INSURANCE POLICY RESERVES

I. Introduction

1. Life insurance companies shall value their policy reserves for life business at the end of each calendar year as required by the Insurance Commission (IC), in accordance with this set of Valuation Standards.

2. The methods and valuation assumptions shall:

    a. be appropriate to the type of business and its risk profile;
    b. include appropriate margins for adverse deviations in respect of the risks that arise under the insurance policy;
    c. be in accordance with the internationally accepted actuarial standards; and
    d. consider the generally accepted actuarial principles concerning financial reporting framework promulgated by the Actuarial Society of the Philippines (ASP).

3. Unless the context otherwise requires, the following terms shall be taken to mean:

    a. "variable contract" is as defined in Section 238 (b) of the New Insurance Code (RA 10607)
    b. "traditional policy" is a policy other than variable contract, which includes life, health or accident, annuity contracts and supplementary benefits or riders
    c. "company" is a life insurance company supervised by the IC.

II. Valuation Methodology

1. An actuary duly accredited by the IC shall be responsible in determining the level of policy reserves based on his professional valuation of the company's life insurance liabilities using a basis no less stringent than that prescribed in the following paragraphs.

2. Subject to paragraphs 3 to 4 below, the reserves for traditional life insurance policies shall be valued, where appropriate, using gross premium valuation. This is calculated as the sum of the present value of future benefits and expenses, less the present value of future gross premiums arising from the policy discounted at the appropriate risk-free discount rate. For this purpose, the expected future cash flows shall be determined using best estimate assumptions with due regard to significant recent experience and appropriate margin for adverse deviation from the expected experience.

3. For any traditional life insurance policy where the calculation based on paragraph 2 results in a negative reserve, the company shall appropriate from the unassigned surplus an amount equal to the aggregate of the negative reserves calculated on a per policy basis.

4. For any traditional life insurance policy with a term of one year or less, the reserve shall be calculated using the unearned premium method.

5. A company shall value the reserves for variable life insurance contracts as the sum of the:

   a. market value of the underlying assets backing the separate accounts relating to the policy, excluding any seed capital; and
   b. unearned cost of insurance or unearned risk charge.

6. A more conservative basis of valuation may be adopted by the Actuary resulting in higher policy reserves compared to the standards set out above, if, in his professional judgment, it is appropriate to do so.

7. Where the reserve of a life insurance policy cannot be appropriately valued using this set of valuation standards, the valuation shall be done using the basis approved by the IC.

8. Valuation of the In-Force file as of End of Prior Period using the Current Period discount rate shall be performed by the Company and the resulting reserves shall be compared to the reserves as of End of Prior Period to

determine the change in reserves due to the volatility in discount rate as shown in Annex B.

III. **Data and Systems**

1. The company's Chief Executive Officer (CEO), or responsible officer with a rank of at least Vice President or its equivalent, shall ensure that the company's database is properly maintained so that the data on business in force is accurate and complete. The CEO or the responsible officer shall furnish the data to the actuary and grant him/her reasonable access to its database.

2. Reasonable tests shall be applied on the data to check both its integrity and completeness before starting the valuation process.

IV. **Valuation Assumptions**

1. Discount Rates

a. The risk-free discount rate shall be used for all cash flows to determine the liability of a traditional life insurance policy.

b. The yield curve used as basis for the risk-free discount rate shall be obtained from the following sources:

   i. for Philippine Peso policies : PDST-R2 rates
   ii. for US Dollar policies: International Yield Curve (IYC) from Bloomberg

c. The risk-free discount rate shall be the equivalent zero-coupon spot yield of the above yield curve with matching duration for durations less than or equal to 20 years. Duration is the term to maturity of each future cash flow.

d. If the duration of the cashflow is more than 20 years, then the discount rate shall be based on a moving-average of the 20-year government bond yield rate, over a period to be prescribed by IC.

e. Where yields at certain durations are not available, these yields shall be appropriately interpolated from available information.

f. The IC shall provide the yield curve and risk-free discount rate, and may change the sources of the yield curve when appropriate.

2. Non-guaranteed Benefits

The level of non-guaranteed benefits under traditional life insurance policies to be valued, including policy dividends, shall be determined with due regard to the company's duty to treat its policyholders fairly and meet policyholders' reasonable expectations.

The Actuary shall disclose the basis for the dividend scale.

3. Expenses

a. The expense assumptions shall be based on the company's experience derived from its latest expense study. Otherwise, basis and justification of the assumptions used shall be provided.

b. Suitable non-negative expense inflation rate shall be used. All projected expected expenses shall be recognized in the valuation process.

4. Mortality and Morbidity

The mortality and morbidity assumptions shall be based on rates of mortality and morbidity that are appropriate to the nature of the risks covered based on the company's actual experience. If actual experience is not available or if the company's actual experience is inappropriate to be used, the basis and justification for the assumptions used shall be provided.

5. **Lapse and/or Persistency**

The lapse and/or persistency rates reflective of the company's actual experience shall be taken as the best estimate lapse and/or persistency assumption, with due regard to changing company practices and market conditions. If lapse and/or persistency experience is not yet available, the basis and justification for the assumption used shall be provided.

V. Margin for Adverse Deviation (MfAD)

1. Fixed margins for adverse deviations (MfAD) shall be used subject to a minimum of:

    a. Interest: +/-10% of discount rate. There shall be no MfAD if the yield rate is net of tax.

    b. Expense: 10% of best estimate expenses

    c. Other assumptions including but not limited to mortality, morbidity, lapse and conversion: +/-10% of best estimate assumptions

2. For mortality and lapse assumptions, the sign (positive or negative) of MfAD should be tested per group of products at the time of valuation. MfAD shall have the same sign for all durations per group of products. The product grouping shall be whole life, endowment and term.

3. For interest assumption, the sign (positive or negative) of MfAD shall be tested on the aggregate basis.

4. The MfAD on expenses shall be on expense components that are exposed to uncertainty. The commissions payable to agents/distributors and taxes may not be subject to MfAD.

5. The provision for adverse deviation or the additional reserves due to the MfAD for each component (i.e., expense, mortality/morbidity, lapse, interest) shall be non-negative.
6. Any change in the level of MfAD used shall be justified.

VI. Actuarial Valuation Report

1. The Report on Actuarial Valuation of Life Insurance Policy Reserves shall follow the format and contain the minimum information set out in **Annex A.**

   The Actuary shall provide the breakdown of the change in reserves due to the following: a) change in the discount rate; b) change in assumptions other than discount rate; and c) change in the in-force file.

   An analysis of the valuation results shall be included in the Report of the Actuary.

2. The Certifications to be submitted by the Actuary and the Chief Executive Officer or responsible officer shall be duly notarized.

VII. Application

This set of Valuation Standards shall apply to all policies issued by life insurance companies and mutual benefit associations.

Annex A

Report on Actuarial Valuation of Life Insurance Policy Reserves

Name of Company: ____________________________

For the period ended dd/mm/yyyy

Section A: Data on In Force Policies

Describe the following:

a. Steps taken to verify consistency, completeness and accuracy of data

b. Adjustments made to the data and rationale for such adjustments

Section B: Valuation Methodology

1. Describe the valuation method used

2. If methods used are different from those prescribed in this set of valuation standards, provide a detailed description of each method, including, but not limited to:

   a. Scope of application including policies/products covered

   b. How the method works including formula

   c. Disclosure of any approximation or simplification made

   d. Justification for the use of said method

   e. Document evidencing approval by the IC

3. Provide details of any change in the valuation methods used since the last valuation date and quantify impact of the change.

Section C: Valuation Assumptions

1. State and provide justification for the key assumptions.

2. Disclose and justify any material change in assumption from the previous valuation and quantify the impact of each change.

Section D: Margin for Adverse Deviations (MfADs)

1. State the MfAD used per assumption or parameter, and provide rationale if different from the minimum prescribed in this set of valuation standards

2. Provide justification for any change in MfAD used from last valuation date and quantify the impact of each change.

Section E: Others

1. Document the extent of compliance with the requirements of this set of valuation standards and the reasons for non-compliance, if any.

2. Define terms and expressions used in the Report on Actuarial Valuation which may be ambiguous or subject to wide interpretation.

Section F: Valuation Results

The summary of the valuation results shall follow the format shown in Annex B.

The summary shows the breakdown of the change in reserves due to the following: a) change in the discount rate; b) change in assumptions other than discount rate; and c) change in the in-force file.

Section G: Certification by the Actuary

The Actuary shall provide a duly-notarized certification as set out below:

> "I hereby certify that I have conducted tests necessary to verify the reasonableness and integrity of the data, confirm that the information contained in this Report are accurate to the best of my knowledge and that I have calculated the policy reserves in accordance with the Valuation Standards prescribed by the Insurance Commission and the standards of practice of the Actuarial Society of the Philippines."

____
Signature over Printed Name of Actuary

Date: _______________
IC Accreditation No.: _______________
PTR No.: _______________

Section H: Certification by the CEO or Responsible Officer

The CEO/Responsible Officer shall provide the following duly-notarized certification:

> "I hereby certify that the database is properly maintained and I have satisfied myself that the data provided to the certifying Actuary are accurate and complete."

____
Signature over Printed Name
of Chief Executive Officer/Responsible Officer

Date: ________________________

3

Name of Company ____________________

ANNEX B

Actuarial Valuation Results
Life Insurance Policy Reserves in Philippine Peso
For the period ended dd/mm/yyyy

I Summary of Valuation Results

		Gross Premium Valuation (GPV) Reserves
Reserves as of End of Prior Period		
(1)	Traditional	
(2)	Variable	
(3)	TOTAL (1) + (2)	-
Reserves as of End of Current Period		
(4)	Traditional	
(5)	Variable	
(6)	TOTAL (4) + (5)	-
(7)	Increase in Reserves (6) - (3)	-

II Impact of Change in Assumptions under GPV

		As of End of Prior Period					As of End of Current Period		
		Reserves as of End of Prior Period (A)	Reserves using Current Period discount rate (B)	Increase in Reserves due to change in discount rate (C) = (B) - (A)	Reserves using Current Period assumptions including discount rate (D)	Increase in Reserves due to changes in assumptions other than discount rate (E) = (D) - (B)	Reserves using Current Period assumptions including discount rate (F)	Increase in Reserves due to change in in-force file (G) = (F) - (D)	Total Increase in Reserves (H) = (C) + (E) + (G)
Policy Reserves									
(1)	Total Policy Reserves after basis change (2) + (3)	-	-	-	-	-	-	-	-
(2)	GPV Reserves with Margin for Adverse Deviations (MfAD)			-		-		-	-
(3)	Unearned Premium Reserves			-		-		-	-
(4)	GPV Reserves without MfAD			-		-		-	-
(5)	Impact of MfAD (2) - (4)			-		-		-	-
(6)	Negative GPV Reserves			-		-		-	-
(7)	GPV Reserves for Non-Guaranteed Benefits and Policyholder Dividends			-		-		-	-

Notes:
1 In Table I, GPV Reserves shall include Unearned Premium Reserves
2. In Table II, the discount rates to be used for columns B, D and F shall be the IC-prescribed discount rates as of end of current period.
3 Item 3 of Table I must tally with Item 1 Column A of Table II
4. Item 6 of Table I must tally with Item 1 Column F of Table II
5 Item 7 of Table I must tally with Item 1 Column H of Table II

Certified by.

____
(Signature over Printed Name of Actuary)
(Designation)
IC Accreditation No :
PTR No .
Date Signed.

ASP GUIDANCE NOTES (GN2017-2)

Implementation Guidelines of Life Reserve Valuation Standards
In accordance with the IC Circular 2016-66
Superseding ASP GN2015-1

Official Release

December 15, 2017

IMPLEMENTATION GUIDELINES OF LIFE RESERVE VALUATION STANDARDS

(In accordance with the IC Circular 2016-66)

Introduction

In December 28, 2016, the Insurance Commission issued IC Circular 2016-66, Valuation Standards for Life Insurance Policy Reserves, superseding IC CL 2014-42-A, Valuation Standards for Life Insurance Policy Reserves. IC CL 2016-66 is to be implemented effective 01 January 2017, with some differences versus IC CL 20-14-42-A, the subject of an earlier ASP Guidance Notes GN2015-1. As such, the ASP Life Insurance Committee deemed it appropriate to revise ASP GN2015-1.

The Actuarial Society of the Philippines (ASP) affirms that IC Circular 2016-66 Valuation Standards for Life Insurance Policy Reserves, presents a sufficient framework of standards for the valuation of life insurance policy reserves (or statutory reserves) for regulatory reporting to the Insurance Commission.

The ASP also recognizes that the regulatory reporting is primarily for establishing and monitoring of the solvency of life insurance companies. The statutory reserves represent the measure of the company's main liability on inforce policies as at the valuation date. Risk- based capital (RBC), which is an allocation of surplus or net worth, shall be layered on top of the statutory reserves for adequate provisions for solvency.

There are differences in the principles underlying various financial reporting standards or regulations. The move to Gross Premium Valuation from Net Premium Valuation is an improvement in determining policyholder liabilities for Traditional Policies. With such change in reserving standards in place, the regulatory approach to protect policyholders from company insolvency is now more focused on requiring sufficient risk-based capital, and less focused on conservative reserves.

Guidance Notes

Guidance Notes serve the following purposes:

- Present the position of ASP on the subjectmatter
- Clarifycertainitemsintherelevantregulationsorstandardsthatmayhaveconflicting interpretations
- Supplement the regulations or standards with additional actuarial practice guidelines
- Establish consistent applications of the standards among Fellows of the ASP
- Expand guidance in order to address utilization of the principles and components of statutory reserves to related items in risk-based capital, Philippine Financial Reporting Standards, reporting of a period's realized/unrealized profit through Profit and Loss Statement (P&L) or Other Comprehensive Income (OCI), asset valuation andothers
- Build guidance notes, if necessary, to become Standards ofPractice

The ASP issues this Guidance Notes (GN2017-2) for compliance by all Fellows (the Actuary) certifying the basis, calculations and amounts of life insurance policy reserves in accordance with IC Circular 2016-66. ASP GN2017-2 supersedes ASP GN2015-1.

SCOPE

1. Discount Rate
2. Consistent Asset Valuation
3. Breakdown of Statutory Reserves
4. Net Premiums Due and Uncollected
5. Non-Guaranteed Benefits
6. Expenses
7. Mortality and Morbidity
8. Long Term Lapse/Surrender Rates

1. Discount Rate

IC Circular 2016-66 Section IV.1, Valuation Assumptions – Discount Rate Guidance

Notes:

The pre-tax rates, gross of any final taxes and other taxes, as issued by the Insurance Commission, should be used.

Rationale:

- The discount rate is primarily a market-consistent parameter of a time value measure that is consistent with the market value basis of long term financial instruments.
- Discount rate, for purposes of reserve valuation, does not represent the expected investment income that can be generated from the supporting asset portfolio.
- Provisions for taxes are to be taken up separately in accordance with tax regulations and outside of the scope of regulatory reserve valuation.
- Only the taxes that are fully and directly proportional with the premium or benefit cash flows (such as premium tax and DST) are factored in the projected cash flows.
- Provisions for corporate income taxes should be taken up separately and outside the reserve valuation.

2. Consistent Asset Valuation

IC Circular Letter 2016-65, Financial Reporting Framework under Section 189 of the Amended Insurance Code (Republic Act No. 10607), issued December 28, 2016
Section 2.11. Section 214 Guidance Notes:

For purposes of establishing an appropriate value of Net Worth (Assets – Liabilities) upon adoption of Gross Premium Valuation (GPV) on statutory reserves, the Actuary is encouraged to recommend to the company to classify fixed income assets supporting policy reserves as Available-For-Sale (AFS), whenever such classification is allowed under PFRS.

Rationale:

The GPV methodology using market-consistent discount rates in the determination of actuarial reserves is consistent with the AFS valuation of assets if changes in reserves resulting purely from changes in discount rates are excluded from the income statement. The GPV methodology on liabilities will yield misleading net worth values whena material amount of supporting assets is not valued at marketinterest rates, such as those assets classified as held-to-maturity(HTM). It is important for assets to be valuedatmarket-consistentdiscount ratestobeconsistentwiththe GPVreserveliability, whichisvalued atmarket discount rates.

The basis of the Actuary's recommendation on the asset classification for valuation basis of assets supporting actuarial reserve liabilities and related surplus reserves is the following overarching principle stated in:

IC Circular Letter 2016-65, Financial Reporting Framework under Section 189 of the Amended Insurance Code (Republic Act No. 10607), issued December 28, 2016

Section 2.11. Section 214 Paragraph
(h)

> "Notwithstanding any provision contained in this section or elsewhere in this chapter, if the Commissioner finds that the interests of policyholders so permit or require, he may permit or require any class or classes of insurers authorized to do business in this country to value their investments or any class or classes thereof as of any date heretofore or hereafter in accordance with any applicable valuation or method."

3. Breakdown of Statutory Reserves
IC Circular 2017-66 Annex B, Actuarial Valuation Results Guidance

Notes:

The Actuary is also responsible for the demonstration of:

a) The impact on reserves due to changes in:
    i) The insurance policy portfolio over the relevantperiod,
    ii) Valuation methodology
    iii) Best-estimate assumptions
    iv) Provisions for adverse deviations
    v) Market-consistent parameters
    vi) Business models and nature of contractual obligations
b) Components of statutory reserves that may be utilized for financial reporting under PFRS and other localregulations

The order of presentation should follow the format as prescribed by IC CL 2016-66 or byany subsequent circular and/or advisory issued by the Insurance Commission on this subject.

Rationale:

For purposes of analysis and demonstration, the actuary may refer to the definitions presented in the appendix to the Guidance Notes. The order of breakdown into components of increases in reserves is primarilyinaccordancewithaccountingrules, rather thana matter of actuarial principle. In any case, the actuary should ensure that statutory reserve balances are properly recognized in the company's financial statements.

However, regardless of details and order of presentation required for regulatory reporting, the actuary should analyze and be able to disclose the components of increases in reserves to ensure that reserve provisions are adequate and company management is able to understand the nature and behavior of the business portfolio and make appropriate, informed decisions.

Further, where the company performs valuations more frequently than that required by the Insurance Commission, the actuary should adjust the reportorial tables and accompanying formulas as necessary.

4. Net Premiums Due and Uncollected
IC Circular 11/91 Net Premiums Due and Uncollected, issued May 28, 1991.

Guidance Notes:

Under Gross Premium Valuation, the asset Net Premiums Due and Uncollected should be calculatedas:

> Gross Premiums Due and Uncollected, less Cost of Collection such as, but not limited to, commissions, overrides and incentives, premium taxes, and other percentage of premium expenses.

5. Non-Guaranteed Benefits
IC Circular 2016-66 Section IV.2, Valuation Assumptions – Non-Guaranteed Benefits Guidance

Notes:

The Actuary should determine the value of reserves for non-guaranteed benefits and policyholder dividends using, to the extent possible, consistent and verifiable basis of the following parameters:

1. Current scales of prospective non-guaranteed benefits or policyholder dividends.

   These shall mean:
   a. On products being marketed during the relevant reporting period, the scales appearingin sales illustrations
   b. On products which are no longer marketed during the relevant reporting period, the scales in the following order ofrelevance:
      i. Recently approved by the Board ofDirectors
      ii. Applied as the basis of most recent non-guaranteed benefits or policyholder dividends provided to policyholders
      iii. Currently stored in the administration system of the company
      iv. Used in the last set of the product's sales illustration

2. Discount rate. This shall mean the discount rates prescribed under IC CL 2016-66 Section IV.1 Discount Rates.

   Rationale:

   - IC CL 2016-66 does not provide any leeway to change the discount rates used for computing the GPV for non-guaranteed benefits.
   - As stated in Section 1 of this Guidance Notes, the discount rate is primarily a market-consistent parameter of a time value measure that is consistent with the market value basis of long term financial instruments.
   - Further, the discount rate, for purposes of reserve valuation, does not represent the expected investment income that can be generated from the supporting asset portfolio.

The Actuary should disclose:
- The discount rate used

- The scale of rates of non-guaranteed benefits or policyholder dividends for all prospective years on a policy with issue age 35 (or other representative age) of the product with one of the most significant reserveamounts for non-guaranteed benefits
- Any changes in assumptions and basis from those in the prior year

6. Expenses
IC Circular 2016-66 Section IV.3, Valuation Assumptions – Expenses

Guidance Notes

The Actuary should select best estimate assumptions which provide for expenses of the relevant policies, including overhead, after valuation date. The basis for the determination of expense assumptions should be the company's current experience.

Should there be an expectation of lower unit expenses in the future, the Actuary may assume a justifiable, systematic grading of unit expenses. Such grading of expense assumption should be doneonly if the actuary believes that unit expenses assumptions are expected to reduce in the future, in consideration of future economies of scale or expense efficiencies are expected to be achieved. If theactuary is assuming unit expenses that are below actual expense experience, the Actuary should consider including provisions for expense overruns in the cash flow projections.

Inflation assumptions should be used in projecting expenses, whenever appropriate.

7. Mortality and Morbidity

Guidance Notes

The basis for selecting mortality and morbidity assumptions should be the company's actual experience and the nature of risks covered. Where actual experience is inappropriate to be used,the Actuary should first consider using mortality and morbidity tables derived from local market experience and ideally recognized by the Insurance Commission, such as, but not limited to:

- 2017 Philippine Intercompany Mortality Study,
- Mortality and morbidity tables that have been or may be published by the Actuarial Society of the Philippines.

modified as deemed appropriate for the nature of risks insured by the company.

8. Long Term Lapse/Surrender Rates
IC Circular 2016-66 Section IV 5., Valuation Assumptions – Lapse and/or Persistency GuidanceNotes

It is generally recognized that the rates of lapses, surrenders and persistency are largely dependent on macroeconomic factors, policyholder characteristics and parameters internal or specific to the company such as the product (premium term, benefits, non-forfeiture options), distribution channel, service level, etc.

Also, the volume of relevant past experience on long term lapse rates is very slow to develop.

It is therefore difficult to establish a credible basis for long term lapse rate assumptions. The overriding consideration is the consistency of assumption adopted by actuaries in the absence of adequate basis for the assumption.

The Actuary may use a best-estimate long term lapse rate between 0% to 3% p.a. for the following policy characteristics without having to justify with the rationale or establishing credibility from insufficient volume of relevant policy experience:

1. Policies already on paid-up period
2. Policies during the premium payment period but beyond the 5th policy anniversary

The Actuary however may use a best-estimate long term lapse rate outside the 0% to 3% range if the assumption is supported with sufficiently credible experience basis or if the Actuary can make declarations of a strong rationale for doing so.

Provisions for adverse deviation shall be added in accordance with the IC Circular 2016-66.

This does not preclude the company in building relevant experience to support the adoption of a more credible long term lapse assumption.

APPENDIX

For purposes of analysis and demonstration, the Actuary should present the breakdown of total statutory reserves by line of business:

I. During the transition period up to the date of the adoption of GPV, the Actuary may be required to present the following reserve amounts:

	As of End of Prior Period	As of End of Current Period	Amount Increase
Reserves under Net Premium Methodology (NPV)			
Reserves under Gross Premium Methodology (GPV)			
Reserves NPV – GPV			
Unearned Premium Reserves (UPR)			
Negative GPV Reserves with MFAD			
Reserves for Non-Guaranteed Benefits and Policyholder Dividends			
Net Premiums Due under NPV			
Net Premiums Due under GPV			
Net Premiums Due NPV – GPV			

While UPR is presented separately, it is understood that UPR in principle is the GPV reserves for short-term insurance contracts, including those renewable at non-guaranteed premium rates. The UPR should contain, when appropriate, provisions for adverse deviations consistent with other classesof policies.

II. During and beyond the transition period, the Actuary should present, but not limited to, the reserve amounts shown in the following table:

II. Impact of Change in Assumptions under GPV

		As of End of Prior Period					As of End of Current Period		
		Reserves as of End of Prior Period (A)	Reserves using Current Period discount rates (B)	Increase in Reserves due to change in discount rate (C) = (B) - (A)	Reserves using Current Period assumptions including discount rate (D)	Increase in Reserves due to changes in assumptions other than discount rate (E) = (D) - (B)	Reserves using Current Period assumptions including discount rate (F)	Increase in Reserves due to change in in-force file (G) = (F) - (D)	Total Increase in Reserves (H) = (C) + (E) + (G)
Policy Reserves									
1	Total Policy Reserves after basis change (2) + (3)	-	-	-	-	-	-	-	-
2	GPV Reserves with Margin for Adverse Deviations (MfAD)			-		-		-	-
3	Unearned Premium Reserves			-		-		-	-
4	GPV Reserves without MfAD			-		-		-	-
5	Impact of MfAD (2) - (4)			-		-		-	-
6	Negative GPV Reserves			-		-		-	-
7	GPV Reserves for Non-Guaranteed Benefits and Policyholder Dividends			-		-		-	-

Notes:

1. In Table I, GPV Reserves shall include Unearned Premium Reserves.
2. In Table II, the discount rates to be used for columns B, D and F shall be the IC-prescribed discount rates as of end of current period.
3. Item 3 of Table I must tally with Item 1 Column A of Table II.
4. Item 6 of Table I must tally with Item 1 Column F of Table II.
5. Item 7 of Table I must tally with Item 1 Column H of Table II.

GUIDELINES FOR ACTUARIAL PRACTICE IN GROUP TERM LIFE INSURANCE

(Adopted 2000)

Editor's Note: Refer to latest Insurance code, IC CL 2017-57 and Tax codes applicable to Group insurance products.

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1. INTRODUCTION

The guidelines recommended herewith are based on the application of the Principles and Methodologies in the practice of Group Insurance Underwriting and Pricing in the Philippine life insurance industry.

The set of recommendations was prepared by the Ad-hoc Committee on Group Pricing of the Actuarial Society of the Philippines (ASP), and is a compilation of the combined experience of the Group actuarial practitioners in the ASP.

2. PRINCIPLES OF GROUP SELECTION

In preparing the Guidelines, the following principles were observed:

2.1 The group to be insured is composed of persons that have been organized for a purpose other than to obtain group insurance.

2.2 There is a steady flow of persons in and out of the group, as to achieve stability in the risk that is being insured.

2.3 A minimum participation requirement is imposed to minimize anti-selection and achieve a greater spread of the risk.

2.4 The amount of benefits is determined not by individual selection. It may be uniform or based on one of the factors inherent in the group, such as, salary, years of service, employment rank, amount of indebtedness or pre-need price.

2.5 The insurance cost is shared by averaging premiums for all ages of persons belonging to the group.

2.6 The administration of the group insurance plan is done by one person or organizational unit of the employer, association, or pre-need company, to achieve efficient collection of premiums and personal data from the persons insured.

2.7 The group to be insured is not generally required to be individually subject to medical examination or other evidence of insurability, except for individuals with large amounts of insurance cover, with ages beyond set limits, or for thoseclassified as belonging to a non-standard risk class.

2.8 One single master insurance policy contract covers the entire group and it is issued to the policyholder, which may be the employer, association, or creditor, of the persons insured. However, individual group insurance certificates are issued to each person covered.

2.9 Although generally renewable yearly, group insurance contracts are considered of continuing nature whereby the plan may outlive individual members.

2.10 Premiums may be subject to experience rating at the end of each term when adjustment in renewal premium and/or experience refund are/is determined.

3. DEFINITION OF TERMS

3.1 Evidence of Insurability (EI). This may be a Health Declaration (short health questionnaire) or a Long Medical Questionnaire. It may also be a simple or comprehensive medical examination and/or medical procedure, and is required depending on the amount of insurance.

3.2 No Evidence Limite (NEL). Also called free cover limit, this is the maximum amount of insurance cover for an individual below which no evidence of insurability is required from that individual to be accepted into the group.

3.3 Non-Medical Limit (NML). This is the maximum amount of insurance cover for an individual for which submission of a simple Health Declaration or a Long Medical Questionnaire is sufficient compliance. Above this limit, the individual isrequired to undergo a medical examination.

3.4 Closed and Open Groups. A closed group refers to a group wherein individuals to be covered by insurance are subject to a rigid criterion such as employment. An open group refers to a group wherein individuals to be covered by insurance are subject to less rigid criteria such as membership in an association, or as debtor in a creditor group life insurance, or as planholder of a pre-need company.

4. UNDERWRITING GUIDELINES

Initial Underwriting

4.1 The following are the information generally considered in the underwriting of group term insurance: type of group (closed or open), age, industry class, gender, amount of insurance, employment status, employment classes, years of service, and some evidence of insurability such as a Health Declaration or Long Medical Questionnaire. For individual members of the group whose amounts of insurance exceed the NEL or NML set by the company in accordance with its underwriting policy, the standards for individual underwriting shall apply.

4.2 To achieve a reasonable spread of risk, the amount of benefit is determined in an automatic manner that precludes a member from selecting against the company.

4.2.1 For closed groups, the amount of benefit is a uniform amount or a multiple of annual salary, or an amount based on employment rank or years of service, whereby the levels are of a reasonable relationship to the compensation levels for each category.

4.2.2 For open groups, the amount of benefit is a uniform amount or an amount based on indebtedness, pre-need price, depositors' account balance, equities in provident funds, etc. The amount of insurance cannot be freely chosen by the insured member.

4.3 The level of Non-Medical Limit and/or No-Evidence Limit is set such that it bears a reasonable relationship to the risk inherent in the group, whether open or closed.

4.4 All the members in employee groups that are to be insured must be actively-at-work (as defined by the insurer) at the effective date of the insurance.

4.5 For contributory plans, enrollment must be within a prescribed period from date of eligibility. Otherwise, evidence of insurability is required.

Renewal Underwriting

The following are guidelines for underwriting group term life insurance at renewal date:

4.6 The minimum number or the minimum proportion of the group of persons to be covered is still satisfied at renewal time.

4.7 The membership in the group coverage must be updated using a report of the new entrants and terminations during the previous period.

4.8 The benefit schedule must be updated, if necessary.

4.9 Underwriting and eligibility requirements must be reviewed and updated based on the group claims experience.

4.10 The premium rate must be verified for adequacy after considering the changes required in the actuarial assumptions and other factors in pricing.

Reinsurance

4.11 In situations where amounts of insurance are beyond retention limits and maximum acceptance limits as defined in the reinsurance agreement, facultative reinsurance cover must be arranged.

4.12 In arranging for appropriate reinsurance cover, catastrophic hazards involving two or more deaths in a single event must be considered.

Underwriting Guidelines for Open Groups

While an open group may qualify as one composed of persons that were not organized to obtain insurance but for some other purpose, the underwriting standards for closed groups should be modified and adapted for each specific type of open group.

4.13 A minimum participation requirement should be specified as that consistent with what was assumed in the pricing.

4.14 Lower underwriting limits than closed groups are generally provided to open groups. In general, coverages are not issued on a No-Evidence basis.

4.15 A higher average age is generally expected from open groups.

4.16 Individual underwriting is generally very limited in open groups.

4.17 Credit Life policies covering debtors are also bound by guidelines for open groups.

4.18 For a pre-need group, the following are some suggested underwriting and pricing guidelines:

4.18.1 For pre-need groups, the coverage is normally expressed as a function of some pre-determined amount provided in the plan, such as the pre-need price or the maturity value. The maximum amount must be verified so that the coverage for each plan does not exceed the maximum amount limit set in the group term insurance policy. The insured members in pre-need groups are individually solicited; thus it is advisable to have lower maximum limits in the amount of insurance than the limits for closed groups.

4.18.2 A higher estimated average age than that assumed for an employee group should be used to take into consideration the difference in the composition of a pre-need group of insured planholders.

4.18.3 Other underwriting information for employee groups, such as employment class, employment status and other underwriting safeguards like an actively-at-work proviso are for practical reasons, not applicable to pre-need groups. Thus underwriting requirements will have to be more rigid.

4.18.4 In the pricing of the group term insurance for pre-need planholders, additional elements of cost must be taken into consideration, considering the diverse membership of a pre-need group. The requirement to issue individual certifications to pre-need planholders is an important element of cost.

4.18.5 In the regulation of securities by the SEC, more disclosure is required, hence a group insurance contract with a set of terms and conditions specific to pre-need must be prepared. The following Guidelines issued by the Insurance Commission for Group Yearly Renewable Term Insurance covering pre-need should also be given due consideration in drawing up the group insurance contract, and in allocating cost of administration of this particular group.

4.18.5.1 The term "Policyholder" whenever used in the group policy shall mean the pre-need company as custodian of said policy.

4.18.5.2 The life company shall issue to the pre-need company for delivery to each planholder an individual certificate setting forth a statement as to the insurance protection to which he is entitled, to whom the insurance benefits are payable, and the rights set forth in paragraphs (h), (i), and (j) of Section 228 of the Insurance Code.

4.18.5.3 The planholder shall bear the entire cost of his group insurance.

4.18.5.4 The proceeds shall be payable to the designated beneficiary of the planholder in the event of his death.

5. CLASSIFICATION OF GROUP ACCOUNTS

5.1 New Accounts. These are groups that have had no prior group insurance program.

5.2 Transfer Accounts. These are group accounts that have had prior group programs whether insured or self-insured. These include take-over accounts, where the insurance company that has taken over adopts the terms and conditions of the previous contract in its entirety.

5.3 Renewal Accounts. These are yearly renewable group insurance contracts that are already with the life insurance company, and are due for renewal.

6. PRICING CONSIDERATIONS

6.1 When pricing group insurance, distinction should be made in the pricing assumptions between refunding and non-refunding accounts.

6.2 Pooling and experience rating concepts may be applied to groups with low credibility, e.g., less than 1,000 members per group. The experience of groups with high credibility may be considered self-sufficient for pricing purposes.

6.3 The minimum gross premium for New Accounts must consider the net risk premium plus all applicable taxes and adequate loadings. An appropriate mortality table, either a published standard table or one arising from the company's own mortality experience, shall be used to estimate the net risk involved.

Expense loading assumptions should be based on an expense study applicable to the experience of the company or of companies with comparable experience.

Premium tax, documentary stamp tax, municipal tax and other annual taxes shall form part of loadings for expenses.

Maximum interest rate, if used in pricing, is 6%.

Because of the disproportionately high documentary-stamp-tax rate of P2.50 per P1,000 of the amount insurance, some companies decide on spreading this one-time tax charge over a period of five years. The insurance company is thus subject to the risk of inadequate expense loading for taxes paid, in case the group insurance contract is terminated before the end of the five-year period.

6.4 Additional or reduced mortality, and/or occupational loadings may be considered in the pricing if appropriate to the profile of the group, and justified by prior years known experience.

6.5 For Transfer and Take-over accounts, the claim experience of the account should be the basis for pricing, subject to adjustment, using credibility factors, and any changes in the terms and conditions of the existing group insurance contract, as approved by the Insurance Commission.

6.6 For Renewal accounts, net premiums are usually based on the expected mortality of the group as indicated by actual claims experience. A credibility factor depending on size, risk profile of the group, type of coverage, and other relevant characteristics of the group, may be applied. If revisions in the group contract are contemplated, the actuary is advised to evaluate the effects of the revisions on all the elements of pricing.

7. RESERVES IN GROUP TERM INSURANCE

7.1 Reserves are determined on a group basis, and are computed from data that have been verified to be complete and correct to the best extent possible.

7.2 Among the reserves to be set up are unearned premium reserves, reserves for due and unpaid claims, claims in course of settlement (ICOS) and incurred but not reported claims (IBNR), reserves for experience refunds, reserves for extended disability or waiver of premium benefits, and reserves for conversion options, if any are provided in the contract.

7.3 Certain provisions in the reinsurance agreement are considered in setting up the insurer's reserves.

7.4 Changes in age and projected claim trends are factors that are considered in the valuation of claim fluctuation reserves.

8. LEGAL AND REGULATORY REQUIREMENTS

The actuary shall make sure that the group master insurance policy contract, individual insurance certificates, application forms, and other forms to be used are approved by the Insurance Commission. The actuary shall coordinate with a lawyer in the preparation of the group insurance contract if no applicable contract already previously approved can be used for the group to be insured. The applicable provisions of the Insurance Code must be followed.

NON-LIFE

Republic of the Philippines
Department of Finance
INSURANCE COMMISSION
1071 United Nations Avenue
Manila

CN: AJA16-0061

Circular Letter (CL) No.:	2018-18
Date:	09 March 2018
Superseding:	CL No. 2016-67
Amending:	CL No. 2015-06

CIRCULAR LETTER

TO : ALL NON-LIFE INSURANCE COMPANIES AND PROFESSIONAL REINSURANCE COMPANIES DOING BUSINESS IN THE PHILIPPINES

SUBJECT : VALUATION STANDARDS FOR NON-LIFE INSURANCE POLICY RESERVES

Pursuant to Sections 219 and 220 of the Amended Insurance Code (Republic Act No. 10607) which require every insurance company other than life to maintain (a) a reserve for unearned premiums on its policies in force, and (b) the estimated amount of all its other liabilities including taxes, expenses and other obligations due or accrued including any special reserves required by the Commissioner, in addition to its liabilities and reserves on contracts of insurance issued by it, attached is the revised Valuation Standards for Non-Life Insurance Policy Reserves which shall take effect retroactively starting 01 January 2017.

This Circular supersedes Circular Letter (CL) No. 2016-67 and amends CL No. 2015-06 *"New Reserves Computation for the Compulsory Insurance Coverage for Migrant Workers"*.

For strict compliance.

DENNIS B. FUNA
Insurance Commissioner

Head Office; P.O. Box 3589 Manila FAX No. 522-14-34 Tel. Nos. 523-84-61 to 70 Website: www.insurance.gov.ph

VALUATION STANDARDS FOR NON-LIFE INSURANCE POLICY RESERVES

1 Introduction

1.1 Every non-life insurance company or reinsurance company supervised by the Insurance Commission (IC) shall maintain reserves for its written policies, which shall be charged as a liability in any determination of its financial condition, as required by the IC, in accordance to Sections 219 and 220 of the New Insurance Code (RA 10607), as well as this Valuation Standards for Non-Life Insurance Policy Reserves.

2 Scope and Application

2.1 This Valuation Standards shall apply to all policies issued by non-life insurance companies and reinsurance companies.

2.2 This Valuation Standards is intended to cover both direct and assumed reinsurance business, whether treaty or facultative, of non-life insurance companies.

3 Key Definitions

3.1 In this Valuation Standards, unless the context otherwise requires:

3.1.1 "Company" refers to a non-life insurance company or reinsurance company supervised by the IC.

3.1.2 "Actuary" refers to an in-house actuary of the Company or an external consulting actuary accredited by the IC.

3.1.3 "Policy Reserves" refers to the aggregate of Premium and Claims Liabilities both defined below.

3.1.4 "Premium Liabilities" refers to all future claim payments and related expenses for policy maintenance and claims settlement, to be made after the valuation date, arising from future events for which the Company is liable under its insurance contracts, and is computed on both gross and net of reinsurance basis.

3.1.4.1 "Unearned Premium Reserves" or "UPR", refers to the amount of reserve for that portion of the premium received which is attributable to a period of risk falling beyond the valuation date.

3.1.4.2 "Unexpired Risk Reserves" or "URR", refers to the amount of reserve required to cover future claims and expenses, at a designated level of confidence, that are expected to emerge from an unexpired period of cover.

3.1.5 "Claims Liabilities" refers to claims incurred but not yet paid as of valuation date, for both the Company's direct and assumed reinsurance business, whether treaty or facultative. It includes claims due and unpaid, claims in the course of settlement, resisted claims and those which are incurred but not reported at a designated level of confidence, as well as direct and indirect expenses related to settling all outstanding claims, whether reported and unreported, as of valuation date.

3.1.5.1 "Outstanding Claims Reserve" refers to the estimated amount of reported claims that have not yet been settled as of valuation date.

3.1.5.2 "Incurred but not Reported" or "IBNR", refers to the amount to be provided for claims in respect of claim events that have occurred but have not been reported to the company as of the valuation date.

3.1.5.3 "Claims Handling Expense" refers to the estimated amount of expenses for settling all claims, whether reported or unreported, outstanding as of valuation date applicable to both direct business and assumed treaty and facultative reinsurance businesses.

4 Data and Systems

4.1 The Company's Chief Executive Officer (CEO) or a Responsible Officer with a comparable rank shall ensure that the Company's database is properly maintained so that the premiums and claims data provided to the Actuary is accurate and complete. The CEO or the Responsible Officer must furnish the data to the Actuary and must allow his/her Actuary reasonable access to the Company's database.

4.2 The Actuary shall apply reasonable tests to satisfy himself that the premiums and claims data is accurate and complete. A check for both integrity and completeness of data should precede the valuation work. Furthermore, the Company shall maintain a historical claims database of at least ten (10) years.

4.3 The Company shall create loss development triangles on both paid and incurred claims for each class of business, on both gross and net of reinsurance basis. The length of historical data needed in creating the loss development triangles must be based on the Company's underlying business and on the long-term development of each class of business. Please refer to **Annex D.**

4.4 Companies or specific classes of business which have insufficient data as a result of business expansion or mergers and acquisitions shall be required to use as much data as they currently have until they have accumulated the appropriate length of historical claims data for valuation purposes.

4.5 The Company shall maintain a database of historical claims, on both gross and net of reinsurance basis, pertaining to large loss events incurred for as long a period as the loss development triangles, for the purpose of measuring and monitoring catastrophic risks, as described in Section 11 below.

4.6 The Company shall also maintain records on historical earned and unearned premiums for each class of business, on both gross and net of reinsurance basis, as well as commissions and other expense information in relation to policy maintenance and claims settlement, for the purpose of estimating future expenses for valuation of policy reserves.

4.7 The Company shall determine the claims grouping for valuation of policy reserves on either an accident year or an underwriting year basis per class of business, whichever is more appropriate, and prepare the corresponding data to the determined basis.

5 Basis of Assumptions

5.1 As much as practicable, the valuation of policy reserves shall be based on the Company's actual historical experience and/or industry data. Any deviations and the use of professional judgment must be supported by a strong rationale and must be documented in Section C of the Actuarial Valuation Report, as described in **Annex A**.

5.2 Premiums used in the valuation of policy reserves shall be gross of expenses, commissions, taxes, etc. depending on the Company's discretion.

5.3 Premiums and claims data used in the valuation of policy reserves, as well as projection of future claims, shall be on gross and net of reinsurance basis.

5.4 The Actuary shall gather information from the Underwriting Department or its equivalent to provide information on the following areas: market outlook, changes in pricing levels, impact of historical and current catastrophes, level of reinsurance cover, policy inception profile, changes in the mix of business, renewal rates and changes in terms and conditions.

5.5 The Actuary shall also gather information from the Claims Department or its equivalent to provide information on the following areas: typical claims process from notification to settlement, current key uncertainties with reaching settlement of claims, claims expense inflation, large loss experience, operational changes in the claims function, large loss concerns and uncertainties, and changes in initial case estimates.

5.6 The Company's projection of future claims shall be based on the loss development triangles per class of business, as described in paragraph 4.3, as well as the results of the information gathered from Underwriting and Claims Departments, or their equivalents, as described in paragraphs 5.4 and 5.5.

5.7 The Company shall determine the major classes of business in its operations for reserving purposes by performing a risk assessment process. At a minimum, the Company shall define its classes of business as follows: Fire, Marine, Casualty, Motor Car and Suretyship. However, the Company can come up with a more granular classification based on its own risk assessment.

6 Valuation Methodology

6.1 The Actuary, as set out in the New Insurance Code, shall be responsible to determine the level of policy reserves using basis no less stringent than that prescribed in Sections 7 to 10 below.

6.2 The reserves for a non-life insurance company shall be composed of Premium and Claims Liabilities both determined using best estimate assumptions, with an appropriate Margin for Adverse Deviation (MfAD) for expected future experience.

7 Premium Liabilities

7.1 Premium Liabilities shall be determined on an aggregate basis.

A computation should be performed to determine whether the URR required is greater or smaller than the UPR net of Deferred Acquisition Cost (DAC). If the URR is greater, then the difference should be booked as an additional reserve on top of UPR.

Therefore, Premium Liabilities is equal to the UPR plus the difference between the URR and the UPR net of DAC, if the URR is greater than the UPR net of DAC. Otherwise, it is equal to the UPR.

7.2 UPR shall be calculated based on the 24th method for all classes of business, on both gross and net of reinsurance basis. This means that for policies with policy duration of less than one (1) year or more than one (1) year, the UPR shall consider the actual unearned premium from the date of valuation to the date of termination of the policy. Further, the same method in the calculation of the UPR shall apply to policies covering migrant workers/Overseas Filipino Workers (OFWs) using the Table of Premiums for Reserve Computation stipulated in Annex A of CL No. 2015-06 until the said CL is further amended. The Actuary shall provide sufficient basis for any material deviations from this methodology in Section C of the Actuarial Valuation Report, as outlined in **Annex A**.

7.3 URR shall be calculated as the best estimate of future claims and expenses for all classes of business, with MfAD as computed in Section 9. This best estimate relates to expected future claim payments and related expenses to be incurred after the valuation date, arising from future events.

7.3.1 Expected future claims shall include all claims which might occur during the unexpired period including: claims which are reported after the end of the unexpired exposure period, but have occurred within the unexpired exposure period; and claims which are reopened at any date, but have occurred within the unexpired exposure period.

7.3.2 Expected future expenses shall include policy maintenance expenses and claims management expenses (i.e., direct and indirect claims settlement costs).

7.4 The URR may be estimated as the unearned premium for each class of business multiplied by the ultimate loss ratio, adjusted for future expenses and MfAD.

7.5 The Actuary may consider an adjustment of the ultimate loss ratio by allowing for large and catastrophic losses; however, these should be captured on a best estimate basis considering the severity apportioned by the expected frequency of such a loss.

8 Claims Liabilities

8.1 Claims Liabilities for both direct business and assumed treaty and reinsurance businesses shall be calculated as the sum of Outstanding Claims Reserve, Claims Handling Expense and IBNR, with MfAD as computed in Section 9.

8.2 Outstanding Claims Reserve shall be based on actual claims reported but have not yet been settled as of valuation date. The Company shall ensure integrity of the data inputs as well as minimize uncertainties in the claims processing, subject to paragraph 4.2.

8.3 The IBNR shall be calculated based on standard actuarial projection techniques or combination of such techniques, such as but not limited to the chain ladder method, the expected loss ratio approach, and the Bornhuetter-Ferguson method. The Actuary shall determine the appropriateness of the methodology considering the characteristics of the data, such as maturity of the business.

8.4 Claims Liabilities shall also include a provision for Claims Handling Expenses, which covers the estimated expenses of settling all claims, both reported and unreported, outstanding as of valuation date.

8.5 The Actuary shall ensure the reliability of the expected loss ratios by obtaining estimates from various sources, such as underwriters, the business plan, pricing actuaries, market statistics, or from a historic view of profitability and loss ratios.

8.6 In valuing the Claims Liabilities, the Actuary should consider other factors such as but not limited to: varying expense structure in run-off situations, large losses arising from significant past events, operational changes in claims management, underwriting changes such as business mix and premium rate changes, changes in reinsurance program, changes in claims handling process, and external conditions.

8.7 To ensure sufficiency of reserves, the Actuary shall conduct a back-testing exercise of the IBNR by comparing the previous year's IBNR of expected current year claim developments, with actual current year claim developments. The results of such shall be documented in Section D of the Actuarial Valuation Report, as outlined in **Annex A**. In cases where the IBNR has proven insufficient to cover actual claims development, the Actuary shall revisit the assumptions for IBNR valuation and document the rationale for this deterioration.

9 Margin for Adverse Deviation

9.1 The Company shall include an MfAD to allow for inherent uncertainty of the best estimate of the policy reserves. The purpose of the MfAD is to consider the variability of claims experience within a class of business, the diversification between classes of business and conservatism in the best estimate.

The actuary shall determine the company-specific MfAD on at least an annual basis based on standard projection techniques or combination of such techniques, such as but not limited to the Mack Method, Bootstrapping Method, Stochastic Chain Ladder Method to bring the actuarial estimate of the Policy Liabilities at the 75th percentile level of sufficiency. The data, basis and analysis in the determination of the MfAD shall be included in Annex A

10 **Discounting**

10.1 The Actuary shall determine the materiality of discounting the cash flows in calculating the policy reserves. It shall be emphasized that cash flow timing is based on claims delay pattern and not on policy maturity.

10.2 If the Actuary deems it material to discount the cash flows in computing the policy reserves, the Actuary shall use current risk-free rates. The rates shall exactly match the duration of the policy and the currency of the cash flows and shall be prescribed by the IC.

11 **Monitoring of Severe and Catastrophic Risks**

11.1 Companies shall take measures to ensure proper monitoring of risks beyond the 75th percentile confidence level, such as internal modelling or performance of appropriate stress testing exercises.

12 **Actuarial Valuation Report**

12.1 The Actuary shall prepare an actuarial valuation report to be submitted to the IC. The actuarial valuation report, at a minimum, shall contain the following information (see **Annex A** for details):

(i) Scope of Report
(ii) Data Requirements
(iii) Valuation Methodologies and Assumptions
(iv) Analysis of Experience
(v) Valuation Results
(vi) Certification by the Actuary
(vii) Certification by the CEO or Responsible Officer

12.2 The Certifications to be provided by the Actuary and the CEO or Responsible Officer shall be duly notarized.

Annex A

Report on Actuarial Valuation of Non-Life Insurance Policy Reserves
Name of Company: ______________________________
For the period ended dd/mm/yyyy

Section A: Scope of Review

1. Purpose of report
2. Name of Actuary (whether the Actuary is an employee of the insurance company or an external consultant), professional qualifications, and the capacity in which he/she is carrying out the valuation of policy reserves
3. Confirmation from the Actuary of compliance with requirements with this Valuation Standards, and reasons, if any, for not complying fully with any requirements

Section B: Data Requirements

1. The basis on which the analysis has been carried out (i.e., underwriting or accident year)
2. The source of the data and how it was extracted
    a. Description of the company's current underwriting policies: specific market segments targeted, risk selection process, any major recent changes in premium rates and policy conditions, any recent changes in levels of underwriting authorities, any recent changes in key personnel and delegation of authority, and any changes in level of deductibles or policy limits
    b. Description of the company's claims management policies: guidelines for case reserving and the use of loss adjusters, policies on opening and closing of claims, operational changes in claims function, large loss concerns and uncertainties
3. Documentation of any adjustments made to the data to allow for abnormal items such as large losses, catastrophe losses, etc. including the nature, amount and rationale for the adjustment
    a. Description of significant events during the year affecting the claim experience and how these were taken into account in the valuation of the liabilities
    b. Description of other effects considered including economic, technological, medical, legislative environment, social trends, competition, court decisions, consumerism, etc.

4. Documentation of quantitative information which may have an impact on valuation, if applicable

Section C: Valuation Methodologies and Assumptions

1. Detailed discussion on the valuation methods, assumptions, and professional judgment used in the estimation of the following:
    a. Premium liabilities
    b. Claims liabilities
    c. Claims handling expense and other related expenses
    d. Margin for adverse deviation
    e. Discounting, if applicable
2. When more than one method is used, the basis for choice of results
3. Justification for key differences in assumptions between valuations of premium and claims liabilities
4. Any material deviations from this Valuation Standards in terms of valuation methodologies and assumptions, and basis for these deviations

Section D: Analysis of Experience

1. For year-end valuation, detailed analysis of the company's actual experience of both URR and claim liabilities versus expected experience in previous year-end valuations, including justifications for any material change observed. The experience analysis should cover claims payments and incurred cost movement.
2. Comparative analysis between current and previous valuations such as discussion of reserve movements.

Section E: Valuation Results and Discussion

The summary of the valuation results shall follow the format shown in **Annexes B.1, B.2 and C.** Companies shall provide a short narrative discussing their valuation results for each class of business.

Section F: Certification by the Actuary

The Actuary shall provide a duly-notarized certification as set out below:

> "I hereby certify that I have conducted tests necessary to verify the reasonableness and integrity of the data, confirm that the information contained in this Report are accurate to the best of my knowledge and that I have calculated the policy reserves in accordance with the Valuation Standards prescribed by the Insurance Commission and the standards of practice of the Actuarial Society of the Philippines."

____

Signature over Printed Name of Actuary

Date: ____________
IC Accreditation No.: ________________
PTR No.: _______________

Section G: Certification by the CEO or Responsible Officer

The CEO/Responsible Officer shall provide the following duly-notarized certification:

> "I hereby certify that the database is properly maintained and I have satisfied myself that the data provided to the certifying Actuary are accurate and complete."

____

Signature over Printed Name of
Chief Executive Officer/Responsible Officer

Date: ____________

ASP GUIDANCE NOTES (GN2017-1)

Implementation Guidelines of Non-Life Reserve Valuation Standards

In accordance with the IC Circular Letter 2016-67, and further amended in accordance with IC Circular Letter 2018-18

(April 2018)

Non-Life Insurance Committee
Actuarial Society of the Philippines

IMPLEMENTATION GUIDELINES OF NON-LIFE RESERVE VALUATION STANDARDS

(In accordance with IC Circular Letter 2018-18)

Introduction

The Actuarial Society of the Philippines (ASP) affirms that the IC Circular Letter 2018-18, Valuation Standards for Non-Life Insurance Policy Reserves, presents a general framework of standards for the valuation of non-life insurance policy reserves (or statutory reserves) for regulatory reporting to the Insurance Commission.

The ASP also recognizes that regulatory reporting is primarily for establishing and monitoring of the solvency of non-life insurance and professional reinsurance companies. The statutory reserves represent the measure of the company's main liability on direct or assumed inforce policies as at the valuation date. Risk based capital (RBC), which is an allocation of surplus or net worth, shall be layered on top of the statutory reserves for adequate provisions for solvency.

The purposes, basis and the amounts of statutory reserves may not be congruent with those for Philippine Financial Reporting Standards (PFRS) and tax regulations. There may be differences in the principles underlying various tax rules, financial reporting standards or regulations.

Guidance Notes

The ASP issues these Guidance Notes (GN2017-1) for compliance of all Fellows accredited by the Insurance Commission as Non-Life Actuary, certifying the basis, calculations and amounts of non-life policy reserves in accordance with IC Circular Letter 2018-18.

The "Actuary" whenever used in this Note refers to a Non-Life Actuary, accredited by the Insurance Commission.

Scope

1. DATA – validation, classification and grouping
2. VALUATION METHODOLOGIES
3. MARGIN FOR ADVERSE DEVIATION
4. DISCOUNTING
5. REPORTING

1. DATA

IC Circular Letter 2018-18, Section 4: Data and Systems

Guidance Note: The Actuary shall use the premiums and claims data which are, to his guided judgment, most appropriate to calculate the applicable policy reserves.

- The Actuary shall be satisfied with the accuracy and completeness of the data, performing checks and tests to ascertain data integrity and completeness. The Actuary shall perform the following: check consistency with financial statement reports, compare with data for prior periods, conduct data trend reasonableness checks and ensure consistency of data definitions (e.g., date of loss, date reported, date paid, claim status, date closed, date reopened).

- Although the company is required to maintain a historical claims database of at least ten (10) years, the Actuary may choose to use data fewer than the 10-year historical claims database. However, it is the responsibility of the Actuary to provide acceptable justification of such choice.

- If the company's systems and resources permit, the Actuary may choose to classify data into groupings that are more granular than the minimum requirement of IC. For example:

    - Fire can be further broken down into Fire/Lightning, Earthquake, Typhoon, Flood, etc.
    - Marine can be further broken down into Hull and Cargo.
    - Motor Car can be further broken down into Compulsory and Voluntary.
    - Other classes like Aviation, Travel, Accident & Health, etc. can be shown separately.
    - For classes with reinsurance acceptances, Direct and Inward Reinsurance business can be shown separately.

  The Actuary's aim should be to divide the data into sufficiently homogeneous groupings, maintaining the credibility of the amount of each grouping.

- Aside from separating the large loss events for the purpose of measuring and monitoring catastrophic risks, the Actuary may choose to further break down data, if the company's systems and resources permit, into regular/attritional losses and large losses not pertaining to catastrophic events. If the Actuary so chooses, he must maintain the consistent definition of the types of losses.

- The Actuary must be consistent in choosing whether to group data by accident year or by underwriting year. Accident year is usually used by direct writing non-life companies while reinsurance companies use underwriting year.

- The Actuary may also deem it appropriate to use monthly, quarterly or semi-annual data instead of annual data as may be required by IC's reporting templates. The Actuary should note that the same framework and valuation principles as contained under IC CL 2018-18 will apply for monthly, quarterly and semi-annual data.

2. VALUATION METHODOLOGY for INCURRED BUT NOT REPORTED (IBNR)

IC Circular Letter 2018-18, Section 8.3 to 8.4: Claims Liabilities

Guidance Note: The Actuary shall use the most appropriate methodology for calculation of the IBNR for each data class.

- The Actuary should be able to balance the two data considerations in non-life reserving which are (1) homogeneity and (2) credibility. Selection of the valuation methodology will then follow.
- Although the IC Circular mentioned three valuation methodologies, namely, chain ladder method, expected loss ratio method and Bornhuetter-Ferguson method, for the estimation of the IBNR, it is highly recommended that the Actuary look into other methodologies that may be more appropriate.
- The Actuary should be guided by the following table that summarizes the usual appropriate valuation methodologies by level of risk/line of business:

	Standard Risks High Frequency-Low Severity	Severe Risks Medium Frequency-Medium Severity	Catastrophic Risks Low Frequency – High/Medium Severity
Business Lines	Motor – Damage Marine - Cargo Typhoon Flood Travel, Accident & Health	Engineering Casualty Personal Liability Fire Motor Bodily Injury	Earthquake Marine – Hull
Methodology	- Case-by-case reserves - Chain Ladder - Bornhuetter-Ferguson - Average Cost per Claim (Frequency Severity Techniques)	- Case-by-case reserves - Severity Modelling - Expected Loss Ratio approach	- Case-by-case reserves - Exposure-Based approach [using Probable Maximum Loss – (PML)] - Scenario Analysis

- Note that the table above is only a general guideline in the selection of the valuation methodology applied. In certain situations, wherein data trends restrict the Actuary in using the guideline, it is then the responsibility of the Actuary to select the most appropriate estimate of the unpaid claim.

- No single reserving method can possibly produce the best estimate in all situations. This is inevitable since every reserving method is based on certain underlying assumptions. (Berquist & Sherman) In such cases, actuarial judgement may prevail so that the selected valuation methodology can be responsive to the trends of the data and to more recent experience.

- Below is an example of a trend smoothing technique so that the Actuary can use in ensuring adequacy of the computed ultimate loss. This can be considered as a variation of the Chain Ladder Method (CL method) as a way to manage, and make provisions for, large/ catastrophic losses in the data.

AY	Development Year			
	1	2	3	4
2012	8,000	11,500	13,750	13,820
2013	9,500	13,500	16,600	
2014	**9,250**	**25,000**		
2015	9,700			
LDF*		1-2	2-3	3-4
2012		1.44	1.20	1.01
2013		1.42	1.23	
2014		**2.70**		

*Loss Development Factor

From the loss development table above, in accident year 2014, there seems to be an unusual data point in development year 2. This caused the age-to-age factor in AY 2014 to be large. As noted above, in situations wherein the data trend restricts the use of a methodology (CL method), the Actuary can then investigate the reason behind the figure and smooth the data.

Suppose that in this particular case, the AY 2014 DY 2 was caused by a large loss of 12,000. Removing the large loss from the triangle will result to:

AY	Development Year			
	1	2	3	4
2012	8,000	11,500	13,750	13,820
2013	9,500	13,500	16,600	
2014	**9,250**	**13,000**		
2015	9,700			

LDF	1-2	2-3	3-4
2012	1.44	1.20	1.01
2013	1.42	1.23	
2014	**1.41**		
Average	1.42	1.21	1.01
CLDF	1.73	**1.22**	1.01

Developing AY 2014 using the smoothed Cumulative Loss Development Factor (CLDF) will produce an ultimate loss of 15,845. This is still short of the large loss, so adding back the large loss will result to 27,845. Depending on the actuarial judgement, this figure may be a preferred estimate of the ultimate loss.
Following the same steps above, the Actuary can then prevent the accumulation of the large loss in using Chain Ladder Method. Wherever possible, the Actuary should incorporate the concept of credibility and data smoothing into the actuarial methods used.

The Actuary may also refer to the Casualty Actuarial Society Notes: "Estimated Unpaid Claims Using Basic Techniques" by Jacqueline Friedland, FCAS, FCIA, MAAA, FCA, KPMG LLP.

3. MARGIN FOR ADVERSE DEVIATION

IC Circular Letter 2018-18, Section 9: Margin for Adverse Deviation

Guidance Note: It is up to the judgment of the Actuary to determine the basis and provision to achieve the required level of sufficiency for the establishment of the Margin for Adverse Deviation (MfAD), with due consideration for the requirements of the Insurance Commission.
In estimating MfAD by class of business, the Actuary may, if deemed appropriate, refer to published industry research or other suitable benchmarks.

4. DISCOUNTING

IC Circular Letter 2018-18, Section 10: Discounting

Guidance Note: Should the Actuary find the need to discount cash flows due to materially long finalization of claims, the yield curve to be used as basis for the market-consistent discount rate shall be obtained from the following sources:

i. for Philippine Peso policies : PDST-R2 rates
ii. for US Dollar policies: International Yield Curve (IYC) from Bloomberg

unless a different basis for the market-consistent discount rate is prescribed by the Insurance Commission.

Furthermore, pre-tax rates, gross of any final taxes and other taxes, should be used.

The rationale for the use of pre-tax discount rate:

- The discount rate is primarily a market-consistent parameter of a time value measure that is consistent with the market value basis of long term financial instruments.
- Discount rate, for purposes of reserve valuation, does not represent the expected investment income that can be generated from the supporting asset portfolio.

- Provisions for taxes are to be taken up separately in accordance with tax regulations and outside of the scope of regulatory reserve valuation.
- Only the taxes that are fully and directly proportional with the premium or benefit cash flows (such as VAT and DST) are factored in the projected cash flows.
- Final taxes on investment income may apply only on government bonds. Since there are various asset mixes across companies, provisions for final taxes on investment income from government bonds should be taken up in the deferred tax asset/liability and not in reserve valuation.
- In the same manner, provisions for deferred tax assets/liabilities on corporate income taxes, MCIT, municipal taxes and other assets are to be taken up separately and outside the reserve valuation.

5. REPORTING

IC Circular Letter 2018-18 Annex A, Report on the Actuarial Valuation of Non-Life Insurance Policy Reserves

Guidance Note: The Actuary is responsible for the demonstration of:

A. The impact on Policy Reserves due to changes in the following may form part of the Analysis of Experience:
   a. The insurance policy portfolio over the relevant reporting period,
   b. Valuation methodology,
   c. Best-estimate assumptions,
   d. Margin for Adverse Deviation,
   e. Market-consistent parameters,
   f. Business models and nature of contractual obligations,

B. Components of Policy Reserves that may be utilized for financial reporting under PFRS and other local regulations

The Actuary should present by class of business the following components of Policy Reserves laid out below:

Premium Liabilities	Unearned Premium Reserves (UPR)
	Unexpired Risk Reserves (URR)
	Margin for Adverse Deviation (MfAD) included in URR
Claims Liabilities	Outstanding Claims
	Incurred But Not Reported (IBNR) Claims
	Claims Handling Expenses (CHE)
	Margin for Adverse Deviation (MfAD) on Claims and Expenses

URR is calculated as the best estimate of future claims and expenses for all classes of business, with MfAD.
The Actuary may further break down Outstanding Claims into Due and Unpaid, In Course of Settlement and Resisted Claims.

ASP PRACTICE GUIDE (PG2018-1)

Non-Life Claims Liabilities

In accordance with the IC Circular Letter 2018-18 and ASP Guidance Notes GN2017-1

(April 2018)

Non-Life Insurance Committee

Actuarial Society of the Philippines

CONTENTS

Section 1: Introduction

Purpose

The Actuarial Society of the Philippines (ASP) affirms that the IC Circular Letter 2018-18, Valuation Standards for Non-Life Insurance Policy Reserves, presents a general framework of standards forthe valuation of Non-life Insurance Policy Reserves (or statutory reserves) for regulatory reporting to the Insurance Commission.

The ASP also recognizes that regulatory reporting is primarily for establishing and monitoring of the solvency of non-life insurance and professional reinsurance companies. The statutory reserves represent the measureofthecompany's main liability ondirectorassumed in-force policiesas atthevaluationdate. Risk based capital (RBC), which is an allocation of surplus or net worth, shall be layeredon top of the statutory reserves for adequate provisions for solvency.

This Practice Guide for Non-Life Claims Reserving is a documentation of the discussion during one of the ASP L&D Team's series of workshop conducted by the Non-Life Committee members last 10 November 2017. Practice Guides are not intended to be Guidance Notes, nor Standards of Practice. It is a list of what are considered as best practices performed by different subject matter experts for a specific practice area.

The purposes, therefore, of this Practice Guide is to present some guidance on certain practical considerations inherent in computing for non-life claims liabilities. It aims to equip non-life practicioners with a practical guide in analyzing data to provide meaningful insights in terms of setting appropriate non-life claims liabilities.

The "Actuary" whenever used in this Note refers to a Non-Life Actuary, accredited by the Insurance Commission.

Scope

This Practice Guide covers only the Claims Liabilities part of the Insurance Policy Reserves. It will present very briefly some basic concepts and definitions before discussing some practice considerations in developing non-life claimsliabilities.

Section 2: Definition of Basic Concepts

Non-life Insurance Policy Reserves

There are two (2) components of a non-life insurance policy reserves, namely, the claims liability and the premium liability.

Claims liability refers to claims and claimshandling expenses incurred but notyetpaid from risks that are written andearnedasofthevaluation date. Thisisreservingforsomethingthat hashappened.

Premium liability refers to future claims and expenses that are expected to occur from the risks that have been writtenbutnotyetexpired(hence,unearned)asofvaluationdate. Thisisreservingforsomething that has not yet happened for policies that are in-force as of valuation date.

Ultimate Claims

Ultimate claims as of the valuation date consist of paid claims, case reserves and incurred but not reported claims (IBNR). Case reserves are claims that are incurred, reported, but unpaid.

In conducting the actuarial valuation, we project the amount of ultimate claims, making the IBNR more of a balancingitem.

Claims Liabilities Components

Removing the paid claims from the equation of ultimate claims would result to just the case reserves and IBNR.

The claims handling expense (CHE) is the expense attributable to processing and settling claims.

IC Circular 2018-18 requires that CHE will be added to the remaining unpaid claims, that is, case reserves and IBNR, to arrive at the best estimate of the claims liability.

To achieve the 75th percentile confidence level requirement of the said Circular, a margin for adverse deviation (MfAD) will need to be added to the best estimate of the claims liability.

Section 3: Practical Considerations for Non-Life Claims Liabilities

Sample Case A: Inadequate Data

Claims for some lines of business, like Aviation, hardly occur, thereby making the claims triangle sparse andthe historical data inadequate for use in the reserve calculation. In Table 1, there are no claims that have been reported since Accident Year (AY) 2011 for a sample Aviation line of business. This does not, however, mean that reserves are not set up for this class.

Table 1

Aviation Cumulative Claims Incurred

Accident Year	Development Year 1	2	3	4	5	6	7	Earned Premium	Loss Ratio (LR) Projected	Selected
2010	0	0	0	0	0	0	0	12,760	0%	**0%**
2011	6,316	14,293	15,544	15,723	15,723	15,723		11,867	132%	**132%**
2012	0	0	0	0	0			11,683	0%	**0%**
2013	0	0	0	0				12,757	0%	**0%**
2014	0	0	0					13,676	0%	**0%**
2015	0	0						13,409	0%	**0%**
2016	0							16,423	0%	**22%**

Due to the inadequacy of historical data, the loss development factors become unreliable in determining the ultimateloss. From Table 1, it canbenotedthatonly AY 2011 containsclaimsinformation. It canalso be deduced that claims exceeded premiums for this accident year.

Forcaseslikethis,the Actuarycannotrelysolelyonthe AY2011experience, norcanhe/sheconsiderthat no claims may occur given such experience in recent historical years. In practice, the Actuary can derive the ultimate loss ratio for AY 2016 by averaging the loss ratios of AY 2010 to AY 2015. It may also be good to assess the derived figureandseehowthiscompareswithindustrydata, orothercompanieswithsimilar size and portfolio.

Sample Case B: Large Losses

When looking into the claims triangles, both paid and outstanding, the Actuary might sometimes notice significant increase in claims from the previous development year. If the transactional data is available, the Actuary can easily check where the sudden increase is coming from. However, if only the triangulated data is available, he/shemayconsiderconsultingwitheitherclaimsoraccountingdepartment.

In Table 2, significant increase in incurred claimscanbe observed in the seconddevelopmentyearof AY 2015 for a sample Fire line of business. Additional information provided by the claims department revealedthat thereisaone-offoutstandingclaimamountingtoPHP450million. Sinceclaimsreported are rarely thisbig, this claim is considered as a large loss. For consistency, the insurer and their Actuary may want to set a threshold amount tobe considered as large loss foreach line of businessbasedon latest given data.

Table 2

Fire Cumulative Claims Incurred

Accident Year	Development Year 1	2	3	4	5	6	7	Earned Premium	Loss Ratio (LR) Projected	Selected
2010	320,300	316,000	197,940	188,600	180,750	180,750	180,750	272,400	66%	**66%**
2011	321,000	317,050	216,700	218,800	219,200	218,800		270,600	81%	**81%**
2012	316,500	319,830	216,975	197,975	197,975			308,400	64%	**64%**
2013	287,000	291,705	218,460	218,460				315,800	69%	**69%**
2014	345,600	321,500	214,610					327,900	65%	**65%**
2015	359,600	801,550						378,252	144%	**182%**
2016	287,100							380,300	62%	**68%**

Since large losses are generally not normal occurrences, they distort the claims development and claims experience, thereby making the loss development factors and loss ratios unreliable. Moreover, the occurrenceofalargelosspromptstheActuarytorevisetheselectedultimatelossratios,especiallyfor themore recent accident years where claims movement can still be expected.

In practice, the Actuary can revise the selected ultimate loss ratio for AY 2015 by:

1) excluding the large loss from the claims triangle,

2) computing for the actual loss ratio of the remaining claims,

3) computing for the loss ratio of the large losses, and

4) adding the loss ratio of the large losses back to the actual loss ratio.

Further,sincethelargelossin AY2015is aone-off, the Actuarycantypicallyassumethat AY2016will havea differentexperiencefromthemostprecedentyear, AY 2015. Hence, the Actuarycanderivethe ultimate loss ratio for AY 2016 by averaging the loss ratios of AY 2010 to AY 2014 and the actual loss ratio of the remaining claims for AY 2015.

Sample Case C: Increase/Decrease in Premiums

Another component of the reserve valuation that the Actuary should monitor is the significant movement in premiums. When sudden increase or decrease was observed, as opposed to the historical premiums, the Actuary may consider looking into the cause of the movement.

Increase in premiumscanbedue to expandingthebusiness, consideringmore risks, makingthepricingto be more competitive, introducing new and innovative products, and so on. Expanding the business can meangrowingthe target market to wider scope or territories, like expanding the business to the provincial and rural areas. Considering more risks can mean including Marine Hull risks under Marine Cargo as an example. Repricing a product to match the industry and introducing new competitive products can directly mean more policyholders, thereby resulting to an increase in premiums.

On the other hand, decrease in premiums can be due to a loss of a certain dealership for the Motor line for instance, termination of a particular product, and so on.

In Table 3, thedecrease in earnedpremiumscanbeobservedstarting AY 2013 forasample Motorlineof business. Theclaimsdepartment providedinformation that thereisa lossofdealershipamountingto 10% of the Motor line’s premiums. Generally, the loss ratios have been relatively stable for the historical years.

Table 3

Motor Cumulative Claims Incurred

Accident Year	Development Year 1	2	3	4	5	6	7	Earned Premium	Loss Ratio (LR) Projected	Selected
2010	190,600	229,500	224,400	223,400	223,400	223,400	223,400	454,000	49%	**49%**
2011	173,000	192,800	198,100	198,680	198,570	198,500		451,000	44%	**44%**
2012	218,900	241,000	237,700	236,700	237,400			514,000	46%	**46%**
2013	185,800	243,300	239,720	238,650				582,400	41%	**41%**
2014	220,900	236,200	235,600					546,500	43%	**43%**
2015	213,200	233,700						525,350	44%	**44%**
2016	160,700							526,500	35%	**45%**

Looking into the earned premiums, it can be observed that after the minimal decrease from AY 2010, it has steadily grown until AY 2013. However, following AY 2013, the premiums started to decrease again, only to experience a minimal increase in AY 2016. It can thus be noted that the earned premium movements have been volatile over the historical years. Further investigation on the cause of the volatile trend revealed that thiswas due to the loss of dealership noted above.

Further, we can see from Table 3 that the incurred claims for the first development year in AY 2016 is relativelylowcomparedtothehistoricalfirstdevelopmentyearclaims. Therefore, giventhatthereis already volatile movements in the earned premium, the low incurred claims further causes the loss ratio for AY 2016 to be lower. For cases like this, the Actuary may typically consider the experience of the historical years. The ultimate loss ratio for AY 2016 can then be derived by averaging the loss ratio of AY 2010 to AY2015.

Sample Case D: New Business/Product

As mentioned above, introducing new and innovative products can cause increase in premiums. Furthermore, since these are new products, then they will have a different claims experience. The claims experience of the historical years might not be appropriate therefore for accident years with claims attributable to the new product. In Table 4, it can be noted that claims incurred and earned premiums almost doubled in AY 2015 for a sample Casualty line of business.

Table 4

Casualty Cumulative Claims Incurred

Accident Year	Development Year 1	2	3	4	5	6	7	Earned Premium	Loss Ratio (LR) Projected	Selected
2010	21,700	24,200	23,560	23,400	23,400	23,400	23,400	50,200	47%	**47%**
2011	23,600	26,100	24,560	24,560	24,500	24,500		53,500	46%	**46%**
2012	33,900	35,000	34,283	34,033	34,063			72,300	47%	**47%**
2013	41,280	44,300	35,800	35,625				86,400	41%	**41%**
2014	45,200	46,600	39,100					91,600	43%	**43%**
2015	106,900	119,400						163,600	66%	**66%**
2016	131,000							190,200	68%	**68%**

Consulting with the claims department, it was revealed that the significant increase in claims and premiums were due to a new property floater product that was introduced in AY 2015. Table 5 details the current experience of the new product.

Table 5

Incremental Claims Paid in Actuarial Configuration

Accident Year	Financial Year 2015	2016
2015	39,300	13,900
2016		36,600

Claims Outstanding in Actuarial Configuration

Accident Year	Financial Year 2015	2016
2015	19,800	18,200
2016		39,100

Net Earned Premium

Accident Year	Earned Premium
2015	72,100
2016	84,450

In thisparticularcase, the lossdevelopmentfactorsandhistoricallossratiosmaynotbereliable. Typically, it may be best to exclude the new business and perform two separate reserve valuations. This will enable the Actuary tosee the actual development of the existing products and the new product, and calculate ultimate loss independently. Table 6 illustrates the sample Casualty line of business including only the existingproducts, whileTable 7illustratesthesample Casualtylineofbusinessincludingonlythenew product.

Table 6

Casualty (Existing) Cumulative Claims Incurred

Accident Year	Development Year 1	2	3	4	5	6	7	Earned Premium	Loss Ratio (LR) Projected	Selected
2010	21,700	24,200	23,560	23,400	23,400	23,400	23,400	50,200	47%	**47%**
2011	23,600	26,100	24,560	24,560	24,500	24,500		53,500	46%	**46%**
2012	33,900	35,000	34,283	34,033	34,063			72,300	47%	**47%**
2013	41,280	44,300	35,800	35,625				86,400	41%	**41%**
2014	45,200	46,600	39,100					91,600	43%	**43%**
2015	47,800	48,000						91,500	48%	**48%**
2016	55,300							105,750	50%	**50%**

Table 7

Casualty (New) Cumulative Claims Incurred

Accident Year	Development Year 1	2	3	4	5	6	7	Earned Premium	Loss Ratio (LR) Projected	Selected
2010										
2011										
2012										
2013										
2014										
2015	59,100	71,400						72,100	99%	**99%**
2016	75,700							84,450	108%	**108%**

The ultimate loss for Casualty will therefore be the sum of the ultimate loss calculated for the existing products and the ultimate loss calculated for the new product.

Moreover, this can also be applicable when, say, the company is expanding the Marine Cargo business to include Marine Hull risks. Since Marine Hull risks will pose new claims experiences, combining both claims and performing one reserve valuation might yield inaccurate ultimate loss. However, performing individual reserve valuation will enable the Actuary to analyze the actual development of Marine Cargo and Marine Hull separately and calculate a more accurate ultimate loss.

Attachments

Non-Life Claims Liabilities Presentation

To access the Non-Life Claims Liabilities slides presented last 10 November, double click the linkbelow.

Non-Life Claims
Liabilities.pptx

Workshop Answer Key

Toaccesstheanswerkeyofthe Workshoppresentedlast10November, doubleclickthelinkbelow.

Workshop Answ er
Key.xlsx

PRE-NEED

STANDARDS OF ACTUARIAL PRACTICE IN PRE-NEED

(Adopted November 18, 2005)

These Guidelines replaced the following documents:

(i) Guidelines to Actuarial Practice in Pre-Need (July 1994)
(ii) Addendum to Sec. VII of the Guidelines (Feb. 1999)
(iii) Minimum Standards of Valuation of Pre-Need Plans (Nov. 1993, amended Aug. 1997)
(iv) Guidelines to Actuarial Practice in Pre-Need Plans (October 2000)

I. DESCRIPTION OF PRE-NEED PLANS AND DEFINITION OF TERMS

1. Pre-Need plans fall under either of two general classifications: Contingent Benefit Plans or Scheduled Benefit Plans.

   a. **Contingent Benefit Plans** refer to plans where the payment of benefits is dependent upon the occurrence of an unexpected event, like death of the planholder, or a decision of the planholder to utilize the benefits under the plan for another person of his choice upon occurrence of the contingent event of death to that person. Examples are funeral plans, memorial plans, mortuary plans, interment plans, cremation plans, etc.

   b. **Scheduled Benefit Plans** refer to plans where the date of entitlement to the benefit is defined at inception. These include pension plans, education plans, travel plans and other similar plans.

2. Pre-need plans can either be Fixed Value Plans or Actual Cost Plans.

   a. **Fixed Value or Fixed Benefit Plans** are plans wherein the amount of the benefit is fixed at the time the plan is purchased.
   b. **Actual Cost or Traditional Plans** are plans wherein the amount of the benefit is the actual cost of such benefit or service at the time of payment of the benefit.

3. **Consideration** is the price paid for the purchase of a pre-need plan. Considerations under a plan are paid either in one lump sum or in installment payments.

   a. **Net Consideration** is the portion of the Gross Consideration payable by the planholder for the principal benefits stipulated in the pre-need contract.

      Net Consideration may sometimes be the Contribution to Reserve when determining Actuarial Reserves.

   b. **Gross Consideration** is the total of Net Consideration plus loadings for administrative and other expenses, as well as profit margins.

   c. **Expenses** include, but are not necessarily limited to, all expenses for plan acquisition, marketing, administration, and taxes.

4. **In-force Plans** are plans for which the pre-need company has liabilities for promised or

contracted benefits, or for the delivery of services. Included as in-force plans are:

a. Plans wherein considerations are still payable and which payments are either up-to-date or within the grace period provided for in the contract;
b. Plans wherein all considerations have been fully paid but benefits are not yet being paid or services are not yet being utilized;
c. Plans wherein considerations have been fully paid and benefits are already being paid or services are being utilized, but have not been completely paid or delivered.

5. **Grace Period** is the period provided for in the pre-need contract within which consideration installments currently due may be paid without penalty and during which period the contract remains in force.

6. **Lapsed Plans** are plans which are delinquent beyond the grace period in the payment of consideration installments due but within the period allowed for reinstatement to active payment status as defined in the contract.

7. **Forfeited or Cancelled Plans** are plans which have remained delinquent in the payment of consideration installments due beyond the period allowed for reinstatement as defined in the contract.

8. **Paid-up Plans** are plans wherein considerations have been fully paid.

9. **Fully Availed Plans** are plans wherein the benefits or services stipulated in the contract have been fully paid or delivered.

10. **Utilization Rate** is the ratio of the number or amount of plans that avail of the benefits or services within a given period, to the number or amount of plans in force at the beginning of the same period.

11. **Lapsation Rate** is the ratio of the number or amount of plans that lapse within a period, to the number or amount of plans that are in force at the beginning of the same period.

12. **Forfeiture or Cancellation Rate** is the ratio of the number or amount of plans that are cancelled at the expiration of the reinstatement period, to the number or amount of lapsed plans that have not expired at the beginning of the same period.

13. **Reinstatement Rate** is the ratio of the number or amount of lapsed plans that are reinstated within a given period, to the number or amount of lapsed plans at the beginning of the same period.

14. **Surrender** refers to the termination of the contract at the option of the planholder in exchange for its termination value at date of surrender.

15. **Surrender Rate** is the ratio of the number or amount of plans that are surrendered within a period, to the number or amount of plans that are in force at the beginning of the same period.

16. **Termination Value** is the amount that the planholder is entitled to be paid upon surrender of the plan prior to payment in full of the benefits under the contract.

17. **Transferability** is a provision in the pre-need contract which allows the planholder to transfer his rights to the benefits and services defined in the contract to another person.

    For Actual Cost Plans where the benefit is transferable or assignable**,** there is the risk of paying higher benefits than expected, unless the contract specifies the conditions otherwise for it to be transferable or assignable.

II. DETERMINATION OF GROSS CONSIDERATIONS OF PRE-NEED PLANS

1. Gross considerations should be determined to include, but not necessarily limited to, all costs of all benefits stipulated in the contract, expenses, taxes, and profit and other margins.

2. At inception, the present value of gross considerations should be equal to the present value of all benefits stipulated in the contract, expenses, taxes, and profit and other margins.

3. Assumptions used for determining gross considerations should be based on the projected but prudently attainable company experience as justified by actual past company experience, if any, that may be adjusted for expected future trends which are realistic and applicable to the situation of the company.

1. DETERMINATION OF ACTUARIAL RESERVES

1. The Actuary must determine the actuarial reserves for all benefits stipulated in the contract. The benefits may be provided by the pre-need company directly, or indirectly by transferring the responsibility for the delivery of such benefits to a third party.

2. The actuarial reserves for benefits shall be determined on a prospective basis.

   The actuarial reserves for benefits directly provided by the pre-need company must be equal to the present value of all future benefits directly provided by the company less the present value of the future contributions to reserves for such benefits.

   The actuarial reserves for benefits provided indirectly by the pre-need company should be equal to the present value of the cost of providing these benefits less the present value of the contributions to reserves to provide for these benefits.

   Actuarial reserves on pre-need contracts should never be less than the corresponding termination values.

3. The period within which contributions to reserves are assumed to be made should not exceed the period within which considerations are to be paid. For paid-up plans, future contributions to reserves are zero.

4. Contribution to Reserve for a particular period should not exceed the Gross Consideration for the same particular period.

5. Assumptions used in the valuation of actuarial reserves should reflect current experience of the company with respect to those assumptions, adjusted only for expected future trends, which are reasonable and realizable. Justification should be made for any assumptions used that do not reflect current experience.

   When updating assumptions, the changes in the assumptions and the effect of such changes on the actuarial reserves should be disclosed in the actuarial valuation report.

6. Expense reserves shall, whenever deemed appropriate, be set up for expenses to be incurred on the plan after the plan is fully paid.

IV. ASSUMPTIONS REGARDING INTEREST, INFLATION, EXPENSES, FORFEITURES, SURRENDERS AND OTHER CONTINGENT FACTORS

1. Assumptions and methods must be selected and applied with integrity, informed judgment and with perspective in relation to the purpose for which the results are intended. Actuarial assumptions should be appropriate to the specific circumstances of the company. They should be based on experience or anticipated experience, which is reasonably applicable to the specific business considering the characteristics of that business and the trends which may reasonably be expected in the future.

2. The interest assumption shall be based on the yield rate or series of yield rates that are expected to be earned from investing the assets of the funds over the lifetime of the contracts involved.

   a. The yield rate includes dividends, interests and other investment income and is net of all investment taxes and expenses.

   b. Factors that may influence interest or yield rates include those that characterize the types of investments allowed, the company's current investment yields, cash flow patterns of the existing investments, and inflation rates. The interest assumption used for pricing should be that which at issue is sustainable over the entire term of the plan, while valuation interest assumption should be that which, at time of valuation, is justified as attainable over the remaining term of the plan.

   c. Forecast of investment yield rates should take into account the relationship of these rates to the contract durations and contract exposures to surrenders and payments of benefits on the contracts.

3. All expenses associated with acquiring and maintaining the business must be recognized in the determination of gross considerations, as well as in the annual valuation of actuarial reserves of the company.

   a. When testing adequacy of gross considerations, all expenses associated with acquiring and maintaining the business should be considered, including those expenses which are payable after all considerations have been paid. These should include acquisition costs such as commissions and overrides, issue costs and the like, licensing fees, registration fees, general administrative and other maintenance expenses, including expenses for cancellations and/or claims servicing, and taxes. If insurance cover is provided, the premiums payable during the entire period of cover must be included.

b. As much as possible, when making assumptions on expenses, actual expense studies of the company should be used, modified only to reflect expected and highly probable future trends in the business; e.g. the effect on expenses of increasing volume of business and the effect of inflation on unit costs.

c. Prudent judgment must be exercised as to the applicability of current expense ratesto future years. Expense assumptions should reflect medium or long-term trends that match the expected duration of the contracts.

4. Inflation is the economic condition associated with rising price levels. It should be emphasized that inflation in benefit cost is specific for each product. It may be different, for example, for mortuary as compared to education plans.

a. In pre-need contracts, inflation affects both the determination of gross considerations and the cost of benefits of actual cost plans.

b. Inflation can affect significantly the following actuarial assumptions:

1.1.1 Investment yield rates from various categories of investments

1.1.2 Cost of benefit of actual cost plans

1.1.3 Expenses for acquiring and maintaining and delivering the promised benefits

c. Rates of surrenders, lapses and utilization for fixed value plans are likely to increase, while for actual cost plans, surrenders and lapses are likely to decrease with higher rates of inflation.

d. The effects of inflation may be recognized in actuarial assumptions either implicitly or explicitly, except in actual cost plans where the effects of inflation must be considered explicitly.

5. Surrenders and lapses are occurrences that are entirely at the option of the planholder. Thus the effects of surrenders and lapses on all other factors must always be considered.

a. The company's own experience should be used as a guide for making assumptions of expected rates in the future.

b. Factors that affect these rates include type of plan, duration, amount of consideration, amount of benefit, inflation, selling practices, and economic outlook.

c. Care should be taken when providing margins for deviations in these rates, and the effects of such deviations should be duly tested and provided for under different circumstances.

6. Utilization rate assumptions should consider the transferability provisions of the plan.

   a. As much as possible, the company's own experience should be used in the assumption of utilization rates.

   b. Utilization rates for transferable benefits should include not only the contingent factors such as mortality for mortuary plans but also the option of the planholder to optimize utilization of the benefits especially under actual cost plans, such as to postpone the use of the benefits for a later time when costs are higher.

   c. For memorial plans, the utilization rates to be used in pricing should not only be influenced by mortality rates applicable to the planholder but also by the possibility that the plan is assigned for use by another person.

V. DETERMINATION OF TERMINATION VALUES

1. In the design of plans, the actuary is expected to define the amounts of the termination values, and consider the same in determining the considerations for the pre-need plan. When asked to do so, the actuary should take into account the equities of all parties – viz. the planholder and the issuer of the plan. For example, equity of the planholder can be a measure of his reasonable expectation from the plan which he may opt to terminate, while equity of the issuer can be its right to collect the costs of a premature termination of the contract.

2. Termination values should represent the equitable share of both parties in the gross considerations minus the expenses of the issuer for the premature termination. However, the termination values should not be less than the minimum values set by the regulatory body.

VI. STATEMENT OF ACTUARIAL OPINION

1. The Statements of Actuarial Opinion should be based on sound actuarial principles adopting concepts in actuarial literature and utilizing accepted standards of actuarial practice and actuarial guidelines applicable to pre-need contracts. The Statements should clearly indicate the bases for such opinion. When making such opinion, the actuary must conduct sufficient tests and calculations on the data reflecting company experience for the specific contract types to satisfy himself of the appropriateness of his opinion.

2. A Statement of Opinion shall include:

   a. The actuary's name and his relationship with the company;
   b. The subject(s) on which the opinion is being made, describing the scope of the actuary's work;
   c. A statement expressing the actuary's opinion on the subject and the appropriateness of assumptions used; and,
   d. A disclosure of any information which, if not disclosed, might reasonably be expected to lead to an incomplete understanding or misinterpretation of the opinion.

3. The Statement of Opinion on pricing shall include, in addition to Paragraph 2 above, an opinion on the adequacy of the considerations and benefit cash flows arising from the contracts. The actuary is expected to base his opinion on projections of considerations and benefit cash flows under various assumptions of future interest and inflation rates that could affect the contractual obligations under the plans, and to consider the characteristics of the contracts that are subject of the opinion.

4. In expressing an opinion as to the adequacy of the pricing of a pre-need product, the actuary must see to it that the assumptions used in such pricing have been adequately and effectively communicated to the company, including the possible effects of adverse deviations from these assumptions.

5. The Statement of Opinion on actuarial reserves shall include, in addition to Paragraph 2 above:

   a. A statement regarding the data or records which the actuary used in his valuation. If the actuary has relied on records supplied by an officer of the company or the independent auditor, he should make a statement to that effect, after having conducted a review and run the necessary tests;

   b. A statement of opinion on the assumptions used in calculating the actuarial reserves including, but not limited to, assumptions on interest or yield rates, rates of inflation, expenses, utilization rates and other rates of decrement. An actuary may use assumptions given by other experts only if he has tested such assumptions and is satisfied that the assumptions are appropriate.

   c. Actuarial formulations and methods used in calculating the actuarial reserves. If there are changes in actuarial formulations, methods and assumptions from those previously employed, the changes should be stated and the effect of such changes indicated in the Statement.

   d. A statement as to whether the actuarial reserves and other actuarial items:

      i. Are computed in accordance with commonly accepted actuarial principles, methods and standards, that are consistently applied;

      ii. Are based on actuarial assumptions which produce reserves at least as great as those called for in any contract provision as to reserve basis and method, andare in accordance with all other contract provisions;

      iii. Meet the requirements of the rules and regulations of the regulator asthey pertain to actuarial matters;

      iv. Include sufficient provisions for all actuarial reserves and related items which ought to be established, as well as all current and future obligations of the company guaranteed under the terms of its contracts, including items which are dependent upon the occurrence of events in the future, such as, for example, reserves for optional modes of settlement at maturity date of the plan;

v. Are computed on the basis of assumptions consistent with those used in computing the corresponding items in the preceding year-end, and if not, the change should be stated, and the reason for such change given, including the quantification of the effect of such changes in assumptions.

6. All pertinent and material information that will minimize the possibility of misinterpretation or misunderstanding by those relying on the actuary's work should be disclosed.

7. The assets of the Trust Fund and their yields are matters to consider in making assumptions for interest rates used in actuarial reserve valuation. The actuary shall make a statement about the effects of deviations of actual trust fund earnings from the assumptions that he used in the valuation of actuarial reserves. He should makea general comment on the quality and/or composition of the assets, particularly on how such assets can adequately or inadequately cover the benefits under the plans as they become due and payable.

8. An actuary must be prepared to justify the use of any procedures that depart materially from those set forth in these Standards and must include in any actuarial communication of the results, an appropriate statement with respect to the basis, rationale, and effect of such departures.

VII. STATEMENT OF ACTUARIAL OPINION ON COMPANY ASSETS INCLUDING TRUST FUNDS

1. Where there is a requirement to set up a separate Trust Fund for the liabilities of the pre-need company to its planholders, the Actuary shall compare the amount in the Trust Fund with the computed actuarial reserves. The actuary shall make a statement of comparison indicating the amount by which the Trust Fund is greater or less than the actuarial reserves computed.

2. The actuary shall make specific recommendations that the periodic deposits to the Trust Fund for each plan shall not be less than the contributions to reserves defined in Section III, par. 2.

3. With respect to financial statements, when the Trust Fund is included as asset in the Balance Sheet, the actuary should see to it that the actuarial reserve is also reflected as a liability in the Balance Sheet. Otherwise, the actuary must make the necessary recommendation to have it included.

VIII. MINIMUM CONTENTS OF AN ACTUARIAL REPORT ON PRICING

1. A Statement of Opinion on pricing.
2. The description of the benefits under the plan, and the period for which considerations are payable.
3. The actuarial assumptions used in the pricing, which shall include, but not necessarily be limited to, interest or yield rates, inflation rates, surrender rates, lapse rates, utilization rates, mortality or morbidity rates, expenses and profit margins. The bases for the actuarial reserves that affected the pricing shall also be indicated.

4. Sample viability analysis showing results each year for all years from inception date to the end of the benefit payment period of the plan.

IX. MINIMUM CONTENTS OF A VALUATION REPORT

1. Statement of Opinion on the actuarial reserves.

2. A schedule showing the following information for the current year:

   a. Number and aggregate amount of obligation in the file of in-force plans;
   b. Actuarial reserves and aggregate amount of the paying plans, including those within the grace period;
   c. Actuarial reserves and aggregate amount of paid-up plans that arealready utilizing the benefits and that are not yet utilizing the benefits;
   d. Actuarial reserves and aggregate amount of lapsed plans within the allowable period of reinstatement;
   e. Assets of the Trust Fund both at cost of acquisition and at market value as of valuation date as certified by the trustees.

3. A schedule showing the experience of the company for the last five years on the net investment rate of return on the Trust Fund assets.

X. RELATIONSHIP WITH AUDITOR

1. When the actuary's work relates to financial statements subject to audit, the actuary should disclose to the auditor the actuarial assumptions and methods used.

2. An actuary who is responsible for any part of the financial statements, which are subject to audit must fully disclose to the auditor his relationship with the company. Likewise, an actuarial opinion that is made part of the published financial statements should state clearly the relationship between the company and the actuary.

3. Should the auditor be unable to form an opinion on the company financial statements on the basis of the information furnished by the company actuary, and the auditor consults with another actuary, the company actuary should make all related materials available for the other actuary's review, and be available for further explanation should this be required.

4. The actuary should disclose his relationship with the auditor, if any.

GUIDELINES GOVERNING IMPLEMENTATION OF AMENDED PRE-NEED RULE 31 (PNUCA)

(Issued February 1, 2008)

These Guidelines are being issued by the Actuarial Society of the Philippines for its members in their actuarial practice when "computing" and "validating" pre-need liabilities in accordance with Pre-Need Rule 31, as amended. Since these Guidelines pertain only to the implementation of Amended Pre-Need Rule 31, these Guidelines do not supersede the ASP's previously issued "Guidelines to Actuarial Practice in Pre-Need" adopted on November 18, 2005. Statements in the November 18, 2005 Guidelines not contradictory to statements in these Guidelines are deemed applicable to these Guidelines as well.

Pre-Need Rule 31 states that the "revised requirements on reserving and liability recognition of pre-need companies" cover the audited financial statements *for the period ended December 31, 2007 and thereafter.*

Pre-Need Rule 31 also states that Associates and Affiliates of the ASP will be allowed to compute and validate Pre-Need Reserves. Thus, these Guidelines apply to all members of the ASP.

The responsibilities of ASP members with respect to Pre-Need practice are as follows:

1. **Fellows (Actuaries) ---** Product Design and Pricing, Valuation of Actuarial Reserve Liability (ARL), Computation and Validation of Pre-Need Reserves (PNR)

2. **Associates and Affiliates ---** Computation and Validation of PNR

The following requirements under Pre-Need Rule 31, as amended require the special attention and interpretation of the Actuary / Associate / Affiliate:

1. "*12 (b) In recognizing the Pre-need Reserves (PNR) for educational and pension plans, the general requirements of PAS 37 on provisioning and the specific methodology provided under this item shall be complied with by the company. For life plans, the requirements of PFRS 4 (Insurance Contracts) shall be complied with by the company*"

   1.1. In using PAS 37 (please refer to the attached), the Actuary / Associate / Affiliate should not treat the PNR as a contingent liability. The Actuary should comment that this is a contractual, and not a contingent, liability.

2. "*12 (c) The amount recognized as a provision to cover the PNR shall be the best estimate of the expenditure required to settle the present obligation at the balance sheet date. The risks and uncertainties that inevitably surround many events and circumstances shall be taken into account in reaching the best estimate of a provision."*

   2.1. The Actuary / Associate / Affiliate should interpret "present obligation" as present value of the obligation, not literally as only the present obligation, as such becomes inconsistent with the subsequent paragraph under item 12(d) of Pre-Need Rule 31, as amended.

2.2. Inflows and outflows from each policy are not guaranteed to occur, i.e. there are risks and uncertainties that may affect occurrence of the inflow or outflow. Given this, the Actuary / Associate / Affiliate should discount such inflows and outflows using interest and adjust the results to reflect the probability of occurrence of each risk or uncertainty. Risks and uncertainties include, but are not limited to, the following:

- Lapse – Lapsed plans are plans which are delinquent in payment and whose delinquencies extend beyond the grace period. Such plans have the option of reinstating, thereby restoring premiums and benefits for the plan. Lapsed plans whose delinquencies extend beyond a stated period are cancelled and all benefits are forfeited.

- Surrender – If a plan is surrendered, a termination benefit may be paid.

- Reinstatement – If a lapsed plan is reinstated, benefits and premiums for the policy will again be payable.

- Cancellation – If a plan is cancelled, all benefits, termination values, and installment payments will no longer be payable. Cancelled plans may not be reinstated.

- Death – If the payor of a policy dies, installments will no longer be payable. Benefits, however, are preserved. For some plans, if the payor of a policy dies, benefits or services become due.

- Disability – If the payor of a policy is disabled, premiums will no longer be payable. Benefits, however, are preserved.

3. "*12(d) Since the effect of the time value of money for pre-need plans is material, the amount of provision shall be the present value of the funding expected to be required to settle the obligation with due consideration of the different probabilities, as follows:*

"(i) For currently being paid plans,

"(1) Provision for termination values shall consider the surrender rate experience of the company. The trend of surrender experience shall be disclosed in the company's notes to financial statements."

- For each plan currently being paid, there is a possibility that a surrender will occur in the future. Upon such surrender, a termination benefit will be payable. The value of the termination benefit for each year in the future, discounted to the present, using interest and probability of surrender, will reflect the provision for termination values of this set of plans. The Actuary / Associate / Affiliate must disclose the surrender rate experience per policy year, or per relevant period, to the auditor, to be included in the company's Notes to Financial Statements. Installment inflows are not considered in the provision for termination values as these are considered in the succeeding section discussing liability for plans that will become fully paid up.

"(2) A liability for plans that will become fully paid shall be computed as equal to the present value of future maturity benefits reduced by the present value of future trust

fund contributions required in accordance to the "Product Model". The discounting interest rate to be used is the 'approved hurdle rate' per Product Model."

- Each plan currently being paid which is neither surrendered nor cancelled will be entitled to benefit(s) in the future. For each such plan, the benefit(s) at each designated period after valuation date should be discounted to the present using interest and probability of persistency. Similarly, for each plan, the installment payment at each designated period after valuation date should be discounted to the present using interest and probability of persistency. The difference between the 2 discounted values will reflect the provision for benefit payment(s) for this set of plans.
- The Actuary / Associate / Affiliate should note that the provision resulting from the use of the hurdle rate per product model may not be sufficient to fund the benefits if investment income rates actually earned are lower than the hurdle rate used for valuing the provision/liability. This fact should be disclosed by the Actuary / Associate / Affiliate in any report to be submitted and in any certification to be issued by him/her.

"(ii) On lapsed plans (meaning plans that have not completed missed due installment contributions within the 60-day grace period) *within the allowable reinstatement period, provision for termination values applying the reinstatement experience of the company. The trend of reinstatement experience shall be disclosed in the company's notes to financial statements;"*

- There is a probability that some of these plans could resume paying contributions. The Actuary / Associate / Affiliate should:

    - compute for the provision for such plans based on the actuary's estimate of the probable number of plans that will be reinstated, and,

    - disclose the assumed rate of reinstatement to the auditor, and whether such assumption is based on the experience of the company or of other companies, for such disclosure to be indicated in the financial statements.

"(iii) Fully Paid Plans, (Plans that have completed the required contributions to the Trust Fund). Pre-Need Rule 31, as amended allows that these be grouped in two batches, and separate provisions be computed for each.

*"(1) For those due for payment within the next (5) five years (*following the date provisions are computed)*, the reserve shall be the present value of future maturity benefits discounted at the attainable rate, as determined and certified by the company's trustee , using industry best practices and principles which shall be indicated in such certification."*

- In disclosing the assumptions, the Actuary / Associate / Affiliate should state that the provision resulting from the use of the interest rate determined by the trustee of the fund may not be the sufficient amount needed to represent the liability that should be in the trust fund to assure payment of the promised benefits defined in the pre-need contract, since the said rate assumed as of the date the plan's trust fund contributions were computed may differ from the actual average of the yield rates of the trust fund following that date.

*"(2) For those not yet due for payment within the next five (5) years (*from date provisions are computed)*, the reserve shall be the present value of the future maturity benefits discounted at the approved hurdle rate per Product Model of the company."*

- The effect of using the hurdle rate could reduce the amount of provisioning, should the hurdle rate be higher than the projected attainable yield rate of return of the trust fund.

- In disclosing the assumptions, the Actuary / Associate / Affiliate should state that the provision resulting from the use of the hurdle rate may not be the sufficient amount needed to represent the liability that should be in the trust fund to assure payment of the promised benefits defined in the pre-need contract, since the hurdle rate assumed at the date the plan's trust fund contributions were computed may differ from the actual average of the yield rates of the trust fund following that date. This fact should be disclosed by the actuary in any report to be submitted and in any certification to be issued by him/her.

4. *"12 (e) Future events that may affect the foregoing amounts shall be reflected in the amount of provision for PNR, where there is sufficient objective evidence that they will occur."*

 4.1. To comply with this requirement, the Actuary / Associate / Affiliate should disclose all assumptions used in determining the PNR. Refer to the paragraphs above requiring that the Actuary state that the provision resulting from use of such assumptions may not be sufficient to assure payment of promised benefits defined in the pre-need contract.

 4.2. If validation is made by an Actuary:

 - the Actuary should disclose the Actuarial Reserve Liability (ARL) computed in accordance with the Actuarial Society of the Philippines' "Guidelines to Actuarial Practice in Pre-Need".

 - the Actuary may apply the Liability Adequacy Test to determine the best estimate of the rate to be used. He/She should also disclose the basis used in determining the best estimate, and take into consideration all the applicable decrements in the formula for determining the liability.

5. "12 (k) The disclosure requirements under PAS 1, relative to methods and assumptions used to estimate the PNR, including sensitivity of the PNR amount, shall be complied with."

 5.1. The Actuary should include disclosures on the funding and reserving gaps.

 5.2. The Actuary / Associate / Affiliate should disclose sensitivity of the PNR to adverse deviations in assumptions.

6. "13 Other Reserves

"The company shall set up other provisions in accordance with PAS 37 to cover its

obligations such as Insurance Premium Reserve."

6.1. Such amounts are to be valued by an actuary.

"Unless the Commission shall so specifically require, a company may at its option set up other provisions as a prudent measure."

6.2. The Actuary / Associate / Affiliate should advise the pre-need company to set up as part of other provisions, i.e. Other Reserves, the excess of the ARL computed over the PNR, as a prudent measure.

7. Finally, for computations or validations being done by:

7.1. An Associate or Affiliate of the ASP, the attached validation certificate template in Annex "A" should be used in lieu of the validation certificate templates provided by the SEC in Interpretative Bulletin Number 1. Notably, Annex "A" contains the following qualifications not present in the original SEC template:

7.1.1. That the Pre-Need Reserves (PNR) were computed according to item 12 of SEC Pre-Need Rule 31, as amended, and may not be adequate to pay for all the contractual benefits of the Pre-Need Company

7.1.2. That the Actuarial Reserve Liability (ARL), computed in accordance with the Actuarial Society of the Philippines' "Guidelines to Actuarial Practice in Pre-Need", is the actuarially accepted measure of liabilities of a pre-need company and that the PNR may be significantly different from the ARL

7.1.3. That an accompanying Pre-Need Reserve Computation Report be prepared subject to the following guidelines

7.1.3.1. The Pre-Need Reserves for each type of plan should be shown
7.1.3.2. The assumptions for each class of reserves should be indicated. The Associate/Affiliate should ensure that such assumptions are NOT referred to as "Actuarial Assumptions". Such assumptions should instead be referred to as "Pre-Need Reserve Assumptions"
7.1.3.3. The basis for the assumptions listed should be disclosed e.g. Discount Rate - based on SEC Pre-Need Rule 31, as amended.

7.1.4. That he/she is an Associate or Affiliate of the ASP as the case may be, and that he/she recommends that a Fellow of the ASP be asked to determine the ARL

7.2. an Actuary or Fellow of the ASP, the attached validation certificate template in Annex "B" should be used in lieu of the validation certificate templates provided by the SEC in Interpretative Bulletin Number 1. Notably, Annex "B" requires the following:

7.2.1. That the Actuary determine and disclose the ARL following the Actuarial Society of the Philippines' "Guidelines to Actuarial Practice in Pre-Need"

7.2.2. That an accompanying Actuarial Valuation Report be prepared in accordance with the Actuarial Society of the Philippines' "Guidelines to Actuarial Practice in Pre-Need".

Annex "A"

Declarations on Computation of Pre-Need Reserves

I have undertaken the computation of the Pre-Need Reserves of the *(specify whether* education plan, life plan or pension plan) of *(name of Pre-Need corporation)* as of *(date of computation)*.

I have relied on data submitted by *(Name and Position of Responsible Person)* and have conducted the tests necessary to satisfy myself on the reasonableness and integrityof such data.

I hereby state that:

1. The assumptions used in this computation are based on item 12 of SEC Pre- Need Rule 31, as amended, and may not be adequate to pay for all the contractual benefits of the Pre-Need Company;

2. The Actuarial Reserve Liability (ARL), computed in accordance with the Actuarial Society of the Philippines' "Guidelines to Actuarial Practice in Pre-Need", is the actuarially accepted measure of liabilities of a pre-need companyand that the PNR may be significantly different from the ARL;

3. All insurance benefits included in the plan agreement are adequately covered under a separate insurance contract. Reserves for the Pre-Need benefits and guarantees, on the other hand, are valued in accordance withthe assumptions based on item 1 above;

4. The pre-need reserves for *(specify type of plan)* aggregating to P _________________ in this computation are in accordance with the above formulation and assumptions;

5. The amount of insurance premium reserves for the cost of purchasingthe insurance benefits after the payment period is P___________________________________

6. The dividends amounting to P______________of the participating pre-needplans were computed based______________________________.

7. The Trust Fund Equity based on the Trustee's Certification has a netbalance of Pas of *(date of computation)*.

This document forms part of the Pre-Need Reserves Computation Report.

Lastly, I am an (Associate / Affiliate) of the Actuarial Society of the Philippines (ASP) and I recommend that a Fellow of the ASP be asked to determine the Actuarial Reserve Liability.

Name & Signature of Associate /
Affiliate SEC Accreditation Number -
____

Issued in_______________on _____________

<u>Annex "B"</u>

ACTUARIAL VALUATION CERTIFICATE

I have undertaken the actuarial valuation of the <u>*(specify whether education plan, life plan or pension plan)*</u> of <u>*(Name of Pre-Need Corporation)*</u> as of <u>*(date of valuation)*</u>.

I have relied on data submitted by <u>*(Name and Position of Responsible Person)*</u> and have conducted the tests necessary to satisfy myself on the reasonableness and integrity of such data.

I hereby certify that:

1. The actuarial assumptions and formulations used in this actuarial valuation are in accordance with generally accepted actuarial principles and practices;
2. The reserves for all benefits and guarantees therein are valued in accordance with the assumptions, and all insurance benefits included in the plan agreement are adequately covered under a separate insurance contract;
3. The Actuarial Reserves for <u>*(specify type of plan)*</u> aggregating to P______in this actuarial valuation are in accordance with the above actuarial formulations and assumptions;
4. The amount of insurance premium reserves for the cost of purchasing the insurance benefits after the payment period is P___.
5. The dividends amounting to P________of the participating pre-need plans were computed based_; and,
6. I have also computed the Pre-Need Reserves amounting to P___in accordance with the guidelines in item 12 of SEC Pre-Need Rule 31, as amended. The difference between the PNR and the Actuarial Reserves as computed in the foregoing is <u>*(indicate if an excess or a deficiency)*</u> of P_______, and *(if the difference is a deficiency)* is booked by the corporation under "Other Reserves".

or

I have also computed the Pre-Need Reserves amounting to P________________in accordance with the guidelines in item 12 of SEC Pre-Need Rule 31, as amended. The difference between the PNR and the Actuarial Reserves as computed in the foregoing is (indicate if *an excess or a deficiency)* is P__________________________, and *(if the difference is a deficiency)* should be reflected as an additional liability of the company.

I further certify that I compared the amount of the Actuarial Reserves as of <u>*(date of valuation)*</u> with the amount of the Trust Fund Equity and the result of the comparison reflects the following information:

The Trust Fund Equity based on the Trustee's Certification has a net asset balance of P_________as of <u>*(date of valuation)*</u>.

Case A. If the Trust Fund Equity is sufficient:

The Trust Fund Equity, excluding the dividends of participating pre-need plan products, *(if applicable)* is sufficient to cover the Actuarial Reserves.

OR

Case B. If the Trust Fund Equity is deficient:

The Trust Fund Equity, excluding the dividends of participating pre-need plan products, *(if applicable)* is deficient to cover the Actuarial Reserves and the deficiency amounting to P_should be in the Trust Fund within the time limit prescribed by SEC regulations.

Attached is the Actuarial Valuation Report, prepared in accordance with the Actuarial Society of the Philippines' "Guidelines to Actuarial Practice in Pre-Need".

Name & Signature of Pre-Need
Actuary SEC Accreditation Number _
__________________Issued in___on _
____

EMPLOYEE BENEFITS

Standard of Actuarial Practice 3
In Relation to

Employee Benefits

(Adopted 24 October 2017)

CONTENTS

INTRODUCTION

This Standard of Actuarial Practice provides guidance to actuaries when performing actuarial services in connection with Philippine Accounting Standard 19 (PAS 19) Employee Benefits. PAS19 is essentially the same as IAS 19.

This Standard of Actuarial Practice is substantially consistent with the International Standard of Actuarial Practice (ISAP), particularly ISAP 1 (General Actuarial Practice) and ISAP 3 (EmployeeBenefits), which are model templates for actuarial standard-setting bodies, encouraged to be adopted by the International Actuarial Association (IAA) to the extent appropriate in the jurisdiction. The Actuarial Society of the Philippines (ASP) is a Full Member of IAA.

The reporting entity is responsible for all the information reported in its PFRS financial statements,including information reported in accordance with PAS 19. This means the reporting entity is responsible for the categorization of employee benefit plans, the choice of actuarial assumptions and methods used to measure employee benefit obligations, and disclosures about employee benefit plans. The ASP requires among its members that only Fellows of ASP in good standing may certify the actuarial valuation report under PAS 19.

In practice, an actuary may advise on a range of issues arising from the application of PAS 19, including the measurement of short-term, post-employment, termination, or other long-term employee benefits and disclosures in the PFRS financial statements.

This Standard of Actuarial Practice is intended to:

- Facilitate convergence in standards of actuarial practice in connection with PAS 19 withinand across jurisdictions;

- Increase reporting entities' and their auditors' confidence in actuaries' contributions to reporting of employee benefits in accordance with PAS 19. The Clarificatory Guidelines on Defined Benefit Pension Valuation Standards, issued by the ASP last November 2016,supplements this Standard;

- Increase public confidence in actuaries' services for PAS 19 purposes; and

- Demonstrate the ASP's commitment to support the work of the IAA and the InternationalAccounting Standards Board (IASB) in achieving high-quality, transparent, andcomparable financial reporting internationally, as envisaged by the Memorandum of Understanding between the IAA and the IASB.

SECTION 1. GENERAL

1.1. Purpose

These Standards provide guidance to actuaries when performing actuarial services in connectionwith PAS 19. Their purpose is to increase intended users' confidence that:

- Actuarial services are carried out professionally and with due care, consistently with PAS19, and taking into account the reporting entity's accounting policies;

- The results are relevant to their needs, are presented clearly and understandably, and are complete; and

- The assumptions and methodology (including, but not limited to, models and modelling techniques) used are disclosed appropriately in the actuary's report.

1.2. Scope

These Standards provide guidance to actuaries when providing actuarial services for a reporting entity's preparation of an actual or pro-forma PFRS financial statement for any type of employeebenefit the reporting entity determines to be covered by PAS 19. Actuaries providing actuarial services in connection with PAS 19 that are outside of this scope (for example, an actuary advisingan auditor or advising a potential buyer regarding an acquisition) should consider the guidance inthese Standards to the extent relevant to the assignment.

1.3. Compliance

An actuary may fail to follow the guidance of these Standards but still comply with it where the actuary:

1.3.1. Complies with requirements of law that conflict with these Standards;

1.3.2. Complies with requirements of the actuarial code of professional conduct applicable to thework that conflict with these Standards; or

1.3.3. Departs from the guidance in these Standards and provides, in any report, an appropriate statement with respect to the nature, rationale, and effect of any such departure.

1.4. Reasonable Judgment

The actuary should exercise reasonable judgment in applying these Standards.

1.4.1. A judgment is reasonable if it takes into account:

a. The spirit and intent of these Standards;

b. The type of assignment; and

c. Appropriate constraints on time and resources.

1.4.2. Nothing in these Standards should be interpreted as requiring work to be performed that isnot proportionate to the scope of the decision or the assignment to which it relates and thebenefit that intended users would be expected to obtain from the work.

1.4.3. Any judgment required by these Standards (including implicit judgment) is intended to bethe actuary's professional judgment unless otherwise stated.

1.5. Defined Terms

These Standards uses various terms whose specific meanings are defined in the Glossary. These terms are highlighted in text with a dashed underscore (e.g., actuary). These Standards also use terms defined in PAS 19, in which case they have the same meaning.

1.6. Cross References

These Standards refer to the content of PAS 19, including any interpretations from the InternationalFinancial Reporting Interpretations Committee or the Standing Interpretations Committee thereon, as issued through September 2014 as adopted by the Philippine Interpretations Committee(PIC), and any interpretations by PIC including, but not limited to, PIC Q&A 2013-03 and PIC Q&A 2008-01, and any amendment thereof. If PAS 19 is subsequently amended, restated, revoked,or replaced after September 2014, the actuary should consider the guidance in these Standards to the extent it remains relevant and appropriate.

SECTION 2. APPROPRIATE PRACTICES

2.1. Knowledge of Accounting Requirements

The actuary should have or obtain sufficient knowledge and understanding of PAS 19, PFRSs thatare interpretations of PAS 19, relevant paragraphs of other PFRSs to which PAS 19 specifically refers, and the reporting entity's relevant accounting policies, if any. If the actuary:

a. Is uncertain whether another PFRS is relevant to the actuarial services; or

b. Discovers that a specific component of the_actuarial services may be subject to alternative interpretations of PAS 19, a PFRS that is an interpretation of PAS 19, a relevant paragraphof another PFRS to which PAS 19 specifically refers, or relevant accounting policies,

the actuary should seek guidance from the principal, and treat the guidance as information (see 2.2).

2.2 Reliance on Others

The actuary may use information prepared by another party such as data, relevant contracts, insurance contract or pension plan provisions, opinions of other professionals, projections, and supporting analyses (but excluding assumptions or methodology). The actuary may select the partyand information on which to rely, or may be given the information by the principal.

The actuary may take responsibility for such information, or the actuary may state that reliancehas been placed upon the source of this information and disclaim responsibility.

2.2.1. If the actuary selects the party on whom to rely, the actuary should consider the following:

a. The other party's qualifications;

b. The other party's competence, integrity, and objectivity;

c. The other party's awareness of how the information is expected to be used;

d. Discussions and correspondence between the actuary and the other party regarding any facts known to the actuary that are likely to have a material effect upon the information used; and

e. The need to review the other party's supporting documentation.

2.2.2. If the actuary uses information prepared by another party without disclaimingresponsibility for that information, the actuary:

a. Should determine that the use of that information conforms to accepted actuarial practicein the jurisdiction(s) of the actuary's services;

b. Should establish appropriate procedures for the management and review of the informationthat the actuary intends to use; and

c. Does not need to disclose the source of the information.

2.2.3. If the actuary states reliance on the information prepared by another party and disclaims responsibility for it, the actuary should:

a. Disclose that fact (including identifying the other party) in any report or other appropriate communication;

b. Disclose the nature and extent of such reliance;

c. Examine the information for evident shortcomings;

d. When practicable, review the information for reasonableness and consistency; and

e. Report the steps, if any, that the actuary took to determine whether it was appropriate torely on the information.

2.2.4. If the information was prepared by the other party under a different jurisdiction, the actuaryshould consider any differences in the law or accepted actuarial practice between the two jurisdictions and how that might affect the actuary's use of the information.

2.3. Materiality

In case of omissions, understatements, or overstatements, the actuary should assess whether or notthe effect is material. The threshold of materiality under which the work is being conducted shouldbe determined by the actuary unless it is imposed by another party such as an auditor or the principal.

2.3.1. When determining the threshold of materiality, the actuary should:

a. Assess materiality from the point of view of the intended user(s), recognizing the purposeof the actuarial services; thus, an omission, understatement, or overstatement is material ifthe actuary expects it to affect significantly either the intended user's decision-making or the intended user's reasonable expectations;

b. Consider the actuarial services and the reporting entity that is the subject of those actuarialservices; and

c. Consult with the principal if necessary.

2.3.2. The actuary should understand the distinction between materiality with respect to the actuarial services, the preparation of PFRS financial statements, and the auditing of those financial statements.

a. When appropriate for the work, the actuary should seek guidance from the principal or reporting entity regarding materiality with respect to the preparation of PFRS financial statements and take that guidance into account when performing the actuarial services.

b. The actuary's threshold of materiality with respect to the actuarial services should not be greater than the reporting entity's threshold of materiality with respect to the preparation of PFRS financial statements, if it is known. The principal or reporting entity (not the userof the PFRS financial statements) is the intended user of the actuarial services when assessing materiality with respect to the actuarial services.

c. In all following paragraphs of these Standards, any use of "material", "materially", or "materiality" is with respect to the actuarial services.

2.4. Proportionality

In applying reasonable judgment (see 1.4, in particular 1.4.2), the actuary should take materiality into account. The degree of refinement in specific assumptions or methods recommended by the actuary should be consistent with the impact on the actuarial services. Examples include, all of which are subject to the actuary's professional judgment:

a. The actuary may use simplified approaches to recommending assumptions when those assumptions will not materially affect the results or are proportionate for the actuarial services. For example, when a pension plan pays primarily lump sum benefits at termination or retirement, the choice of mortality assumption may have little impact on theliabilities. As a second example, for certain work-related accident or injury benefits, the projected benefit cash flows may be so uncertain as to make a highly refined approach to selecting the discount rate disproportionate.

b. In lieu of collecting new employee census data at the measurement date, the actuary may appropriately adjust results using data collected at a different date when doing so will not materially affect the results.

c. The actuary may apply or amend assumptions selected for other purposes (such as to determine funding of the employee benefit plan) or demographic assumptions used at a prior measurement date when those assumptions are reasonable for PAS 19 purposes at thecurrent measurement date.

d. The actuary may apply simplified methods to attribute benefits to periods of service whendoing so will not materially affect the results.

2.5. Constructive Obligations

The actuary may rely on representations made by the principal regarding the existence and natureof any constructive obligations arising from the reporting entity's employee benefit practices or policies (see 2.2.).

If it becomes apparent to the actuary in the course of performing the actuarial services that significant uncertainties exist regarding such representations, the actuary should seek clarificationfrom the principal. If the uncertainty is not resolved to the actuary's satisfaction, particularly whenthe uncertainty is caused by data deficiencies, the actuary should consider the possible effect of such data deficiencies (such as inadequacy, inconsistency, incompleteness, inaccuracy, and unreasonableness) on the results of the work. If such deficiencies in the data are not likely to materially affect the results, then the deficiencies need not be considered further. If the actuary cannot find a satisfactory way to resolve the deficiencies, then the actuary should consider whetherto:

a. Decline to undertake or continue to perform the actuarial services;

b. Work with the principal to modify the actuarial services or obtain appropriate additional data; or

c. Subject to compliance with the actuary's code of professional conduct, perform theactuarial services as well as possible and disclose the data deficiencies in the report (including an indication of the potential impact of those data deficiencies).

This guidance does not impose additional duties on the actuary beyond the scope of the actuarial services to search for or analyze constructive obligations that go beyond formal plans or agreements.

2.6. Categorization of Employee Benefit Plan

The reporting entity is responsible for determining the categorization of its employee benefit plansunder PAS 19 as short-term, defined benefit post-employment, defined contribution post- employment, termination, or other long-term.

2.6.1. The actuary may advise the principal regarding the categorization of an employee benefit plan. When providing such advice, the actuary should exercise professional judgment whenan employee benefit plan has characteristics of multiple categories (such as retirement plans that combine elements of defined benefit and defined contribution plans, or employment-related injury benefits that include both medical care and wage replacement).

2.6.2. If the actuary is uncertain as to the reporting entity's categorization of an employee benefitplan, the actuary should seek guidance from the principal, and disclose this in the report

2.6.3. The actuary should treat the reporting entity's categorization of its employee benefit plansas a prescribed methodology to which paragraph 2.9 applies.

2.7 Assumptions and Methodology

2.7.1. The assumptions and methodology may be

a. Set by the actuary (2.8);

b. Prescribed by the principal or another party (2.9); or

c. Mandated by law (2.10).

2.7.2. Where the report is silent about who set an assumption or methodology, the actuary who authored the report will be assumed to have taken responsibility for such assumption or methodology.

2.8. Assumptions and Methodology Set by Actuary

Where the actuary sets the assumptions and methodology, or the principal or another party sets an assumption or methodology that the actuary is willing to support:

2.8.1. **Selection of Assumptions and Methodology** – The actuary should select the assumptionsand methodology that are appropriate for the work. The actuary should consider the needsof the intended users and the purpose of the actuarial services. In selecting assumptions and methodology, the actuary should consider the circumstances of the reporting entity andthe assignment, as well as relevant industry and professional practices. The actuary shouldconsider to what extent it is appropriate to adjust assumptions or methodology to compensate for known deficiencies in the available data.

2.8.2. **Appropriateness of Assumptions** – The actuary should consider the appropriateness of the assumptions underlying each component of the methodology used. Assumptionsgenerally involve significant professional judgment as to the appropriateness of the methodology used and the parameters underlying the application of such methodology. Assumptions may (if permitted in the circumstances) be implicit or explicit and may involve interpreting past data or projecting future trends. The actuary should consider to what extent it is appropriate to use assumptions that have a known significant bias to underestimation or overestimation of the result.

2.8.3. **Margins for Adverse Deviations** – In cases where unbiased calculations are not required, the actuary should consider to what extent it is appropriate to adjust the assumptions or methodology with margins for adverse deviations in order to allow for uncertainty in the underlying data, assumptions, or methodology. The actuary should disclose any incorporation of margins for adverse deviations in assumptions or methodology.

2.8.4. **Discontinuities** – The actuary should consider the effect of any discontinuities in experience on assumptions or methodology. Discontinuities could result from:

a. Internal circumstances regarding the reporting entity such as changes in the reporting entity's human resource policies or retirement benefit design; or

b. External circumstances impacting the reporting entity such as changes in the legal, economic, legislative, regulatory, supervisory, demographic, technological, and social environments.

2.8.5. **Individual Assumptions and Aggregate Assumptions** – The actuary should assess whether an assumption set is reasonable in the aggregate. While assumptions might be justifiable individually, it is possible that prudence or optimism in multiple assumptions will result in an aggregate assumption set that is no longer valid. If not valid, the actuary should make appropriate adjustments to achieve a reasonable assumption set and final result.

2.8.6. **Internal Consistency of Assumptions** – The actuary should determine if the assumptionsused for different components of the work are materially consistent, and that any significantinterdependencies are modelled appropriately. The actuary should disclose any material inconsistency in the report.

2.8.7. **Alternative Assumptions and Sensitivity Testing** – The actuary should consider and address the sensitivity of the methodology to the effect of variations in key assumptions, when appropriate. In determining whether sensitivity has been appropriately addressed, the actuary should take into account the purpose of the actuarial services and whether the results of the sensitivity tests reflect a reasonable range of variation in the key assumptions,consistent with that purpose.

2.9. Assumptions and Methodology Prescribed

Where the assumptions or methodology are prescribed by the principal or another party:

2.9.1. If the actuary is willing to support the prescribed assumption or methodology (following paragraph 2.8 as applicable), the actuary may disclose the party who prescribed the assumption or methodology and the actuary's support.

2.9.2. If the actuary is unwilling to support the prescribed assumption or methodology because:

a. It significantly conflicts with what would be appropriate for the purpose of the actuarial services, the actuary should disclose in the report that fact including the actuary's assumptions and methodology, the party who prescribed the assumption or methodology, and the reason why this party, rather than the actuary, set the assumption or methodology;or

b. The actuary has been unable to judge the appropriateness of the prescribed assumption or methodology without performing a substantial amount of additional work beyond the scopeof the assignment, or the actuary was not qualified to judge the appropriateness of the assumption, the actuary should disclose in the report that fact, the party who prescribed the assumption or methodology, and the reason why this party, rather than the actuary, set the assumption or methodology.

2.9.3. When the principal requests an additional calculation using an assumption set which the actuary does not judge to be reasonable for the purpose of the actuarial services, the actuarymay provide the principal with the results based on such assumptions. If those results are communicated to any party other than the principal, the actuary should disclose the sourceof those assumptions and the actuary's opinion of their appropriateness.

2.10. Assumptions and Methodology Mandated by Law

When an assumption or methodology is mandated by law, the actuary should disclose in the reportthat the assumption or methodology was mandated by law and that the report should not be used for other purposes where the assumptions and methodology used are not appropriate (unless appropriately adjusted).

2.11. Actuarial Assumptions

The reporting entity is responsible for selecting assumptions that are unbiased, mutually compatible, and represent the reporting entity's best estimates of the variables that will determinethe ultimate costs of its employee benefits. The actuary may advise the principal regarding the selection or reasonableness of some or all of the assumptions to be used in the actuarial services. In doing so, the actuary should be guided by paragraphs 2.7. to 2.10., taking into account PAS 19'srequirements regarding assumptions used to measure defined benefit post-employment plans, termination benefits, or other long-term benefits. In particular, when using prescribed assumptions,the actuary should be guided by paragraph 2.9. Assumptions and Methodology Prescribed.

2.11.1. **General Approach for Selecting Assumptions** – When advising the principal on theselection or reasonableness of actuarial assumptions, the actuary should:

a. Identify the types of assumptions needed to perform the actuarial services.

b. Evaluate information relevant to each type of assumption:

   i. With respect to financial assumptions, the actuary should review market-implied expectations and other information at the measurement date. Examples of such information include:

      - Corporate or government bond yields;
      - Yields on nominal and inflation-indexed debt;
      - Recent changes in relevant price indices (such as general or medical price inflation indices) and forecasts of inflation;
      - Employment data and projections;
      - Other relevant economic data; and
      - Analyses prepared by experts.

The actuary may also consider the reporting entity's expectations regardingassumptions where the reporting entity can influence future experience.

ii. With respect to demographic assumptions, the actuary should review information that, in the actuary's professional judgment, is relevant to the population covered by the reporting entity's employee benefits. With respect to reviewing the experience of the covered population, this guidance does not impose additional duties on the actuary beyond the scope of the actuarial services. Examples of suchinformation that may be reviewed by the actuary include:

- The experience of the covered population to the extent credible;
- Analyses prepared by experts such as published tables or experience studies;
- Studies or reports on general trends relevant to the particular demographic assumption; and
- Relevant factors known to the actuary that may affect future experience such asthe economic conditions of the geographic area or industry, availability of alternative employment, and the reporting entity's human resource policies or practices.

The actuary may also consider the reporting entity's expectations regarding assumptions where the reporting entity can influence future experience.

c. Select an appropriate format for each type of assumption, taking into account materiality (see 2.3.2.) and proportionality (see 2.4.) (For example, mortality rates typically vary by gender and age, and when material and proportionate to the actuarial services might also vary by calendar year, employment type, location, or other factors).

d. Recommend assumptions that in the actuary's opinion are unbiased, mutually compatible,and, if adopted by the reporting entity, would be appropriate to represent the reporting entity's best estimate.

2.11.2. **Mortality Assumption** – When advising the principal on the selection or reasonableness of the mortality assumption, the actuary should reflect expected changes in plan members' future mortality rates when material and proportionate to the actuarial services. Examplesof methods for reflecting future mortality rates include using a matrix including separate mortality tables for each year or year of birth or projecting the mortality rates for an appropriate period.

2.11.3. **Discount Rate Assumption** – When advising the principal on the selection or reasonableness of the discount rate assumption, the actuary should take into account PAS 19's requirement that the discount rate reflect market yields at the measurement date on high-quality corporate bonds if the market for such bonds is deep or government bonds otherwise, where such bonds are consistent with the currency and estimated term of the

employee benefit obligation. The actuary may use a variety of approaches to identify a discount rate assumption that satisfies this requirement, including the following:

a. **Full Yield Curve** – The actuary may recommend a full spot-rate yield curve for discounting projected benefit cash flows. The actuary may develop an appropriate yieldcurve from bond yield data at the measurement date. Alternatively, the actuary may apply a third party's yield curve, which the actuary has determined is appropriate for the purpose of selecting a PAS 19 discount rate (or has adjusted so as to make it appropriate). When applying a third party's yield curve, the actuary should be guided by paragraph 2.2.

i. Bond Universe – When developing a yield curve or assessing the appropriateness of a third party's yield curve, the actuary should consider the characteristics of the bond universe used to create the yield curve, including currency and, for corporate bonds, quality. The actuary should also consider whether adjustments are needed to deal with "outliers"—bonds withsubstantially different yields than the yields on most bonds of similar quality and duration included in the universe—or with bonds that have special characteristics, such as call features.

ii. Curve Fitting, Interpolation, and Extrapolation – When the actuary is constructing the yield curve from the available bond data in the same currency,the actuary should exercise professional judgment in applying appropriate curve-fitting, interpolation, or extrapolation techniques to estimate yields at durations where the actuary considers the bond market data unreliable or such data do not exist. Such techniques may take into account (with an appropriate spread or other adjustment) other market data sources such as yields on government or lower-rated corporate bonds, the swaps market, or yields on government or corporate bonds in other currencies with market-observable yields at durations beyond the longest duration bond in the same currency as the employee benefits and which the actuary, having applied professional judgment, considers appropriate for this purpose.

An actuary using this approach may also determine a single weighted-average discountrate based on the yield curve (as described in 2.11.3.b.) for the reporting entity's use inthe PFRS financial statement disclosures.

b. **Single Weighted-Average Discount Rate Based on Yield Curve** – The actuary may recommend a single weighted-average discount rate assumption determined by:

i. Projecting cash flows on and after the measurement date of benefits attributed to employee service up to the measurement date;

ii. Applying an appropriate yield curve (as described in 2.11.3.a. above) to determine the present value of the cash flows projected in 2.11.3.b.i.; and

iii. Calculating a single weighted-average discount rate that produces substantially the same present value determined in 2.11.3.b.ii.

c. **Single Weighted-Average Discount Rate Based on Bond Model** – The actuary may recommend a single weighted-average discount rate assumption determined by:

i. Projecting cash flows on and after the measurement date of benefits attributed to employee service up to the measurement date;

ii. Applying a bond model to identify a portfolio of bonds—appropriately selectedfrom the bond universe described in 2.11.3.a.i. above—that generates substantially the same cash flows projected in 2.11.3.c.i. At durations where theactuary considers the bond market data unreliable or such data do not exist, theactuary should apply techniques as described in 2.11.3.a.ii. above; and

iii. Calculating a single weighted-average yield on the bonds in the portfolio.

When applying a third party's bond model, which the actuary has determined is appropriate (or has adjusted so as to make it appropriate) for the purpose of selecting a

PAS 19 discount rate for measuring the cash flows, the actuary should be guided by paragraph 2.2.

d. **Alternative Approaches** – The actuary may use alternative approaches to those described above. When doing so, the actuary should understand the data and assumptions on which the approach is based and the circumstances in which it can be applied appropriately. The alternative approach should take into account both the duration of the projected benefit cash flows attributed to employee service up to the measurement date and their shape (that is, whether the cash flows over time are smoothor lumpy). Subject to materiality (see 2.3.) and proportionality (see 2.4.), examples of alternative approaches include, but are not limited to:

i. The actuary may recommend a single discount rate that, in the actuary's professional judgment, approximates the weighted-average rate that would be determined under one of the preceding approaches.

ii. The actuary may apply a market index or other reference rate, with adjustments if appropriate. The actuary should have sufficient understanding of the bond data and methodology used to construct the index or reference rate to conclude that it is appropriate for the purpose of selecting a PAS 19 discount rate for measuring the present value of the defined benefit obligation (or has adjusted so as to make it appropriate). When applying a market index or other referencerate, the actuary also should be guided by paragraph 2.2.

If the rate used to discount post-employment benefit obligations reflects those of bonds that pay out interest payments on a periodic basis over the term of the bond and the principal upon maturity, such rate may be converted to a zero coupon rate through bootstrapping method or other methods such as the average bond duration method and there-investment method, as stated in PIC Q&A 2008-01. In case there is a need to determinediscount rates for payments with maturities beyond the longest available tenor, the zero coupon rate converted from the longest available tenor will be applied to those cash flows.

2.11.4. **General Price Inflation Assumption** – When the actuary is advising the principal on theselection or reasonableness of a general price inflation assumption, the actuary should review market-implied expectations and other information at the measurement date.Examples of such information include:

a. Changes in price indices;

b. Implicit price deflators;

c. Yields on nominal and inflation-indexed debt (taking into account the effect of any significant supply-demand imbalances);

d. Forecasts of inflation;

e. Relevant regional factors;

f. Central bank monetary policy;

g. Other relevant economic data; and

h. Analyses prepared by experts.

2.11.5. **Medical Cost Assumptions** – When the actuary is advising the principal on the selection or reasonableness of medical cost assumptions, the actuary should consider estimated future changes in the cost of medical services, which may differ significantly from generalprice inflation. When material and proportionate to the actuarial services, the actuary should consider separate assumptions for major cost components such as hospital services,drugs, medical devices, other medical services, and administrative expenses. The actuary also should consider different assumptions for different future time periods.

2.11.6. **Other Assumptions Regarding Future Benefit Amounts** – For some types of employeebenefits, future benefit amounts under the plan may reflect factors other than general priceinflation or future medical costs. When the actuary is advising the principal on the selection or reasonableness of an assumption about future benefit amounts, the actuary should identify relevant factors that, in the actuary's professional judgment, are likely to have a material effect on future benefit amounts under the plan. Depending on the type of employee benefit plan, examples of relevant factors may include:

a. Merit or promotional salary increases;

b. Investment returns on actual or notional assets;

c. Changes in benefit utilization or delivery patterns;

d. Changes in social insurance benefits;

e. Changes in offsets of benefits provided by other parties; and

f. Expected changes in mandated benefits.

2.11.7. **Change in Process for Developing Assumptions** – The actuary generally should apply aconsistent process from year to year to develop recommended assumptions for a particularreporting entity. When the actuary considers it appropriate to change the process used to develop a recommended assumption, the actuary should discuss the change with the principal, and should seek guidance from the principal regarding whether to make the change, and if so, what, if any, information about the change should be disclosed in the actuary's report. For example, if the principal determines that the change in the assumption-setting process may be subject to PAS 8, *Accounting Policies, Changes in Accounting Estimates and Errors,* the principal may ask the actuary to disclose the nature of the changeand its general effect in the report.

2.12. Plan Assets

When the actuarial services take plan assets into account, the actuary should be guided by the following:

2.12.1. **Asset Values Supplied by Others** – The actuary may rely on asset values prepared by a third party (such as a trustee or investment manager) and, when doing so, should be guidedby paragraph 2.2.

2.12.2. **Qualifying Insurance Policies** – The actuary should distinguish between qualifyinginsurance policies and other sources of reimbursement for expenditures required to settle adefined benefit obligation. When plan assets include qualifying insurance policies, the actuary should appropriately reflect those policies in the calculation of the deficit or surplus. For example, the actuary should appropriately differentiate between the reportingentity's employee benefit obligations and those that an insurer has assumed.

2.12.3. **Asset-Related Benefit Liabilities** – When advising on the valuation of benefits where future benefit amounts are affected by the value of plan assets (for example, when benefitlevels are linked to the return on plan assets (see paragraph 2.11.6.) or depend on whetherthere is a surplus), the actuary should value the employee benefits in a manner that is consistent with the nature of the linked assets.

2.13. Asset Ceiling

The asset ceiling is the present value of economic benefits available to the reporting entity in the form of refunds from the plan or reductions in future contributions to the plan. PAS 19 requires areporting entity to recognize a net defined benefit asset at the lower of the surplus in the defined benefit plan and the asset ceiling. International Financial Reporting Interpretations Committee Interpretation number 14 (IFRIC 14) provides guidance on how to determine the asset ceiling.

The actuary should seek guidance from the principal whether or not there should be an asset ceilingand how to apply the asset ceiling, having due regard to IFRIC 14 and issues such as legal interpretation of the plan rules, particularly with regard to right to refund, or any minimum fundingrequirements.

2.14. Attribution of Benefits to Service Periods

When advising the principal on the attribution of plan benefits to service periods, the actuary should exercise professional judgment to address plan designs whose treatment is not fully specified in PAS 19.

SECTION 3. COMMUNICATION

3.1. General Principles

Any communication should be appropriate to the particular circumstances and take the skills, understanding, levels of relevant technical expertise, and needs of the intended user into consideration to allow the intended user to understand the implications of the actuary's communication.

3.1.1. **Form and Content** – The actuary should determine the form, structure, style, level of detail, and content of each communication to be appropriate to the particular circumstances, taking into account the intended users.

3.1.2. **Clarity** – The actuary should word each communication to be clear and use language appropriate to the particular circumstances, taking into account the intended users.

3.1.3. **Timing of Communication** – The actuary should issue each communication within a reasonable time period. The timing of the communication should reflect any arrangementsthat have been made with the principal. The actuary should consider the needs of the intended users in setting the timing.

3.1.4. **Identification of the Actuary** – A communication shall clearly identify the issuing actuary. When two or more individuals jointly issue a communication, at least some of which is actuarial in nature, the communication shall identify all responsible actuaries, unless the actuaries judge it inappropriate to do so. The name of an organization with whicheach actuary is affiliated also should be included in the communication, but the actuary's responsibilities are not affected by such identification. Unless the actuary judges it inappropriate, any communication shall also indicate to what extent and how supplementary information and explanation can be obtained from the actuary or another party.

3.2. Report

The actuary should complete a report unless any intended users will otherwise be adequately informed about the results of actuarial services (including access to the supporting information which is necessary to understand these results). The actuary should present all information with sufficient detail that another actuary qualified in the same practice area could make an objective appraisal of the reasonableness of the actuary's work.

3.2.1. **Content** – In the report, the actuary should include, if applicable:

a. The scope and intended use of the report;

b. The results of actuarial services, including the potential variability of these results;

c. The methodology, assumptions, and data used;

d. Any restrictions on distribution;

e. The date of the report; and

f. Information on the authorship of the report.

3.2.2. **Disclosures** – In the report, the actuary issuing the report should disclose, if applicable:

a. Any material deviation from the guidance in these Standards (1.3.);

b. Any reliance on information prepared by another party for which the actuary disclaims responsibility;

c. Any reliance on the principal's representations regarding constructive obligations (2.4.);

d. Any data modification, validation and deficiencies;

e. The actuary's assessment of the uncertainty inherent in the information used by the actuary;

f. Any material inconsistency in the assumptions used;

g. Where the report contains the results of an additional calculation using an assumption set requested by the principal which the actuary does not judge to be reasonable for the purposeof the assignment;

h. Assumptions and methodology that have been prescribed by another party;

i. Assumptions and methodology that are mandated by law

j. Any information regarding a change in the process for selecting assumptions that is requested to be disclosed (2.6.7.); and

k. Any material subsequent event.

3.2.3. **Authorship** – The actuary issuing the report should include in the report:

a. The actuary's name;

b. If applicable, the name of the organization on whose behalf the actuary is issuing the report,and the actuary's position held;

c. The capacity in which the actuary serves;

d. The actuary's qualifications;

e. The code of professional conduct and actuarial standards under which the work was performed, if there is any possible ambiguity; and

f. If applicable, attestations and reliances.

3.2.4. **Form** – A report may comprise one or several document(s) that may exist in several different formats. Where a report comprises multiple documents, the actuary shouldcommunicate to all intended users which documents comprise the report. The actuary should ensure that report components (especially those in electronic media) are such that they can be reliably reproduced for a reasonable period of time.

3.2.5. **Constraints** – The content of a report may be constrained by circumstances such as legal,legislative, regulatory, or supervisory proceedings. Constraints could also include other standards such as financial reporting standards or a reporting entity's accounting policy. The actuary should follow the guidance of these Standards to the extent reasonably possiblewithin such constraints.

GLOSSARY

Accounting Policies – As defined by the Financial Reporting Standards Council (FRSC) in paragraph 5 of PAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors, "*the specific principles, bases, conventions, rules and practices applied by an [reporting] entity in preparing and presenting financial statements."

Actuarial Services – Services based upon actuarial considerations provided to intended users thatmay include the rendering of advice, recommendations, findings, or opinions.

Actuary – A Fellow member, in good standing, of the Actuarial Society of the Philippines.

Communication – Any statement (including oral statements) issued or made by an actuary with respect to actuarial services.

Constructive Obligation – As defined by the FRSC in paragraph 10 of PAS 37 *Provisions, Contingent Liabilities and Contingent Assets*, as amended in January 2013, by PFRS 9, *FinancialInstruments*: "an obligation that derives from an [reporting] entity's actions where:

a. by an established pattern of past practice, published policies or a sufficiently specific current statement, the [reporting] entity has indicated to other parties that it will accept certain responsibilities; and
b. as a result, the [reporting] entity has created a valid expectation on the part of those other parties that it will discharge those responsibilities."

In paragraph 4(c) of PAS 19 *Employee Benefits,* the FRSC further states "Informal practices giverise to a constructive obligation where the [reporting] entity has no realistic alternative but to payemployee benefits."

Employee Benefits – As defined by the FRSC in paragraph 8 of PAS 19 *Employee Benefits*, as amended through September 2014: "all forms of consideration given by an [reporting] entity in exchange for service rendered by employees or for the termination of employment."

IAA – The International Actuarial Association**.**

Intended User – Any legal or natural person (usually including the principal) whom the actuary intends at the time the actuary performs actuarial services to use the report.

Law – Applicable acts, statutes, regulations or any other binding authority (such as accounting standards and any regulatory guidance that is effectively binding).

Measurement Date – The date as of which the value of an asset or liability is presented, whether or not the actual calculations have been made as of a different dateand rolled forward or back to the measurement date.

Opinion – An opinion expressed by an actuary and intended by that actuary to be relied upon by the intended users.

PAS 19 – Philippine Accounting Standard 19 Employee Benefits, including any Interpretationsfrom the Philippine Interpretations Committee thereon, as issued through September 2014.

Philippine Financial Reporting Standards (PFRSs) – As defined by the FRSC in paragraph 7 of PAS 1 *Presentation of Financial Statements*, as amended in July 2012 , by *Presentation of Items of Other Comprehensive Income (Amendments to PAS 1)*:

"Standards and Interpretations issued by the Financial Reporting Standards Council (FRSC). They comprise:

a. Philippine Financial Reporting Standards;
b. Philippine Accounting Standards;
c. [International Financial Reporting Interpretations Committee] IFRIC Interpretations; and
d. [the former Standing Interpretations Committee] SIC Interpretations."

Principal – The party who engages the provider of actuarial services. The principal will usually be the client or the employer of the actuary.

Professional Judgment – The judgment of the actuary based on actuarial training and experience.

Report– The actuary's communication(s) presenting some or all results of actuarial services to anintended user in any recorded form, including but not limited to paper, word processing or spreadsheet files, e-mail, website(s), slide presentations, or audio or video recordings.

Reporting Entity – As defined by the IASB in paragraph 8 of *Framework for the Preparation and Presentation of Financial Statements,* adopted in April 2001: "an entity for which there are users who rely on the financial statements as their major source of financial information about theentity."

Subsequent Event – An event of which the actuary becomes aware after the measurement date (or date to which the actuarial services refer) but before the actuary's communication on the resultsof these actuarial services is delivered.

CLARIFICATORY GUIDELINES ON DEFINED BENEFIT PENSION VALUATION STANDARDS

ASP GUIDANCE NOTE (GN2016-01)

In accordance with Philippine Accounting Standards No. 19 (PAS19)

Official Release
November 7, 2016

I. Introduction

The Actuarial Society of the Philippines reaffirms its adherence to the Philippine Accounting Standards No. 19 (PAS19) for the actuarial valuation of a defined benefit (DB) retirement plan.

This Guidance Note intends to establish a common understanding among retirement practitioners of the proper, consistent and correct liability valuation methodology of benefits under a DB plan in accordance with PAS19. This shall clarify and reinforce the ASP's Standards of Actuarial Practice on the Valuation of Retirement Plans and Practice Guide on Reporting Under PAS 19.

II. Scope of the Guidance Note

This Guidance Note seeks to discuss the following items which are relevant to the valuation of defined benefit retirement plans:

1. Benefits to be valued
2. Actuarial assumptions
3. Valuation methodology
4. Certification of actuarial valuation reports

III. Benefits to be Valued

All benefits under a defined benefit plan, not otherwise classified as short-term or termination benefits as defined in paragraph 8 of PAS19[1], shall be considered in the actuarial valuation. Such benefits include, but are not limited to, early retirement benefits, vested resignation benefits, death benefits and disability benefits which are subject to age and/or service requirements and increase with tenure[2].

In particular, whenever a defined benefit retirement plan provides for vested separation benefits to resigning employees/members, and/or death and disability benefits, these benefits must be calculated in accordance with the valuation methodology provided in the standards and the resulting liabilities are included as components of the Defined Benefit Obligation (DBO). An example on how vested benefits of resigning employees are included in the DBO calculation is illustrated in Annex A.

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1 *PAS 19, par 8 :Short-term employee benefits* are employee benefits (other than termination benefits) that are expected to be settled wholly before twelvemonths after the end of the annual reporting period in which the employees render the related service.

Post-employment benefits are employee benefits (other than termination benefits and short-term employee benefits) that are payable after the completion of employment.

Other long-term employee benefits are all employee benefits other than short-term employee benefits, post-employment benefits and termination benefits.

Termination benefits are employee benefits provided in exchange for the termination of an employee's employment as a result of either:

(a) an entity's decision to terminate an employee's employment before the normal retirement date; or

(b) an employee's decision to accept an offer of benefits in exchange for the termination of employment.

2 Vested separation benefits, death and disability benefits are neither termination, nor short-term benefits and hence should be considered as post-employment benefits and should be valued accordingly.

IV. Actuarial Assumptions

As provided under paragraph 55 of PAS 19, actuarial assumptions are required to measure the obligation and expense under defined benefit plans. These assumptions comprise of demographic assumptions such as mortality, rates of employee turnover, disability, and early retirement and financial assumptions dealing with the discount rate and future salary (paragraph 76).

This Guidance Note emphasizes that actuarial assumptions should reflect the best estimate of the future demographic characteristics of the group and market expectations. These assumptions should be unbiased and mutually compatible (paragraph 77). Conservatism should not be a justification to exclude any of the aforementioned assumptions or to assume other than the fair estimate of the variables. Specifically, the absence of turnover, death or disability decrements assumption in the valuation are not acceptable even if these result to a higher liability unless the actuary can reasonably justify that these are his best estimates of the group's demographic outlook.

V. Valuation Methodology

PAS19 specifically requires the use of the Projected Unit Credit(PUC) cost method in the valuation of defined benefit plans(paragraph 67).

The Actuarial Equivalence Principle as it applies to the valuation method should be observed. That is, upon entry of a member, the present value of future Current Service Costs should be equivalent to the present value of future benefits and at any time, the Present Value of Defined Benefit Obligation should be equivalent to the present value of future benefits less the present value of future Current Service Costs. Relatedly, if assumptions are kept unchanged and experience follows exactly the assumptions, no actuarial gains or losses on the obligation should occur.

In calculating the defined benefit obligation and the current service cost, the formulas shown in the Annex A satisfy the requirements of PAS19 for benefits prorated over the period of service of a plan member.

VI. Certification of Reports

The actuarial valuation report under Pas 19 should be signed by a Fellow of the Actuarial Society of the Philippines in good standing.

VII. Implementation of Guidelines

All members of the Actuarial Society of the Philippines, particularly all Fellows certifying the basis, calculations and amounts of defined benefit obligations, should comply with the standards under PAS19 and all relevant guidelines issued by the ASP, including this Guidance Note (GN2016-01).

ANNEX A

These formulas generally satisfy the requirements of PAS19 for benefits prorated over the period of service of a plan member.

$$PVDBO_{x+t} = \sum_{k=0}^{w-x-t-1} v^{k+1} \, {}_kp_{x+t}^{(T)} \frac{t}{t+k+1} \Big[B_{x+t+k+1}^{(s)} q_{x+t+k}^{(s)} + B_{x+t+k+1}^{(d)} q_{x+t+k}^{(d)} + B_{x+t+k+1}^{(dis)} q_{x+t+k}^{(dis)} + B_{x+t+k+1}^{(r)} q_{x+t+k}^{(r)} + \cdots \Big]$$

$$CSC_{x+t} = \sum_{k=0}^{w-x-t-1} v^{k} \, {}_kp_{x+t}^{(T)} \frac{1}{t+k+1} \Big[B_{x+t+k+1}^{(s)} q_{x+t+k}^{(s)} + B_{x+t+k+1}^{(d)} q_{x+t+k}^{(d)} + B_{x+t+k+1}^{(dis)} q_{x+t+k}^{(dis)} + B_{x+t+k+1}^{(r)} q_{x+t+k}^{(r)} + \cdots \Big]$$

where:

- DBO = Present Value of Defined Benefit Obligation
- CSC = Current Service Cost calculated at the beginning of the period
- x = entry age / hire age
- t = years of service
- w= mandatory retirement age where separation rate should be set to 100%
- B = benefit payable given t and attained age x + t
- $q^{(s)}, q^{(d)}, q^{(dis)}, q^{(r)}$.... = decrements; rates of separation, death, disability, retirement
- $B^{(s)}, B^{(d)}, B^{(dis)}, B^{(r)}$…= applicable benefit payable

  $B^{(s)}$ - should reflect the vested benefit payable upon separation of a member if the retirement plan provides for vested benefits; should not be assumed to be zero

  $B^{(d)}$ - should reflect the death benefit payable upon death of a member if the retirement plan provides for death benefit

  $B^{(dis)}$ - should reflect the disability benefit payable upon disability of a member if the retirement plan provides for disability benefit

Note that the above formulas have the following assumptions:

1. $p^{(T)} = 1 - q^{(s)} - q^{(d)} - q^{(dis)} - q^{(r)} - \ldots$

   Alternatively, $p^{(T)}$ may also be equal to $(1 - q^{(s)})(1 - q^{(d)})(1 - q^{(dis)})(1 - q^{(r)})\ldots$, which requires an adjustment to the above formula. The appropriate survival formula should depend on whether the decrements used are independent of each other or not.

2. Decrements occur at the end of the year
   The above formula can be modified to consider decrements that occur during the beginning or the middle of the year.

3. Entry date falls on the employee's birthday
   Adjustments should be made to consider the exact entry age of the employee.

4. Attribution factors

Adjustments should be made if a particular benefit needs to be attributed on a non- linear fashion based on the plan's formula or attributed only to a specific period of service.

5. Benefits terminate at a mandatory retirement age
   The above formula should be modified if mandatory retirement is based on years of service or other conditions.

6. Current Service Costs are calculated at the beginning of the period
   The above formula may be modified depending on the timing of calculation and the relevant period covered by the Current Service Cost.

Below is a numerical example that illustrates the PUC cost method and its application assuming prorating of benefits to periods of service. The illustration has been simplified to highlight the prorating method and inclusion of pre-retirement benefits in the calculations.

Given:

- Benefit:100 per year of service subject to the following percentage schedule:

YOS	Separation	Death	Disability
1	0%	100%	100%
2	50%	100%	100%
3	100%	100%	100%

- Decrements:yearend occurrence, $p^{(T)} = 1 - q^{(s)} - q^{(d)} - q^{(dis)}$

t	$q^{(s)}$	$q^{(d)}$	$q^{(dis)}$
1	0.190	0.006	0.004
2	0.480	0.010	0.010
3	1.000	-	-

- Discount rate = 2.0% p.a.

Results:Calculations:

The benefits are allocated as follows:

t	$B^{(s)}$	$B^{(d)}$	$B^{(dis)}$	$B^{(s)}$ / t	$B^{(d)}$ / t	$B^{(dis)}$ / t
1	0	100	100	0	100	100
2	100	200	200	50	100	100
3	300	300	300	100	100	100

The resulting PVDBO and CSC every year are shown in the following table.

t	CSC	$PVDBO_{end}$
1	59.84	73.55
2	75.02	196.08
3	100.00	-

The Current Service Costs are calculated as follows:

$CSC_0 =$ $(1.02)^0(1.000)[(0)(0.190) + (100)(0.006) + (100)(0.004)] +$
$(1.02)^{-1}(0.800)[(50)(0.480) + (100)(0.010) + (100)(0.010)] +$
$(1.02)^{-2}(0.400)[(100)(1.000)]$
$= 59.84$

$CSC_1 =$ $(1.02)^0(1.000)[(50)(0.480) + (100)(0.010) + (100)(0.010)] +$
$(1.02)^{-1}(0.500)[(100)(1.000)]$
$= 75.02$

$CSC_2 =$ $(1.02)^0(1.000)[(100)(1.000)]$
$= 100.00$

The Present Value of Define Benefit Obligations are calculated as follows:

$PVDBO_0 = 0.00$

$PVDBO_1 =$ $(1.02)^{-1}(1.000)[(50)(0.480) + (100)(0.010) + (100)(0.010)] +$
$(1.02)^{-2}(0.500)[(100)(1.000)]$
$= 73.55$

$PVDBO_2 = (1.02)^{-1}(2)(1.000)[(100)(1.000)]$
$= 196.08$

$PVDBO_3 = 0.00$

Actuarial Equivalence Principle Check:

To check the consistency of the calculated CSCs and PVDBOs, let us assume 1,000 employees were hired on the same date.

The movement in the employee force would be as follows:

t	l	s	d	dis
1	1,000	190.0	6.0	4.0
2	800	384.0	8.0	8.0
3	400	400.0	-	-

The movement in the PVDBO would be:

t	$PVDBO_{beg}$	CSC	Int Cost	Ben	Gain/Loss	$PVDBO_{end}$
1	-	59,839	-	(1,000)	-	58,839
2	58,839	60,016	1,177	(41,600)	-	78,431
3	78,431	40,000	1,569	(120,000)	-	-

$PVDBO_1 = \quad 73.55 \times 800 = 58{,}839$ and $PVDBO_2 = 196.08 \times 400 = 78{,}413$

Notice that no actuarial gains or losses occur. If the CSCs and PVDBOs were calculated differently, gains and losses would occur.

Upon entry of the 1,000 employees:

$$\text{PV of CSCs} = (59{,}839)(1.02)^{-1} + (60{,}016)(1.02)^{-2} + (40{,}000)(1.02)^{-3}$$
$$= 154{,}044$$
$$\text{PV of Benefits} = (1{,}000)(1.02)^{-1} + (41{,}600)(1.02)^{-2} + (120{,}000)(1.02)^{-3}$$
$$= 154{,}044$$

MODEL RETIREMENT PLAN PROVISIONS

Standard Defined Benefit Retirement Plan Rules

Standard Defined Contribution Retirement Plan Rules

Standard Hybrid Plan Retirement Plan Rules

STANDARD DEFINED BENEFIT RETIREMENT PLAN RULES
(Non-contributory)

STANDARD DEFINED BENEFIT RETIREMENT PLAN RULES

Article No.	Description
I	Name, Objective, and Effective Date
II	Definitions
III	Membership
IV	Retirement Eligibility
V	Benefits
VI	Beneficiary
VII	The Retirement Fund
VIII	Retirement Committee
IX	Appointment of Trustee and Investment of Funds
X	Amendment and Termination of the Plan
XI	Non-Reversion of Fund
XII	Effect of Social Legislation
XIII	Plan Qualification
XIV	Miscellaneous Provisions

STANDARD DEFINED BENEFIT RETIREMENT PLAN RULES

ARTICLE I

NAME, OBJECTIVE AND EFFECTIVE DATE

Section 1 - Name

<Company Name> hereby establishes a retirement plan known as the <Name of Retirement Plan>.

Section 2 - Objective

The objective of this Plan is to provide through a Retirement Fund established by the Company, for the payment of <Benefits under the Plan> to all its eligible Employees and Beneficiaries as the case may be, subject to the conditions and limitations hereinafter set forth.

Section 3 - Effective Date

The Plan shall take effect on <Effective Date>.

ARTICLE II

DEFINITIONS

Section 1 - Definition of Terms

The following words and phrases, as used herein, shall have the meaning indicated herein, unless a different meaning is plainly required by the context:

(a) **"Actuary"** means an independent consultant who is a Fellow of the Actuarial Society of the Philippines in good standing or a firm of consultants with such a qualified actuary on its staff. Such actuary or firm is to be approved and selected by the Company.

(b) "**Beneficiary**" or "**Beneficiaries**" means any person or persons designated by the Member to receive in the event of his death or inability by reason of physical or mental incapacity to receive in person any amounts due to or in respect of him in accordance with the provisions of this Plan.

(c) **"Company**" means <Company Name>.

(d) **"<u>Continuous Service</u>"** means the number of years and months of uninterrupted service rendered by a Member as determined from the records of the Company counted from the date of hire on a regular employment status including the probationary period, if any, up to the date of retirement, death, total and permanent disability or separation from the Company, as the case may be. Leave of absences approved by the Company with or without pay shall not constitute an interruption of service.

Continuity of service is deemed broken for any of the following reasons:

1. A Member voluntarily leaves the employment of the Company;

2. A Member is involuntarily discharged from the employment of the Company;

3. A Member fails to return to the service of the Company after an approved leave of absence; and

4. Any other cause constituting a severance of the employer-employee relationship between the Company and the Member.

.

(Optional) If a Member's continuity of service has been broken for any of the above reasons, then, unless the Company directs otherwise, he shall lose credit for all of his service prior to the break in his continuity of service.

(Optional) Approved leave of absence, either with or without pay, shall not constitute a break in service.

(Optional) If a former Employee is rehired after a break in service, his Credited Service shall commence on the date he is last rehired.

(Optional) In the event that a Member is temporarily assigned to a post outside the Philippines, it may be agreed amongst the Member, the Company and the Retirement Committee that such period of overseas service shall be deemed to be Continuous Service and during such period his Plan Salary shall be deemed for the purposes of this Plan, to be such amount (expressed in Philippine Pesos) as may be set out in such agreement, regardless of the actual salary he is receiving during such posting.

(e) **"<u>Credited Service</u>"** means____.

(f) **"<u>Employee</u>"** means any person employed by the Company on a regular and permanent basis and classified as such in the payroll of the Company, excluding part time, casual and temporary staff, apprentices, and other persons, who under the normal practice of the Company, are not considered to be regular and permanent employees.

(g) **"<u>Final Plan Salary</u>"** (if applicable) means the Member's Plan Salary earned in the month of retirement death, disability or separation from the Company as the case maybe.

(h) **"<u>Labor Code</u>"** means the Labor Code of the Republic of the Philippines and includes any amendments thereto or re-enactments thereof.

(i) **"<u>Member</u>"** means any Employee who has been admitted to membership in accordance with Article III hereof.

(j) **"<u>Plan</u>"** means the <u><Name of Retirement Plan></u>as described herein and shall include all future amendments hereto.

(k) **"<u>Plan Salary</u>"** means____.

(l) **"<u>Retirement Committee</u>"** means the body created by the Company to administer the Plan in accordance with Article VIII hereof.

(m) **"<u>Retirement Fund</u>"** or **"<u>Fund</u>"** means the retirement trust fund derived from the contributions paid by the Company whether in the form of cash or property, including all the increments or decrements thereto, and shall also be taken as referring to the assets constituting the retirement fund at any time.

(n) **"<u>Total and Permanent Disability</u>"** (if applicable) means

(Option 1) inability to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death or to be of long, continued and indefinite duration.

(Option 2) disability resulting from bodily injury due to accident or disease which wholly prevents the Member from engaging in any business or occupation to which he is reasonably suited by reason of education or training.

The disability must be certified by a medical examination acceptable to the Trustees.

(o) **"<u>Trust Agreement</u>"** means the agreement entered into between the Company and the Trustees pursuant to Article IX hereof.

(p) **"<u>Trustee</u>** or **<u>Trustees</u>"** means any individual, group of individuals or financial institution designated in the Trust Agreement to hold in Trust the assets of the Plan for the purpose of providing benefits under the Plan and shall include any successor trustee to the Trustee initially designated hereunder.

Whenever used herein the masculine shall include the feminine, the singular shall include the plural and vice versa unless the context otherwise indicates or requires.

ARTICLE III

MEMBERSHIP

Section 1 - Eligibility at Effective Date

All Employees in the service of the Company are automatically Members in the Plan, as of the Effective Date of the Plan.

Section 2 - Eligibility after Effective Date

Any Employee of the Company not covered by the Plan as of the Effective Date and any person hired after the Effective Date shall become a Member of the Plan on ________________________.

Section 3 - Termination

Membership in this Plan shall cease automatically upon termination of the Member's employment with the Company for any reason or upon full payment of the amounts, if any, due the Member hereunder.

Section 4 - Re-Employment

A Member whose membership in the Plan was terminated and who is subsequently re-employed by the Company shall, upon re-admission to the Plan and unless the Company directs otherwise, be treated as a new Member on the first day of the month coincident with or next following the commencement date of his regular employment with the Company; unless the Company directs otherwise.

Section 5 - Leave of Absence

Membership in the Plan shall continue during any period in which a Member is on an approved leave of absence and during any period of absence due to furlough, sickness, accident or other causes not constituting a severance of employer-employee relationship. If a Member fails to return after an approved leave of absence, notwithstanding the Company's order for him to report for work, the Employee loses his membership in the Plan as of the day he entered into such leave of absence.

ARTICLE IV

RETIREMENT ELIGIBILITY

Section 1 - Normal Retirement Date

A member shall be retired on the first day of the month coincident with or next following the Member’s________birthday, hereinafter referred to as the Normal Retirement Date.

Section 2 - Early Retirement (If applicable)

A Member may, with the approval of the Company, retire and be entitled to the retirement benefits provided in Article V, Section 2 hereof on the day he attains age_, and after rendering at least_years of Continuous Service with the Company.

Section 3 - Late Retirement (If applicable)

At the option of the Company and upon approval by the Member, he may continue in the service of the Company beyond his Normal Retirement Date subject to a yearly extension basis, provided however that such extension of service shall in no case extend beyond the Member's_______birthday.

ARTICLE V

BENEFITS

Section 1 - Normal Retirement Benefit

Upon normal retirement, a Member shall be entitled to a lump sum benefit equal to ____________________.

Section 2 - Early Retirement Benefit (if applicable)

Upon early retirement, a Member shall be entitled to a lump sum benefit equal to ____________________.

Section 3 - Late Retirement (if applicable)

A Member whose retirement has been deferred, pursuant to Article IV, Section 3 hereof, shall be entitled to a lump sum benefit equal to________.

Section 4 - Voluntary Separation Benefit (if applicable)

Any Member who, prior to eligibility for retirement, voluntarily resigns from the Company after completing at least__years of Credited Service, he will be entitled to a lump sum benefit equal to________________calculated as at date of voluntary separation.

Completed Years of Continuous Service	Percentage Payable
Less than 5	
5	
6	

7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20 or more	

Section 5 - Death Benefit (if applicable)

If a Member dies before retirement, his duly designated Beneficiary or Beneficiaries shall be entitled to a lump sum benefit equal to________calculated as at the date of death.

Should the death of a Member arise from or be caused by self-inflicted injuries or any criminal act attributable to him, no benefit shall be due or payable to the Member under this Plan.

Section 6 - Total and Permanent Disability Benefit (if applicable)

In the event of Total and Permanent Disability, as determined by a Company physician, a Member shall be entitled to a lump sum benefit equal to__________calculated as at the date of Total and Permanent Disability.

Should the Total and Permanent Disability of a Member arise from or be caused by self-inflicted injuries or any criminal act attributable to him, no benefit shall be due or payable to the Member under this Plan.

Section 7 - Involuntary Separation Benefit (if applicable)

A Member who is separated from the employment of the Company for any reason (other than for just cause) beyond his control including, but not limited to, retrenchment, redundancy, disease, cessation of Company operation, etc., shall be entitled to receive a lump sum benefit equal to________________.

The payment of such a benefit from the Plan shall operate in full satisfaction of any liability of the Company to make a payment under the Labor Code or any similar legislation on involuntary termination.

Section 8 - Separation for Cause

A Member who is separated for just cause by the Company pursuant to the applicable provisions of the Labor Code shall forfeit all his rights and privileges under the Plan.

Section 9 - Availment of Benefits

Availment of benefits under Sections 1 to 7 of this Article shall be exclusive and shall disqualify the Member from any other benefits under this Plan.

Any outstanding obligation of a member to the Plan or the Company upon his termination of membership from the Plan shall be deducted from the benefit payable to him under this Plan.

Section 10 - Other Benefits

No benefit other than those provided in accordance with Sections 1 to 7 of this Article shall be payable under this Plan.

Section 11 - Non-duplication of Benefit Payments

Any benefit payable under this Plan shall be in lieu of or in compliance with, but not in addition to, the payment of similar benefits the Company is required to pay its Employees under existing laws, contracts or collective bargaining agreement(s).

ARTICLE VI

BENEFICIARY

Section 1 - Nomination of Beneficiaries

An Employee shall, upon joining the Plan, forthwith nominate in writing, in such forms as shall be prescribed by the Company, a person or persons, not otherwise disqualified by law, who will receive the benefit in case of his death or inability by reason of physical or mental incapacity to receive in person any sum due him under the Plan. Nomination must be made in accordance with existing laws.

If two or more beneficiaries are named and if the Employee did not state their respective interests they shall share equally.

Section 2 - Change of Beneficiary

Every nomination or appointment shall remain in force until the death of the nominee or appointee or until revoked or amended by the Member by delivering to the Company another nomination or appointment in the prescribed form.

Should a sole Beneficiary predecease the Member, the latter shall forthwith nominate another person in place of the deceased Beneficiary. In the event, however, that one of several designated Beneficiaries predecease the Member, the latter may, at his option, nominate another person in place of the deceased Beneficiary.

Section 3 - Incompetent Beneficiary

In the event that any person entitled to the benefits under this Plan is a minor or is otherwise incompetent at the time payment is due, the Company reserves the right to determine to whom such payment shall be made for and in behalf of the incompetent Beneficiary, and any such determination by the Company shall be conclusive and binding on all parties concerned.

Payment to the person in behalf of the incompetent Beneficiary shall be deemed as if made to the Beneficiary in person and shall discharge the Fund from liability to the extent of the amount paid. In no case shall the Beneficiary be entitled to any income on the amount of the benefits during the period the payment was deferred because of the absence of a legal guardian.

Section 4 - Failure to Nominate a Beneficiary

If at the death of a Member there shall exist no valid nomination by him of a Beneficiary, he shall be conclusively presumed to have appointed as his Beneficiary the person or persons in the first of the following classes then surviving and if more than one in such class in equal shares:

(1) Legitimate spouse;
(2) Children;
(3) Parents;
(4) Brothers and sisters of the full blood; and
(5) Member's estate

ARTICLE VII

THE RETIREMENT FUND

Section 1 – The Retirement Fund

The funding of the Plan and payment of the benefits hereunder shall be provided for through the medium of a Retirement Fund held, managed and maintained by the Trustee/s appointed by the Company. The contributions of the Company to the Retirement Fund, together with any income, gains or profits resulting from the investment and re-investment of the same, less distributions, expenses and losses, shall constitute the Retirement Fund.

Section 2 - Funding

No Member shall be required or permitted to make any contributions to the Retirement Fund.

The Company shall contribute to the Fund such amounts as may be recommended by an independent Actuary, on the basis of reasonable actuarial assumptions, to pay the benefits payable under these Rules and to maintain the Plan in an actuarially sound condition.

Although the Company intends to continue the Plan indefinitely, it reserves the right to discontinue, suspend, or change the rate and amount of its contributions to the Fund at any time for any reason whatsoever.

The Company shall not be liable to any person for failure on its part to make contributions as provided in this Article, nor shall any action lie to compel the Company to make such contributions.

Section 3 - Irrevocability of Trust

Subject only to the provisions of Article XI hereof, all contributions made by the Company to the Retirement Fund shall be held, solely and exclusively, for the benefits of the Members or their Beneficiaries and no part of the Fund shall be used for, or diverted to, purposes other than for the exclusive benefit of such Members or their Beneficiaries prior to the satisfaction of all liabilities under the Plan. The reasonable expenses of administering the Plan and the Fund may be paid out of the Fund to the extent that they are not borne by the Company.

Section 4 - Interest in the Fund

No Member shall have any right, title or interest in or to any part of the assets of the Fund except as and to the extent expressly provided in the Plan.

Section 5 - Forfeitures

Any amount accrued under this Plan which is not paid by virtue of the limitations specified in this Rules and Regulations, such as forfeitures arising from separation for cause or voluntary resignation, shall not be applied to increase the benefits any Member would otherwise receive under the Plan at any time prior to the termination of the Plan or the complete discontinuance of contributions of the Company. The amount so forfeited shall be used as soon as possible to reduce future Company contributions under the Plan.

Section 6 - Unclaimed Benefits

Any amount payable to a former Member or his beneficiary, which for any reason is not claimed within a period of five (5) years from the date such amount becomes payable, shall be retained in the Fund and after such period shall be used to reduce subsequent contributions of the Company to the Fund.

ARTICLE VIII

RETIREMENT COMMITTEE

Section 1 - Appointment

The Company shall appoint a Retirement Committee of at least three (3) members to manage and administer this Plan in accordance with the provisions hereof. Each member is to serve for such term as the Company may designate, until a successor member has been appointed, or until removal of the Company. In the event of resignation, death, removal or other cause of the original members, new members shall be appointed by the Company. Retirement Committee members shall serve without compensation for the Committee services. All reasonable expenses of the Committee shall be paid by the Company. The Company may at any time revoke any appointment to the Retirement Committee.

Section 2 - Actions of Committee

The Committee shall act by agreement of a majority of its members, either by vote at a meeting or in writing if without a meeting. By such action, it may authorize one or more of its members to execute documents on its behalf and direct the Trustee in the performance of its duties hereunder. The Trustees, upon written notification of such authorization, shall accept and rely upon such documents until notified in writing that the authorization has been revoked by the Committee. The Trustee shall not be deemed to be on notice of any change in the membership of the Committee unless notified in writing.

A member of the Committee, who is also a Member hereunder, shall not vote or act upon any matter relating solely to himself. In the event of a deadlock or other situation which prevents agreement of a majority of the Committee members, the matter shall be decided by the Company.

Section 3 - Powers and Duties

The Committee shall have the power and duty to do all things necessary or convenient to effect the intent and purpose of this Plan and, not inconsistent with any of the provisions hereof, whether or not such powers and duties are specifically set forth herein, and not in limitation but in amplification of the foregoing, shall have the power to:

(a) Construe the Plan and to determine all questions that shall arise hereunder, including, particularly, directions to and questions submitted by the Trustee on all matters necessary for it to properly discharge its powers and duties;

(b) Determine eligibility of Employees to participate in the Plan;

(c) Settle all questions involving interpretation of the provisions of the Plan and questions of entitlement to benefits;

(d) Consider and approve investment policies and guidelines as provided for in the Trust Agreement;

(e) Approve all payments and disbursements from the Fund;

(f) Perform such other acts of administration necessary or desirable to implement the provisions and objectives of the Plan.

Decisions of the Committee made in good faith upon any matters within the scope of its authority shall be final and binding on the Company, the Trustees, Members and all others. The Committee, at all times, in making and carrying out its decisions and directions shall act in a uniform and non-discriminatory manner and may from time to time prescribe and modify uniform rules of interpretation and administration

Section 4 - Advisers

The Committee shall consult with or hire an independent Actuary, approved by the Company, who shall perform the actuarial valuation and other services necessary to maintain the Plan in an actuarially sound condition.

The Committee may likewise consult with independent auditors and lawyers to perform all necessary and related services in connection with the operation of the Plan.

The expense of such advisers shall be paid by the Company, or if not paid by the Company, the Committee may direct that such expense be paid from the fund.

ARTICLE IX

APPOINTMENT OF TRUSTEE AND INVESTMENT OF FUNDS

Section 1 - Appointment of Trustees

The Company shall establish a Trust Agreement and appoint a Trustee to hold and invest the assets of the Fund in accordance with the provisions of this Plan and the Trust Agreement. The Company shall have the authority to rename a Trustee and appoint successor Trustees.

Section 2 -Investment of Funds

The Fund shall be held and invested by the Trustee, in accordance with the directions of the Committee. The Committee is hereby granted full power and authority to direct the Trustee to invest and reinvest the Fund or any part thereof in accordance with the standards set forth in the Trust Agreement and the provisions of this Article.

ARTICLE X

AMENDMENT AND TERMINATION OF THE PLAN

Section 1 - Modification, Suspension or Discontinuance

Although it is expected that the Plan will continue indefinitely, it may be amended, suspended or terminated at anytime by the Company on account of business necessity or adverse economic conditions, but no such action of the Company shall operate to permit any part of the assets of the Fund to be used for, or diverted to, purposes other than for the exclusive benefit of the Members or their Beneficiaries. Neither shall it be applied retroactively so as to adversely affect or reduce in any way the benefit accrued to any Member on account of service prior to the date of such amendment, suspension or liabilities of the Plan have been satisfied.

Section 2 - Disposition of the Fund on Plan Termination

Upon the termination of the Plan, the liability of the Company to make contributions shall cease and the assets of the Fund shall be allocated after the satisfaction of all outstanding Fund expenses, taxes, duties, fees and charges incidental to the administration, management and termination of the Plan, for benefit of each Member accrued to the date of such termination or discontinuance, to the extent then funded, and payable in accordance with the following priorities:

(a) **First**, all benefits due and payable but not yet paid at the date of termination to or in respect of Members whose employment has been terminated prior to such date by reason of retirement, death, or total and permanent disability shall be paid to the extent then funded; pro-rata if the fund is not sufficient.

(b) Any funds remaining, **Second**, those Members eligible for retirement under normal, optional, or late retirement shall receive the value of their accrued benefits, to the extent then funded; pro-rata if the Fund is not sufficient.

(c) Any funds remaining, **Third**, those Members involuntarily separated (except for just cause) by the Company shall be paid, to the extent then funded, the excess, if any, of the amount payable by the Company in accordance with the Labor Code over the amount, if any, already received under the Plan; pro-rata if the Fund is not sufficient.

(d) Any funds remaining, **Fourth**, all Members who have not received the full amount of their benefits accrued at date of termination or discontinuance determined using the same formula as in the retirement benefit shall receive such unpaid accrued benefits, to the extent then funded; pro-rata if the Fund is not sufficient.

Any amount remaining after satisfying (a), (b), (c) and (d) above shall revert to the Company.

Section 3 - Payment of Benefits on Plan Termination

A Member or former Member who is entitled to a payment under Section 2 hereof shall be entitled to receive such amount forthwith. By agreement amongst the Company, the Retirement Committee and the Member, payment of the amount may be deferred in the case of a Member who is still employed by the Company until the termination of his employment. In such event the amount due to the Member shall be credited with interest at a rate determined by the Trustees on the advice of the Actuary.

ARTICLE XI

NON-REVERSION OF FUND

The Company shall have no right, title or interest whatsoever in the contributions made by it to the Fund and no part of the Fund shall revert to the Company except that which may remain after satisfaction of all liabilities of the Plan, as a result of overpayment made by the Company.

ARTICLE XII

EFFECT OF SOCIAL LEGISLATION

Section 1- Social Security and Employees' Compensation

Whatever benefits may be due to the Member on account of the Social Security and Employees' Compensation Act existing as of the Effective Date of the Plan shall not be deducted from the benefits granted under this Plan.

Section 2- Other Laws, Contracts, Agreements, Government Awards, Rules and Regulations

Except as otherwise provided by law, the benefits provided for by this Plan shall, at the discretion of the Company be reduced by, or be used to reduce or offset the amount of, all other benefits, emoluments, contributions or other payments that the Company may be required to pay to any person arising out of the termination of the employment of a Member for any reason (including death), by virtue of any present or future contracts, agreements, awards, legislation, or lawful order of competent authority including collective bargaining agreements, Labor Code or any similar legislation thereof.

Section 3- Integration with Statutory Benefits

If a Member or his Beneficiary shall have received or be entitled to receive any benefit to the extent and in the manner now or thereafter provided by Law in connection with retirement, disability, death or termination of employment of such Member, the Company shall have the right to apply the benefits paid under this Plan for the satisfaction of such statutory benefits.

A Member, who is qualified to receive retirement benefits under Republic Act 7641, or any similar future law amending or superseding it, providing for a minimum retirement benefit, shall not receive a benefit under this Plan lower than the benefit provided by Law. In no case, however, shall the Member be entitled to more than one benefit whether granted by any retirement law, other laws, agreement, contracts, or this Plan as provided under Sections 1 and 2 of this Article.

ARTICLE XIII

PLAN QUALIFICATION

The Rules have been designed to meet the requirements of tax laws and Bureau of Internal Revenue regulations for a tax-qualified retirement plan. The Company reserves the right to amend any provision of the Plan in order that the Plan shall maintain its tax-qualified status in accordance with present and future BIR regulations or otherwise to secure the most favorable tax treatment of contributions to, benefits from, and income of the Fund.

In case the benefits payable under the Plan are subject to tax, the Trustees shall, if required by the relevant legislation or regulations, deduct from the benefits the corresponding withholding tax.

ARTICLE XIV

MISCELLANEOUS PROVISIONS

Section 1 - Non-Transferability of Benefits

The benefits under the Plan are intended exclusively for the Members and their Beneficiaries. No benefits payable to or in respect of a Member under the provisions hereof shall be subject in any manner to anticipation, alienation, transfer, assignment, pledge or encumbrance; nor shall any such benefits be in any manner liable for or subject to the debts or liabilities of the Member except as may specifically be provided by Law.

Section 2 - Rights of Members

Nothing herein contained shall be deemed to give any Member the right to be retained in the service of the Company or to interfere with the right of the Company to discharge such Member at any time, nor shall it give the Company the right to require a Member to remain in its service, nor shall it interfere with the Member's right to terminate his service at any time.

Section 3 - Fluctuations in Currency

Article 1250 of the Civil Code of the Philippines (Republic Act No. 386), which provides that "In case an extraordinary inflation or deflation of the currency stipulated should supervene, the value of the currency, at the time of the establishment of the obligation shall be the basis of payment unless there is an agreement to the contrary" shall not apply to any of the payments made or to be made under the provisions of this Plan.

Section 4 – Currency of Benefits and Contributions

All benefits and contributions shall be computed in terms of Philippine Pesos.

Section 5 – Proof of Age and Other Data

Proof of age and other data, when required must be established by evidence satisfactory to the Retirement Committee. The Company's records as to Continuous Service and compensation may be accepted by the Retirement Committee for Plan purposes.

Section 6 - Entitlements Derived from Rules

No Member shall have any vested rights under the Plan except to the extent that such rights may accrue to him upon compliance with all the conditions and requirements established by the Rules of the Plan for receipt of benefits herein.

Section 7 - Recoupment of Direct Payment by Company

In the event that the Company makes a payment from its own funds of any benefit or part thereof to or in respect of a Member under these Rules or in the event that the Company makes any other payment from its own funds of any other amount properly chargeable under these Rules or the Trust Agreement to the Fund then the Company shall be entitled to be reimbursed for such payment from the Fund.

Section 8 - Transfer of Benefits to or from Plan

In the event that a Member who joins the Plan has been a member of another retirement plan and such other plan agrees to transfer to the Fund assets representing the Member's benefit in such other plan, then the Trustees upon notification by the Retirement Committee and with the consent of the Company, may accept such assets into the Fund. The benefits which the Member would otherwise receive under these Rules shall therefrom be varied in such form as the Company, the Trustees and the Member shall agree, after taking the advice of the Actuary.

Where a Member becomes entitled to a benefit from the Plan, the Trustees may, at the request of the Member and with the consent of the Company, authorize the Trustees to pay such benefit directly to the trustees of another plan of which the Member is or is about to become a member instead of paying it to the Member directly.

If a Member ceases to be a Member of this Plan and becomes or is about to become a member of another retirement plan, being a retirement plan nominated and approved by the Company, the Trustees shall, at the request of the Company and the Member, transfer to the trustees of such other retirement plan the amount certified by the Actuary as representing the value of the Member's accrued benefits in the Fund.

Section 9 - Management Powers

Nothing contained in these rules and regulations shall be deemed as a limitation on the inherent powers and prerogatives of the Company management.

Section 10 - Applicable Laws

The laws of the Republic of the Philippines shall govern in resolving any questions under the Plan.

Section 11 - Superseding Any or All Existing Retirement Plans (if applicable)

This Plan shall supersede any or all retirement plans sponsored by the Company for its Employees in effect as of the Effective Date of the Plan.

APPROVED:

BY: ________________________________

NAME:

TITLE:

DATE:

STANDARD DEFINED CONTRIBUTION RETIREMENT PLAN RULES

STANDARD DEFINED CONTRIBUTION RETIREMENT PLAN RULES

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STANDARD DEFINED CONTRIBUTION RETIREMENT PLAN RULES AND REGULATIONS

ARTICLE I

NAME, OBJECTIVE AND EFFECTIVE DATE

Section 1 - Name

<Company Name> hereby establishes a retirement plan known as the <Name of Retirement Plan>.

Section 2 - Objective

The objective of this Plan is to provide through a Retirement Fund established by the Company, for the payment of <Benefits under the Plan> to all its eligible Employees and Beneficiaries as the case may be, subject to the conditions and limitations hereinafter set forth.

Section 3 - Effective Date

The Plan shall take effect on <Effective Date>.

ARTICLE II

DEFINITIONS

Section 1 - Definition of Terms

The following words and phrases as used in this Plan, shall have the meaning indicated herein, unless a different meaning is plainly required by the context:

(a) **"Actuary"** means an independent consultant who is a Fellow of the Actuarial Society of the Philippines in good standing or a firm of consultants with such a qualified actuary on its staff. Such actuary or firm is to be approved and selected by the Company.

(b) **"Beneficiary"** or **"Beneficiaries"** means any person or persons designated by the Member to receive in the event of his death or inability by reason of physical or mental incapacity to receive in person any amounts due to or in respect of him in accordance with the provisions of this Plan.

(c) **"Company"** means <Company Name>.

(d) **"<u>Continuous Service</u>"** means the number of years and months of uninterrupted service rendered by a Member as determined from the records of the Company counted from the date of hire on a regular employment status including the probationary period, if any, up to the date of retirement, death, total and permanent disability or separation from the Company, as the case may be. Leave of absences approved by the Company with or without pay shall not constitute an interruption of service.

Continuity of service is deemed broken for any of the following reasons:

1. A Member voluntarily leaves the employment of the Company;

2. A Member is involuntarily discharged from the employment of the Company;

3. A Member fails to return to the service of the Company after an approved leave of absence; and

4. Any other cause constituting a severance of the employer-employee relationship between the Company and the Member.

(Optional) If a Member's continuity of service has been broken for any of the above reasons, then, unless the Company directs otherwise, he shall lose credit for all of his service prior to the break in his continuity of service.

(Optional) Approved leave of absence, either with or without pay, shall not constitute a break in service.

(Optional) If a former Employee is rehired after a break in service, his Credited Service shall commence on the date he is last rehired.

(Optional) In the event that a Member is temporarily assigned to a post outside the Philippines, it may be agreed amongst the Member, the Company and the Retirement Committee that such period of overseas service shall be deemed to be Continuous Service and during such period his Monthly Salary shall be deemed for the purposes of this Plan, to be such amount (expressed in Philippine Pesos) as may be set out in such agreement, regardless of the actual salary he is receiving during such posting.

(e) **"<u>Credited Service</u>"** means____.

(f) **"<u>Employee</u>"** means any person employed by the Company on a regular and permanent basis and classified as such in the payroll of the Company, excluding part time, casual and temporary staff, apprentices, and other persons, who under the normal practice of the Company, are not considered to be regular and permanent employees.

(g) **"<u>Individual Account Balance</u>"** means the total contributions to the Fund by the Company on a Member's behalf or by the Member himself, and the investment returns on these contributions. Separate individual accounts shall be maintained for Companycontributions and Member contributions.

(h) **"Investment Manager"** means any individual, group of individuals, or financial institution designated by the Trustee to manage and invest the Fund pursuant to the Trust Agreement.

(i) **"Labor Code"** means the Labor Code of the Republic of the Philippines and includes any amendments thereto or reenactments thereof.

(j) **"Member"** means any Employee who becomes a member of the Plan in accordance with Article III hereof.

(k) **"Plan"** means the <Name of Retirement Plan>as described herein and shall include all future amendments hereto.

(l) **"Plan Salary"** means____.

(m) **"Retirement Committee"** means the body appointed by the Company to administer the Plan in accordance with Article VIII hereof.

(n) **"Retirement Fund"** or **"Fund"** means the retirement trust fund derived from the contributions paid by the Company and/or the Members whether in the form of cash or property, including all the increments or decrements thereto, and shall also be taken as referring to the assets constituting the retirement fund at any time.

(o) **"Total and Permanent Disability"** (If applicable) means

(Option 1) inability to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death or to be of long, continued and indefinite duration.

(Option 2) disability resulting from bodily injury due to accident or disease which wholly prevents the Member from engaging in any business or occupation to which he is reasonably suited by reason of education or training.

The disability must be certified by a medical examination acceptable to the Trustees.

(p) **"Trust Agreement"** means the agreement entered into between the Company and the Trustees pursuant to Article IX hereof.

(q) "**Trustee"** or **"Trustees"** means individual, individuals, or financial institution designated by the Company under a Trust Agreement to hold in Trust the assets of the Plan for the purpose of providing benefits under the Plan, and shall include any successor trustee to the Trustee initially designated hereunder.

(r) **"Valuation"** means the allocation of contributions and investment returns among the individual account of Members pursuant to Article VII Section 3.

Whenever used herein the masculine shall include the feminine, the singular shall include the plural and vice versa unless the context otherwise indicates or requires.

ARTICLE III

MEMBERSHIP

Section 1 - Eligibility at Effective Date

All Employees in the service of the Company are automatically Members in the Plan, as of the Effective Date of the Plan.

Section 2 - Eligibility after Effective Date

Any Employee of the Company not covered by the Plan as of the Effective Date and any person hired after the Effective Date shall become a Member of the Plan on________________________.

Section 3 - Termination

Membership in this Plan shall cease automatically upon termination of the Member's employment with the Company for any reason or upon full payment of the amounts, if any, due the Member hereunder.

Section 4 - Re-Employment

A Member whose membership in the Plan was terminated and who is subsequently re-employed by the Company shall, upon re-admission to the Plan and unless the Company directs otherwise, be treated as a new Member on the first day of the month coincident with or next following the commencement date of his regular employment with the Company; unless the Company directs otherwise.

Section 5 - Leave of Absence

Membership in the Plan shall continue during any period in which a Member is on an approved leave of absence and during any period of absence due to furlough, sickness, accident or other causes not constituting a severance of employer-employee relationship. If a Member fails to return after an approved leave of absence, notwithstanding the Company's order to report for work, the Employee loses his membership in the Plan as of the day he entered into such leave of absence.

ARTICLE IV

RETIREMENT ELIGIBILITY

Section 1 - Normal Retirement Date

A member shall be retired on the first day of the month coincident with or next following the Member's_______birthday, hereinafter referred to as the Normal Retirement Date.

Section 2 - Early Retirement Date (if applicable)

A Member may, with the approval of the Company, retire and be entitled to the retirement benefits provided in Article V, Section 2 hereof on the day he attains age____, and after rendering at least _____years of Continuous Service with the Company.

Section 3 - Late Retirement Date (if applicable)

At the option of the Company and upon approval by the Member, he may continue in the service of the Company beyond his Normal Retirement Date subject to a yearly extension basis, provided however that such extension of service shall in no case extend beyond the Member's _______ birthday.

ARTICLE V

BENEFITS

Section 1 - Normal Retirement Benefit

Upon normal retirement, a Member shall be entitled to a lump sum benefit equal to the sum of the following:

(a) An amount which shall be paid from Fund A equivalent to the Member's Individual Account Balance attributable to Company contributions to Fund A as of the most recent Valuation prior to Normal Retirement Date and adjusted for subsequent contributions, if any.

(b) An amount which shall be paid from Fund B equivalent to the Member's Individual Account Balance attributable to the Member's own contributions to Fund B as of the most recent Valuation prior to Normal Retirement Date and adjusted for subsequent contributions, if any.

Section 2 - Early Retirement Benefit (if applicable)

Upon early retirement, a Member shall be entitled to a lump sum benefit equal to the sum of the following:

(a) An amount which shall be paid from Fund A equivalent to the Member's Individual Account Balance attributable to Company contributions to Fund A as of the most recent Valuation prior to early retirement date and adjusted for subsequent contributions, if any.

(b) An amount which shall be paid from Fund B equivalent to the Member's Individual Account Balance attributable to the Member's own contributions to Fund B as of the most recent Valuation prior to early retirement date and adjusted for subsequent contributions, if any.

Section 3 - Late Retirement Benefit (if applicable)

A Member whose retirement has been deferred, pursuant to Article IV, Section 3 hereof, shall be entitled to a lump sum benefit equal to the sum of the following:

(a) An amount which shall be paid from Fund A equivalent to the Member's Individual Account Balance attributable to Company contributions to Fund A as of the most recent Valuation prior to late retirement date and adjusted for subsequent contributions, if any.

(b) An amount which shall be paid from Fund B equivalent to the Member's Individual Account Balance attributable to the Member's own contributions to Fund B as of the most recent Valuation prior to late retirement date and adjusted for subsequent contributions, if any.

Section 4 – Voluntary Separation Benefit (if applicable)

Any Member who, prior to eligibility for retirement, voluntarily resigns from the Company, shall be entitled to a lump sum benefit equal to sum of the following:

(a) An amount which shall be paid from Fund A equivalent to a percentage of the Member's Individual Account Balance attributable to Company contributions to Fund A as of the most recent Valuation prior to separation date and adjusted for subsequent contributions, if any. The percentage payable is as follows:

Completed Years of Continuous Service	Percentage Payable
Less than 5	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20 or more	

(b) An amount which shall be paid from Fund B equivalent to the Member's Individual Account Balance attributable to the Member's own contributions to Fund B as of the most recent Valuation prior to separation date and adjusted for subsequent contributions, if any.

Section 5 - Death Benefit (if applicable)

If a Member dies before retirement, his duly designated Beneficiary or Beneficiaries shall be entitled to a lump sum benefit equal to the sum of the following:

(a) An amount which shall be paid from Fund A equivalent to the Member's Individual Account Balance attributable to Company contributions to Fund A as of the most recent Valuation prior to date of death and adjusted for subsequent contributions, if any.

(b) An amount which shall be paid from Fund B equivalent to the Member's Individual Account Balance attributable to the Member's own contributions to Fund B as of the most recent Valuation prior to date of death and adjusted for subsequent contributions, if any.

Should the death of a Member arise from or be caused by self-inflicted injuries or any criminal act attributable to him, no benefit shall be due or payable to the Member under this Plan except for the Member's Individual Account Balance attributable to the Member's own contributions to Fund B as of the most recent Valuation prior to date of death and adjusted for subsequent contributions, if any, less any liabilities or indebtedness of the Member to the Company, regardless of the Member's age and number of years of Credited Service.

Section 6 - Total and Permanent Disability Benefit (if applicable)

In the event of Total and Permanent Disability, as determined by a Company physician, a Member shall be entitled to a lump sum benefit equal to the sum of the following:

(a) An amount which shall be paid from Fund A equivalent to the Member's Individual Account Balance attributable to Company contributions to Fund A as of the most recent Valuation prior to date of Total and Permanent Disability and adjusted for subsequent contributions, if any.

(b) An amount which shall be paid from Fund B equivalent to the Member's Individual Account Balance attributable to the Member's own contributions to Fund B as of the most recent Valuation prior to date of Total and Permanent Disability and adjusted for subsequent contributions, if any.

Should the Total and Permanent Disability of a Member arise from or be caused by self-inflicted injuries or any criminal act attributable to him, no benefit shall be due or payable to the Member under this Plan except for the Member's Individual Account Balance attributable to the Member's own contributions to Fund B as of the most recent Valuation prior to disability date and adjusted for subsequent contributions, if any, less any liabilities or indebtedness of the Member to the Company, regardless of the Member's age and number of years of Credited Service.

Section 7 - Involuntary Separation Benefit

A Member who is separated from the employment of the Company for any reason (other than for just cause) beyond his control including, but not limited to, retrenchment, redundancy, disease, cessation of Company operation, etc., shall be entitled to receive a lump sum benefit equal to the sum of the following:

(a) An amount which shall be paid from Fund A equivalent to the Member's Individual Account Balance attributable to Company contributions to Fund A as of the most recent Valuation prior to date of separation and adjusted for subsequent contributions, if any.

(b) An amount which shall be paid from Fund B equivalent to the Member's Individual Account Balance attributable to the Member's own contributions to Fund B as of the most recent Valuation prior to date of separation and adjusted for subsequent contributions, if any.

The payment of such a benefit from the Plan shall operate in full satisfaction of any liability of the Company to make a payment under the Labor Code or any similar legislation on involuntary termination.

Section 8 - Separation for Cause

A Member who is separated for just cause by the Company pursuant to the applicable provisions of the Labor Code shall forfeit all his rights and privileges under the Plan, except for the Member's Individual Account Balance in Fund B attributable to his own contributions as of most recent Valuation and adjusted for subsequent contributions less any liabilities or indebtedness of the Member to the Company, regardless of the Member's age and number of years of Credited Service.

Section 9 - Availment of Benefits

Availment of benefits under Sections 1 to 7 of this Article shall be exclusive and shall disqualify the Member from any other benefits under this Plan.

Any outstanding obligation of a member to the Plan or the Company upon his termination of membership from the Plan shall be deducted from the benefit payable to him under this Plan.

Section 10 - Other Benefits

No benefit other than those provided in accordance with Sections 1 to 7 of this Article shall be payable under this Plan.

Section 11 - Non-Duplication of Benefit Payments

Any benefit payable under this Plan shall be in lieu of or in compliance with, but not in addition to, the payment of similar benefits the Company is required to pay its Employees under existing laws, contracts or collective bargaining agreement(s).

ARTICLE VI

BENEFICIARY

Section 1 - Designation of Beneficiaries

An Employee shall, upon joining the Plan, forthwith nominate in writing, in such forms as shall be prescribed by the Company, a person or persons, not otherwise disqualified by law, who will receive the benefit in case of his death or inability by reason of physical or mental incapacity to receive in person any sum due him under the Plan. Nomination must be made in accordance with existing laws.

If two or more Beneficiaries are named and if the Employee did not state their respective interest, they shall share equally.

Section 2 - Change of Beneficiary

Every nomination or appointment shall remain in force until the death of the nominee or appointee or until revoked or amended by the Member by delivering to the Company another nomination or appointment in the prescribed form.

Should a sole Beneficiary predecease the Member, the latter shall forthwith nominate another person in place of the deceased Beneficiary. In the event, however, that one of several designated Beneficiaries predecease the Member, the latter may, at his option, nominate anotherperson in place of the deceased Beneficiary.

Section 3 - Incompetent Beneficiary

In the event that any person entitled to the benefits under this Plan is a minor or is otherwise incompetent at the time payment is due, the Company reserves the right to determine to whom such payment shall be made for and in behalf of the incompetent Beneficiary, and any such determination by the Company shall be conclusive and binding on all parties concerned.

Payment to the person in behalf of the incompetent Beneficiary shall be deemed as if made to the Beneficiary in person and shall discharge the Fund from liability to the extent of the amount paid. In no case shall the Beneficiary be entitled to any income on the amount of the benefits during the period the payment was deferred because of the absence of a legal guardian.

Section 4 - Failure to Nominate a Beneficiary

If at the death of a Member there shall exist no valid nomination by him of a Beneficiary, he shall be conclusively presumed to have appointed as his Beneficiary the person or persons in the first of the following classes then surviving and if more than one in such class in equal shares:

1. Legitimate spouse;
2. Children;
3. Parents;
4. Brothers and sisters of the full blood; and
5. Member's estate.

ARTICLE VII

THE RETIREMENT FUND

Section 1 – The Retirement Fund

The funding of the Plan and payment of the benefits hereunder shall be provided for through the medium of a Retirement Fund held, managed and maintained by the Trustee/s appointed by the Company. The contributions of the Company to the Retirement Fund, together with any income, gains or profits resulting from the investment and re-investment of the same, expenses and losses, shall constitute the Retirement Fund.

Section 2 – Funding

(a) Contributions to Fund A

1. Fund A shall be an allocated fund hereby established to hold contributions made by the Company on the Member's behalf, and the corresponding investment earnings and losses on such contributions.

2. (If applicable) The Company shall establish an initial Individual Account Balance for each Member as follows: ___________________________.

3. Commencing on______________, the Company shall contribute to the Fund an amount equal to a percentage of each Member's Plan Salary as follows:

	Contribution Rates (as a Percentage of Plan Salary)

4. (If applicable) Should a Member opt to contribute to Fund B, the Company shall match these contributions by contributing to Fund A an amount equal to the Member's elected contribution rate up to a maximum amount to be determined by the Company from time to time.

5. (If applicable) Should a Member choose not to contribute or to stop contributing to Fund B, the Company shall likewise not make or stop making these additional matching contributions to Fund A on the Member's behalf.

(b) Contributions to Fund B

1. Fund B shall be an allocated fund hereby established to hold contributions made by Members who opted to do so, and the corresponding investment earnings and losses on such contributions.

2. A Member may, at his option, elect to contribute monthly to Fund B a percentage of his Monthly Salary. The contribution percentage shall range from _ % to __% and subject to Company guidelines.

3. The Member's contributions shall be deducted from the Member's payroll.

4. The Member's decision to contribute, or cease, or resume, to contribute to Fund B shall be acted upon in accordance with the procedures set forth by the Company.

(c) Contributions to Fund A and Fund B shall be forwarded by the Company each month to the Investment Manager appointed by the Company.

(d) The Company shall appoint a plan administrator to maintain a separate individual account for each Member to which contributions to the Fund and the associated share of investment earnings and/or losses shall be credited.

(e) Investment earnings and/or losses, net of associated administrative expenses and taxes on the Fund shall be allocated to the Member's individual accounts in proportion to the value of the Individual Account Balances as of the last preceding Valuation adjusted for subsequent contributions.

(f) A Member shall not be allowed to withdraw his Individual Account Balance from Fund A and Fund B prior to separation from the Company.

(g) Each Member shall receive a periodic statement showing the position of his Individual Account Balance under Fund A and Fund B.

(h) Forfeitures as defined in Section 7 of this Article shall be used to reduce future Company contributions to the Plan. However, in case the benefit under the Plan is less than the minimum mandated benefit under the law, the Company may at its option use forfeitures or make additional contribution to cover the deficiency.

Section 3 - Valuation of Retirement Fund

(a) The frequency and timing of the valuation of the Fund shall be determined by the Company.

(b) Investment returns (net of tax, if any) of the Fund shall be allocated over the Individual Account Balances as of each Valuation in proportion to the value of the Fund as of the last Valuation adjusted for subsequent contributions.

Section 4 - Accounting

1. Adequate books of accounts for Fund A and Fund B shall be maintained.

2. Fund A and Fund B shall be independently managed. Assets may be commingled for investment purposes but separate accounting must be maintained at all times.

3. No inter-fund transfers shall be allowed between Fund A and Fund B.

Section 5 - Irrevocability of Trust

Subject only to the provisions of Article XI hereof, all contributions made by the Company to the Retirement Fund shall be held, solely and exclusively, for the benefits of the Members or their Beneficiaries and no part of the Fund shall be used for, or diverted to, purposes other than for the exclusive benefit of such Members or their Beneficiaries prior to the satisfaction of all liabilities under the Plan. The reasonable expenses of administering the Plan and the Fund may be paid out of the Fund to the extent that they are not borne by the Company.

Section 6 - Interest in the Fund

No Member shall have any right, title or interest in or to any part of the assets of the Fund except as and to the extent expressly provided in the Plan.

Section 7 - Forfeitures

Any amount accrued under this Plan which is not paid by virtue of the limitations specified in this Rules and Regulations, such as forfeitures arising from separation for cause or voluntary resignation, shall not be applied to increase the benefits any Member would otherwise receive under the Plan at any time prior to the termination of the Plan or the complete discontinuance of contributions of the Company. The amount so forfeited shall be used as soon as possible to reduce future Company contributions under the Plan.

Section 8 - Unclaimed Benefits

Any amount payable to a former Member or his Beneficiary, which for any reason is not claimed within a period of five (5) years from the date such amount becomes payable, shall be retained in the Fund and after such period shall be used to reduce subsequent contributions of the Company to the Fund.

ARTICLE VIII

RETIREMENT COMMITTEE

Section 1 - Appointment

The Company shall appoint a Retirement Committee of at least three (3) members to manage and administer this Plan in accordance with the provisions hereof. Each member is to serve for such term as the Company may designate, until a successor member has been appointed, or until removal of the Company. In the event of resignation, death, removal or other cause of the original members, new members shall be appointed by the Company. Retirement Committee members shall serve without compensation for the Committee services. All reasonable expensesof the Committee shall be paid by the Company. The Company may at any time revoke any appointment to the Retirement Committee.

Section 2 - Actions of Committee

The Committee shall act by agreement of a majority of its members, either by vote at a meeting or in writing if without a meeting. By such action, it may authorize one or more of its members to execute documents on its behalf and direct the Trustee in the performance of its duties hereunder. The Trustees, upon written notification of such authorization, shall accept and rely upon such documents until notified in writing that the authorization has been revoked by the Committee. The Trustee shall not be deemed to be on notice of any change in the membership of the Committee unless notified in writing.

A member of the Committee, who is also a Member hereunder, shall not vote or act upon any matter relating solely to himself. In the event of a deadlock or other situation, which prevents agreement of a majority of the Committee members, the matter shall be decided by the Company.

Section 3 - Powers and Duties

The Committee shall have the power and duty to do all things necessary or convenient to effect the intent and purpose of this Plan and, not inconsistent with any of the provisions hereof, whether or not such powers and duties are specifically set forth herein, and not in limitation but in amplification of the foregoing, shall have the power to:

(a) Construe the Plan and to determine all questions that shall arise hereunder, including, particularly, directions to and questions submitted by the Trustee on all matters necessary for it to properly discharge its powers and duties;

(b) Determine eligibility of Employees to participate in the Plan;

(c) Settle all questions involving interpretation of the provisions of the Plan and questions of entitlement to benefits;

(d) Consider and approve investment policies and guidelines as provided for in the Trust Agreement;

(e) Approve all payments and disbursements from the Fund;

(f) Perform such other acts of administration necessary or desirable to implement the provisions and objectives of the Plan.

Decisions of the Committee made in good faith upon any matters within the scope of its authority shall be final and binding on the Company, the Trustees, Members and all others. TheCommittee, at all times, in making and carrying out its decisions and directions shall act in a uniform and non-discriminatory manner and may from time to time prescribe and modify uniform rules of interpretation and administration.

Section 4 - Advisors

The Committee shall consult with or hire an independent Actuary, approved by the Company, who shall perform the actuarial valuation and other services necessary to maintain the Plan in an actuarially sound condition.

The Committee may likewise consult with independent auditors and lawyers to perform all necessary and related services in connection with the operation of the Plan.

The expense of such advisers shall be paid by the Company, or if not paid by the Company, the Committee may direct that such expense be paid from the fund.

ARTICLE IX

APPOINTMENT OF TRUSTEE AND INVESTMENT OF FUNDS

Section 1 - Appointment of Trustee

The Company shall establish a Trust Agreement and appoint a Trustee to hold and invest the assets of the Fund in accordance with the provisions of this Plan and the Trust Agreement. The Company shall have the authority to rename a Trustee and appoint successor Trustees.

Section 2 - Investment of Fund

The Fund shall be held and invested by the Trustee, in accordance with the directions of the Committee. The Committee is hereby granted full power and authority to direct the Trustee to invest and reinvest the Fund or any part thereof in accordance with the standards set forth in the Trust Agreement and the provisions of this Article.

ARTICLE X

AMENDMENT AND TERMINATION OF THE PLAN

Section 1 - Modification, Suspension or Discontinuance

Although it is expected that the Plan will continue indefinitely, it may be amended, suspended or terminated at anytime by the Company on account of business necessity or adverse economic conditions, but no such action of the Company shall operate to permit any part of the assets of the Fund to be used for, or diverted to, purposes other than for the exclusive benefit of the Members or their Beneficiaries. Neither shall it be applied retroactively so as to adversely affect or reduce in any way the benefit accrued to any Member on account of service prior to the date of such amendment, suspension or liabilities of the Plan have been satisfied.

Section 2 - Disposition of the Fund on Plan Termination

Upon the termination of the Plan or upon the complete discontinuance of Company contributions under the Plan and after the satisfaction of all outstanding Fund expenses, taxes, duties, fees and charges incidental to the administration, management and termination of the Plan, the rights of each Member to benefits under the Fund accrued as of the date of such termination or discontinuance, shall be vested as follows:

(a) The Member's Individual Account Balance as of the date of such termination or discontinuance shall be non-forfeitable to such Member.

(b) Any asset remaining after satisfying (a) above shall revert to the Company.

Section 3 - Payment of Benefits on Plan Termination

A Member or former Member who is entitled to a payment under Section 2 hereof shall be entitled to receive such amount forthwith. By agreement amongst the Company, the Retirement Committee and the Member, payment of the amount may be deferred in the case of a Member who is still employed by the Company until the termination of his employment. In such event the amount due to the Member shall be credited with interest at a rate determined by the Trustees on the advice of the Actuary.

ARTICLE XI

NON-REVERSION OF FUND

The Company shall have no right, title or interest whatsoever in the contributions made by it to the Fund and no part of the Fund shall revert to the Company except that which may remain after satisfaction of all liabilities of the Plan, as a result of overpayment made by the Company.

ARTICLE XII

EFFECT OF SOCIAL LEGISLATION

Section 1- Social Security and Employees' Compensation

Whatever benefits may be due to the Member on account of the Social Security and Employees' Compensation Act existing as of the Effective Date of the Plan shall not be deducted from the benefits granted under this Plan.

Section 2- Other Laws, Contracts, Agreements, Government Awards, Rules and Regulations

Except as otherwise provided by law, the benefits provided for by this Plan shall, at the discretion of the Company be reduced by, or be used to reduce or offset the amount of, all other benefits, emoluments, contributions or other payments that the Company may be required to pay to any person arising out of the termination of the employment of a Member for any reason (including death), by virtue of any present or future contracts, agreements, awards, legislation, or lawful order of competent authority including collective bargaining agreements, Labor Code or any similar legislation thereof.

Section 3- Integration with Statutory Benefits

If a Member or his Beneficiary shall have received or be entitled to receive any benefit to the extent and in the manner now or thereafter provided by Law in connection with retirement, disability, death or termination of employment of such Member, the Company shall have the right to apply the benefits paid under this Plan for the satisfaction of such statutory benefits.

A Member, who is qualified to receive retirement benefits under Republic Act 7641, or any similar future law amending or superseding it, providing for a minimum retirement benefit, shall not receive a benefit under this Plan lower than the benefit provided by Law. In no case, however, shall the Member be entitled to more than one benefit whether granted by any retirement law, other laws, agreement, contracts, or this Plan as provided under Sections 1 and 2 of this Article.

ARTICLE XIII

PLAN QUALIFICATION

The Rules have been designed to meet the requirements of tax laws and Bureau of Internal Revenue regulations for a tax-qualified retirement plan. The Company reserves the right to amend any provision of the Plan in order that the Plan shall maintain its tax-qualified status in accordance with present and future BIR regulations or otherwise to secure the most favorable tax treatment of contributions to, benefits from, and income of the Fund.

In case the benefits payable under the Plan are subject to tax, the Trustee shall, if required by the relevant legislation or regulations, deduct from the benefits the corresponding withholding tax.

ARTICLE XIV

MISCELLANEOUS PROVISIONS

Section 1 - Non-Transferability of Benefits

The benefits under the Plan are intended exclusively for the Members and their Beneficiaries. No benefits payable to or in respect of a Member under the provisions hereof shall be subject in any manner to anticipation, alienation, transfer, assignment, pledge or encumbrance; nor shall any such benefits be in any manner liable for or subject to the debts or liabilities of the Member except as may specifically be provided by Law.

Section 2 - Rights of Members

Nothing herein contained shall be deemed to give any Member the right to be retained in the service of the Company or to interfere with the right of the Company to discharge such Member at any time, nor shall it give the Company the right to require a Member to remain in its service, nor shall it interfere with the Member's right to terminate his service at any time.

Section 3 - Fluctuations in Currency

Article 1250 of the Civil Code of the Philippines (Republic Act No. 386), which provides that "In case an extraordinary inflation or deflation of the currency stipulated should supervene, the value of the currency, at the time of the establishment of the obligation shall be the basis of payment unless there is an agreement to the contrary" shall not apply to any of the payments made or to be made under the provisions of this Plan.

Section 4 – Currency of Benefits and Contributions

All benefits and contributions shall be computed in terms of Philippine Pesos.

Section 5 – Proof of Age and Other Data

Proof of age and other data, when required must be established by evidence satisfactory to the Retirement Committee. The Company's records as to Continuous Service and compensation may be accepted by the Retirement Committee for Plan purposes.

Section 6 - Entitlements Derived from Rules

No Member shall have any vested rights under the Plan except to the extent that such rights may accrue to him upon compliance with all the conditions and requirements established by the Rules of the Plan for receipt of benefits herein.

Section 7 - Recoupment of Direct Payment by Company

In the event that the Company makes a payment from its own funds of any benefit or part thereof to or in respect of a Member under these Rules or in the event that the Company makes any other payment from its own funds of any other amount properly chargeable under these Rules or the Trust Agreement to the Fund then the Company shall be entitled to be reimbursed for such payment from the Fund.

Section 8 - Transfer of Benefits to or from Plan

In the event that a Member who joins the Plan has been a member of another retirement plan and such other plan agrees to transfer to the Fund assets representing the Member's benefit in such other plan, then the Trustees upon notification by the Retirement Committee and with the consent of the Company, may accept such assets into the Fund. The benefits which the Member would otherwise receive under these Rules shall therefrom be varied in such form as the Company and the Member shall agree, after taking the advice of the Actuary.

Where a Member becomes entitled to a benefit from the Plan, the Trustees may, at the request of the Member and with the consent of the Company, authorize the Trustees to pay such benefit directly to the trustees of another plan of which the Member is or is about to become a member instead of paying it to the Member directly.

If a Member ceases to be a Member of this Plan and becomes or is about to become a member of another retirement plan, being a retirement plan nominated and approved by the Company, the Trustees shall, at the request of the Company and the Member, transfer to the trustees of such other retirement plan the amount certified by the Actuary as representing the value of the Member's accrued benefits in the Fund.

Section 9 - Management Powers

Nothing contained in these rules and regulations shall be deemed as a limitation on the inherent powers and prerogatives of the Company management.

Section 10 - Applicable Laws

The laws of the Republic of the Philippines shall govern in resolving any questions under the Plan.

Section 11 - Superseding Any or All Existing Retirement Plans (if applicable)

This Plan shall supersede any or all retirement plans sponsored by the Company for its Employees in effect as of the Effective Date of the Plan.

APPROVED BY:
NAME
TITLE
DATE

STANDARD HYBRID PLAN RETIREMENT PLAN RULES

STANDARD HYBRID PLAN RETIREMENT PLAN RULES

STANDARD HYBRID PLAN RULES AND REGULATIONS

ARTICLE I

NAME, OBJECTIVE AND EFFECTIVE DATE

Section 1 - Name

<Company Name> hereby establishes a retirement plan known as the <Name of Retirement Plan>.

Section 2 - Objective

The objective of this Plan is to provide through a Retirement Fund established by the Company, for the payment of <Benefits under the Plan> to all its eligible Employees, and Beneficiaries, as the case may be, subject to the conditions and limitations hereinafter set forth.

Section 3 - Effective Date

The Plan shall take effect on <Effective Date>.

ARTICLE II

DEFINITIONS

Section 1 - Definition of Terms

The following words and phrases, as used herein, shall have the meaning indicated herein, unless a different meaning is plainly required by the context:

(a) "**Actuary**" means an independent consultant who is a Fellow of the Actuarial Society of the Philippines in good standing or a firm of consultants with such a qualified actuary on its staff. Such actuary or firm is to be approved and selected by the Company.

(b) "**Beneficiary**" or "**Beneficiaries**" means any person or persons designated by the Member to receive in the event of his death or inability by reason of physical or mental incapacity to receive in person any amounts due to or in respect of him in accordance with the provisions of this Plan.

(c) "**Company**" means <Company Name>.

(d) "**Continuous Service**" means the number of years and months of uninterrupted service rendered by a Member as determined from the records of the Company counted from the date of hire on a regular employment status including the probationary period, if any, up to the date of retirement, death, total and permanent disability or separation from the Company, as the case may be. Leave of absences approved by the Company with or without pay shall not constitute an interruption of service.

Continuity of service is deemed broken for any of the following reasons:

1. A Member voluntarily leaves the employment of the Company;

2. A Member is involuntarily discharged from the employment of the Company;

3. A Member fails to return to the service of the Company after an approved leave of absence; and

4. Any other cause constituting a severance of the employer-employee relationship between the Company and the Member.

(Optional) If a Member's continuity of service has been broken for any of the above reasons, then, unless the Company directs otherwise, he shall lose credit for all of his service prior to the break in his continuity of service.

(Optional) Approved leave of absence, either with or without pay, shall not constitute a break in service.

(Optional) If a former Employee is rehired after a break in service, his Credited Service shall commence on the date he is last rehired.

(Optional) In the event that a Member is temporarily assigned to a post outside the Philippines, it may be agreed amongst the Member, the Company and the Retirement Committee that such period of overseas service shall be deemed to be Continuous Service and during such period his Plan Salary shall be deemed for the purposes of this Plan, to be such amount (expressed in Philippine Pesos) as may be set out in such agreement, regardless of the actual salary he is receiving during such posting.

(e) "**Credited Service**" means______________________________.

(f) "**Employee**" means any person employed by the Company on a regular and permanent basis and classified as such in the payroll of the Company, excluding part time, casual and temporary staff, apprentices, and other persons, who under the normal practice of the Company, are not considered to be regular and permanent employees.

(g) "**Final Plan Salary**" (if applicable) means the Member's Plan Salary earned in the month of retirement, death, disability, or separation from the Company as the case may be.

(h) "**Individual Account Balance**" means the total contributions to the Fund by the Company on a Member's behalf or by the Member himself, and the investment returns on these contributions. Separate individual accounts shall be maintained for Company contributions and Member contributions.

(i) "**Investment Manager**" means any individual, group of individuals, or financial institution designated by the Trustee to manage and invest the Fund pursuant to the Trust Agreement.

(j) "**Labor Code**" means the Labor Code of the Republic of the Philippines and includes any amendments thereto or reenactments thereof.

(k) "**Member**" means any Employee who has been admitted to membership in accordance with Article III hereof.

(l) "**Plan**" means the <Name of Retirement Plan>as described herein and shall include all future amendments hereto.

(m) "**Plan Salary**" means____.

(n) "**Retirement Committee**" means the body created by the Company administer the Plan in accordance with Article VIII hereof.

(o) "**Retirement Fund**" or "**Fund**" means the retirement trust fund derived from the contributions paid by the Company and/or the Members whether in the form of cash or property, including all the increments or decrements thereto, and shall also be taken as referring to the assets constituting the Retirement Fund at any time. The Fund shall consist of Fund A, Fund B, and Fund C as provided in Article VII hereof.

(p) "**Total and Permanent Disability**" (if applicable)

(Option 1) inability to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death or to be of long, continued and indefinite duration.

(Option 2) disability resulting from bodily injury due to accident or disease which wholly prevents the Member from engaging in any business or occupation to which he is reasonably suited by reason of education or training.

The disability must be certified by a medical examination acceptable to the Trustees.

(q) "**Trust Agreement**" means the agreement entered into between the Company and the Trustees pursuant to Article IX hereof.

(r) "**Trustee**" means individual, individuals, or financial institution designated by the Company under a Trust Agreement to hold in Trust the assets of the Plan for the purpose of providing benefits under the Plan, and shall include any successor trustee to the Trustee initially designated hereunder.

(s) "**Valuation**" means the allocation of contributions, investment earnings and losses among the individual account of Members pursuant to Article VII, Section 3.

Whenever used herein the masculine shall include the feminine, the singular shall include the plural and vice versa unless the context otherwise indicates or requires.

ARTICLE III

MEMBERSHIP

Section 1 - Eligibility at Effective Date

All Employees in the service of the Company are automatically Members in the Plan as of the Effective Date of the Plan.

Section 2 - Eligibility After Effective Date

Any Employee of the Company not covered by the Plan as of the Effective Date and any person hired after the Effective Date shall become a Member of the Plan on______________________.

Section 3 - Termination

Membership in the Plan shall cease automatically upon termination of the Member's employment with the Company for any reason or upon full payment of the amounts, if any, due the Member hereunder.

Section 4 - Re-Employment

A Member whose membership in the Plan was terminated and who is subsequently re-employed by the Company shall, upon re-admission to the Plan and unless the Company directs otherwise, be treated as a new Member on the first day of the month coincident with or next following the commencement date of his regular employment with the Company; unless the Company directs otherwise.

Section 5 - Leave of Absence

Membership in the Plan shall continue during any period in which a Member is on an approved leave of absence and during any period of absence due to furlough, sickness, accident or other causes not constituting a severance of employer-employee relationship. If a Member fails to return after an approved leave of absence, notwithstanding the Company's order for him to reportfor work, the Employee loses his membership in the Plan as of the day he entered into such leaveof absence.

ARTICLE IV

RETIREMENT ELIGIBILITY

Section 1 - Normal Retirement Date

A member shall be retired on the first day of the month coincident with or next following the Member's_______birthday, hereinafter referred to as the Normal Retirement Date.

Section 2 - Early Retirement Date (If applicable)

A Member may, with the approval of the Company, retire and be entitled to the retirement benefits provided in Article V, Section 2 hereof on the day he attains age____, and after rendering at least _____years of Continuous Service with the Company.

Section 3 - Late Retirement Date (if applicable)

At the option of the Company and upon approval by the Member, he may continue in the service of the Company beyond his Normal Retirement Date subject to a yearly extension basis, provided however that such extension of service shall in no case extend beyond the Member's _______ birthday.

ARTICLE V

BENEFITS

Section 1 - Normal Retirement Benefit

Upon normal retirement, a Member shall be entitled to a lump sum benefit equal to the sum of the following:

(a) A lump sum amount which shall be paid from Fund A equivalent to_____________.

(b) An amount which shall be paid from Fund B equivalent to the Member's Individual Account Balance attributable to Company contributions to Fund B as of most recent Valuation prior to Normal Retirement Date and adjusted for subsequent contributions, if any.

(c) An amount which shall be paid from Fund C equivalent to the Member's Individual Account Balance attributable to the Member's own contributions to Fund C as of most recent Valuation prior to Normal Retirement Date and adjusted for subsequent contributions, if any.

Section 2 - Early Retirement Benefit (if applicable)

Upon early retirement, a Member shall be entitled to a lump sum benefit equal to the sum of the following:

(a) An amount which shall be paid from Fund A equivalent to____________.

(b) An amount which shall be paid from Fund B equivalent to the Member's Individual Account Balance attributable to Company contributions to Fund B as of most recent Valuation prior to early retirement date and adjusted for subsequent contributions, if any.

(c) An amount which shall be paid from Fund C equivalent to the Member's Individual Account Balance attributable to the Member's own contributions to Fund C as of most recent Valuation prior to early retirement date and adjusted for subsequent contributions, if any.

Section 3 - Late Retirement Benefit (if applicable)

A Member whose retirement has been deferred, pursuant to Article IV, Section 3 hereof, shall be entitled to a lump sum benefit equal to the sum of the following:

(a) An amount which shall be paid from Fund A equivalent to____________.

(b) An amount which shall be paid from Fund B equivalent to the Member's Individual Account Balance attributable to Company contributions to Fund B as of most recent Valuation prior to late retirement date and adjusted for subsequent contributions, if any.

(c) An amount which shall be paid from Fund C equivalent to the Member's Individual Account Balance attributable to the Member's own contributions to Fund C as of the most recent Valuation prior to late retirement date and adjusted for subsequent contributions, if any.

Section 4 - Voluntary Separation Benefit (If applicable)

Any Member, who prior to eligibility for retirement, voluntarily resigns from the Company shall receive a benefit equal to the sum of the following:

(a) An amount which shall be paid from Fund A equivalent to a percentage of the benefit computed in accordance with the Normal Retirement Benefit formula of Section 1 (a) of this Article. The percentage payable is as follows:

Completed Years of Continuous Service	Percentage Payable
Less than 5	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

17 18 19 20 or more	

(b) An amount which shall be paid from Fund B equivalent to a percentage of the Member's Individual Account Balance attributable to Company contributions to Fund B as of the most recent Valuation prior to separation date and adjusted for subsequent contributions, if any. The percentage payable is based on the same schedule as Section 4 (a) of this Article.

(d) An amount which shall be paid from Fund C equivalent to the Member's Individual Account Balance attributable to the Member's own contributions to Fund C as of most recent Valuation prior to voluntary separation date and adjusted for subsequent contributions, if any.

Section 5 - Death Benefit (If applicable)

If a Member dies before retirement, his duly designated Beneficiary or Beneficiaries shall be entitled to receive a lump sum benefit equal to the sum of the following:

(a) An amount which shall be paid from Fund A equivalent to____________.

(b) An amount which shall be paid from Fund B equivalent to the Member's Individual Account Balance attributable to Company contributions to Fund B as of most recent Valuation prior to date of death and adjusted for subsequent contributions, if any.

(c) An amount which shall be paid from Fund C equivalent to the Member's Individual Account Balance attributable to the Member's own contributions to Fund C as of the most recent Valuation prior to date of death and adjusted for subsequent contributions, if any.

Should the death of a Member arise from or be caused by self-inflicted injuries or any criminal act attributable to him, no benefit shall be due or payable to the Member under this Plan except for the Member's Individual Account Balance attributable to the Member's own contributions to Fund C as of the most recent Valuation prior to date of death and adjusted for subsequent contributions, if any, less any liabilities or indebtedness of the Member to the Company, regardless of the Member's age and number of years of Credited Service.

Section 6 - Total and Permanent Disability Benefits

In the event of Total and Permanent Disability of a Member, as determined by a Company physician, a Member shall be entitled to a lump sum benefit payable equal to the sum of the following:

(a) An amount which shall be paid from Fund A equivalent to____________.

(b) An amount which shall be paid from Fund B equivalent to the Member's Individual Account Balance attributable to Company contributions to Fund B as of most recent Valuation prior to date of Total and Permanent Disability and adjusted for subsequent contributions, if any.

(c) An amount which shall be paid from Fund C equivalent to the Member's Individual Account Balance attributable to the Member's own contributions to Fund C as of the most recent Valuation prior to date of Total and Permanent Disability and adjusted for subsequent contributions, if any.

Should the Total and Permanent Disability of a Member arise from or be caused by self-inflicted injuries or any criminal act attributable to him, no benefit shall be due or payable to the Member under this Plan except for the Member's Individual Account Balance attributable to the Member's own contributions to Fund B as of the most recent Valuation prior to disability date and adjusted for subsequent contributions, if any, less any liabilities or indebtedness of the Member to the Company, regardless of the Member's age and number of years of Credited Service.

Section 7 - Involuntary Separation Benefit

A Member who is separated from the employment of the Company for any reason (other than for just cause) beyond his control including, but not limited to retrenchment, redundancy, disease, cessation of the Company operation, etc., shall be entitled to receive a lump sum benefit equal to the sum of the following:

(a) An amount which shall be paid from Fund A equivalent to_____________.

(b) An amount which shall be paid from Fund B equivalent to the Member's Individual Account Balance attributable to Company contributions to Fund B as of most recent Valuation prior to date of separation and adjusted for subsequent contributions, if any.

(c) An amount which shall be paid from Fund C equivalent to the Member's Individual Account Balance attributable to the Member's own contributions to Fund C as of the most recent Valuation prior to date of separation and adjusted for subsequent contributions, if any.

The payment of such a benefit from the Plan shall operate in satisfaction of any liability on the Company to make a payment under the Labor Code or any similar legislation on involuntary termination.

Section 8 - Separation for Cause

A Member who is separated for just cause by the Company pursuant to the applicable provisions of the Labor Code shall forfeit all his rights and privileges under the Plan, except for the Member's Individual Account Balance in Fund C attributable to his own contributions as of most recent Valuation and adjusted for subsequent contributions less any liabilities or indebtedness of the Member to the Company, regardless of the Member's age and number of years of Credited Service.

Section 9 - Availment of Benefits

Availment of benefits under Sections 1 to 7 of this Article shall be exclusive and shall disqualify the Member from any other benefits under this Plan.

Any outstanding obligation of a Member to the Plan or the Company upon his termination of membership from the Plan shall be deducted from the benefit payable to him under the Plan.

Section 10 - Other Benefits

No benefit other than those provided in accordance with Sections 1 to 7 of this Article shall be payable under this Plan.

Section 11 - Non-duplication of Benefit Payments

Any benefit payable under this Plan shall be in lieu of or in compliance with, but not in addition to, the payment of similar benefits the Company is required to pay its Employees under existing laws, contracts or collective bargaining agreement(s).

ARTICLE VI

BENEFICIARY

Section 1 - Nomination of Beneficiaries

An Employee shall, upon joining the Plan, forthwith designate in writing, in such forms as shall be prescribed by the Company, a person or persons, not otherwise disqualified by law, who will receive the benefit in case of his death or inability by reason of physical or mental incapacity to receive in person any sum due him under the Plan. Nomination must be made in accordance with existing laws.

If two or more Beneficiaries are named and if the Member did not state their respective interest, they shall share equally.

Section 2 - Change of Beneficiary

Every nomination or appointment shall remain in force until the death of the nominee or appointee or until revoked or amended by the Member by delivering to the Company another nomination or appointment in the prescribed form.

Should a sole Beneficiary predecease the Member, the latter shall forthwith nominate another person in place of the deceased Beneficiary. In the event, however, that one of several designated Beneficiaries predecease the Member, the latter may, at his option, nominate anotherperson in place of the deceased Beneficiary.

Section 3 - Incompetent Beneficiary

In the event that any person entitled to the benefits under this Plan is a minor or is otherwise incompetent at the time payment is due, the Company reserves the right to determine to whom such payment shall be made for and in behalf of the incompetent Beneficiary, and any such determination by the Company shall be conclusive and binding on all parties concerned.

Payment to the person in behalf of the incompetent Beneficiary shall be deemed as if made to the Beneficiary in person and shall discharge the Fund from liability to the extent of the amount paid. In no case shall the Beneficiary be entitled to any income on the amount of the benefits during the period the payment was deferred because of the absence of a legal guardian.

Section 4 – Failure to Nominate a Beneficiary

If at the death of a Member there shall exist no valid nomination by him of a Beneficiary, he shall be conclusively presumed to have appointed as his Beneficiary the person or persons in the first of the following classes then surviving and if more than one in such class in equal shares:

(1) Legitimate spouse;
(2) Children;
(3) Parents;
(4) Brothers and sisters of the full blood; and
(5) Member's estate

ARTICLE VII

THE RETIREMENT FUND

Section 1 – The Retirement Fund

The funding of the Plan and payment of the benefits hereunder shall be provided for through the medium of a Retirement Fund held, managed and maintained by the Trustee/s appointed by the Company. The contributions of the Company to the Retirement Fund, together with any income, gains or profits resulting from the investment and re-investment of the same, less distributions, expenses and losses, shall constitute the Retirement Fund.

Section 2 - Funding

(a) Contributions to Fund A

1. Fund A shall be unallocated fund used to provide the benefits determined using the applicable formula in Article V Section 1(a), 2(a), 3(a), 4(a), 5(a), 6(a) and 7(a).

2. The Company shall contribute to Fund A such amounts as may be recommended by an independent Actuary, on the basis of reasonable actuarial assumptions, to pay the benefits payable under these Rules and to maintain the Plan in an actuarially sound condition.

3. No Member shall be required or permitted to make any contributions to Fund A.

(b) Contributions to Fund B

1. Fund B shall be an allocated fund hereby established to hold contributions made by the Company on the Member's behalf, and the corresponding investment earnings and losses on such contributions.

2. (If applicable) The Company shall establish an initial Individual Account Balance for each Member as follows:________________________.

3. Commencing on____________, the Company shall contribute to the Fund an amount equal to a percentage of each Member's Plan Salary as follows:

	Contribution Rates (as a Percentage of Monthly Salary)

4. (If applicable) Should a Member opt to contribute to Fund C, the Company shall match these contributions by contributing to Fund B an amount equal to the Member's elected contribution rate up to a maximum amount to be determined by the Company from time to time.

5. (If applicable) Should a Member choose not to contribute or to stop contributing to Fund C, the Company shall likewise not make or stop making these additional matching contributions to Fund B on the Member's behalf.

(c) <u>Contributions to Fund C</u>

1. Fund C shall be an allocated fund hereby established to hold contributions made by Members who opted to do so, and the corresponding investment earnings and losses on such contributions.

2. A Member may, at his option, elect to contribute monthly to Fund C a percentage of his Monthly Salary. The contribution percentage shall range from _ % to__% and subject to Company guidelines.

3. The Member's contributions shall be deducted from the Member's payroll.

4. The Member's decision to contribute or cease or resume to contribute to Fund C shall be acted upon in accordance with the procedures set forth by the Company.

(d) Contributions to Fund B and Fund C shall be forwarded by the Company each month to the Investment Manager appointed by the Company.

(e) The Company shall appoint a plan administrator to maintain a separate individual accounts for each Member to which contributions to the Fund and the associated share of investment earnings and/or losses shall be credited.

(f) Investment earnings or losses, net of associated administrative expenses and taxes on Fund B and Fund C shall be allocated to the Member's individual accounts in proportion to the value of the Individual Account Balances as of the last preceding Valuation adjusted for subsequent contributions.

(g) A Member shall not be allowed to withdraw his Individual Account Balance from Fund B and Fund C prior to separation from the Company.

(h) Each Member shall receive a periodic statement showing the position of his Individual Account Balance under Fund B and Fund C.

(i) Forfeitures as defined in Section 7 of this Article shall be used to reduce future Company contributions to Fund A or Fund B. However, in case the benefit under the Plan is less than the minimum mandated benefit under the law, the Company may at its option use forfeitures or make additional contribution to cover the deficiency.

Section 3 - Valuation of Retirement Fund

(c) The frequency and timing of the valuation of the Fund shall be determined by the Company.

(d) Investment returns (net of tax, if any) of the Fund shall be allocated over the Individual Account Balances as of each Valuation in proportion to the value of the Fund as of the last Valuation adjusted for subsequent contributions.

Section 4 - Accounting

1. Adequate books of accounts for Fund A, Fund B and Fund C shall be maintained.

2. Fund A, Fund B, and Fund C shall be independently managed. Assets may be commingled for investment purposes but separate accounting must be maintained at all times.

3. Inter-fund transfers shall only be allowed between Fund A, Fund B, and Fund C.

Section 5 - Irrevocability of Trust

Subject only to the provisions of Article XI hereof, all contributions made by the Company to the Retirement Fund shall be held, solely and exclusively, for the benefits of the Members or their Beneficiaries and no part of the Fund shall be used for, or diverted to, purposes other than for the exclusive benefit of such Members or their Beneficiaries prior to the satisfaction of all liabilities under the Plan. The reasonable expenses of administering the Plan and the Fund may be paid out of the Fund to the extent that they are not borne by the Company.

Section 6 - Interest in the Fund

No Member shall have any right, title or interest in or to any part of the assets of the Fund except as and to the extent expressly provided in the Plan.

Section 7 - Forfeitures

Any amount accrued under this Plan which is not paid by virtue of the limitations specified in this Rules and Regulations, such as forfeitures arising from separation for cause or voluntary resignation, shall not be applied to increase the benefits any Member would otherwise receive under the Plan at any time prior to the termination of the Plan or the complete discontinuance of contributions of the Company. The amount so forfeited shall be used as soon as possible to reduce future Company contributions under the Plan.

Section 8 - Unclaimed Benefits

Any amount payable to a former Member or his beneficiary, which for any reason is not claimed within a period of five (5) years from the date such amount becomes payable, shall be retained in the Fund and after such period shall be used to reduce subsequent contributions of the Company to the Fund.

ARTICLE VIII

RETIREMENT COMMITTEE

Section 1 - Appointment

The Company shall appoint a Retirement Committee of at least three (3) members to manage and administer this Plan in accordance with the provisions hereof. Each member is to serve for such term as the Company may designate, until a successor member has been appointed, or until removal of the Company. In the event of resignation, death, removal or other cause of the original members, new members shall be appointed by the Company. Retirement Committee members shall serve without compensation for the Committee services. All reasonable expensesof the Committee shall be paid by the Company. The Company may at any time revoke any appointment to the Retirement Committee.

Section 2 - Actions of Committee

The Committee shall act by agreement of a majority of its members, either by vote at a meeting or in writing if without a meeting. By such action, it may authorize one or more of its members to execute documents on its behalf and direct the Trustee in the performance of its duties hereunder. The Trustees, upon written notification of such authorization, shall accept and rely upon such documents until notified in writing that the authorization has been revoked by the Committee. The Trustee shall not be deemed to be on notice of any change in the membership of the Committee unless notified in writing.

A member of the Committee, who is also a Member hereunder, shall not vote or act upon any matter relating solely to himself. In the event of a deadlock or other situation which prevents agreement of a majority of the Committee members, the matter shall be decided by the Company.

Section 3 - Powers and Duties

The Committee shall have the power and duty to do all things necessary or convenient to effect the intent and purpose of this Plan and, not inconsistent with any of the provisions hereof, whether or not such powers and duties are specifically set forth herein, and not in limitation but in amplification of the foregoing, shall have the power to:

(a) Construe the Plan and to determine all questions that shall arise hereunder, including, particularly, directions to and questions submitted by the Trustee on all matters necessary for it to properly discharge its powers and duties;

(b) Determine eligibility of Employees to participate in the Plan;

(c) Settle all questions involving interpretation of the provisions of the Plan and questions of entitlement to benefits;

(d) Consider and approve investment policies and guidelines as provided for in the Trust Agreement;

(e) Approve all payments and disbursements from the Fund;

(f) Perform such other acts of administration necessary or desirable to implement the provisions and objectives of the Plan.

Decisions of the Committee made in good faith upon any matters within the scope of its authority shall be final and binding on the Company, the Trustees, Members and all others. TheCommittee, at all times, in making and carrying out its decisions and directions shall act in a uniform and non-discriminatory manner and may from time to time prescribe and modify uniform rules of interpretation and administration.

Section 4 - Advisers

The Committee shall consult with or hire an independent Actuary, approved by the Company, who shall perform the actuarial valuation and other services necessary to maintain the Plan in an actuarially sound condition.

The Committee may likewise consult with independent auditors and lawyers to perform all necessary and related services in connection with the operation of the Plan.

The expense of such advisers shall be paid by the Company, or if not paid by the Company, the Committee may direct that such expense be paid from the fund.

ARTICLE IX

APPOINTMENT OF TRUSTEE AND INVESTMENT OF FUNDS

Section 1 - Appointment of Trustees

The Company shall establish a Trust Agreement and appoint a Trustee to hold and invest the assets of the Fund in accordance with the provisions of this Plan and the Trust Agreement. The Company shall have the authority to rename a Trustee and appoint successor Trustees.

Section 2 -Investment of Funds

The Fund shall be held and invested by the Trustee, in accordance with the directions of the Committee. The Committee is hereby granted full power and authority to direct the Trustee to invest and reinvest the Fund or any part thereof in accordance with the standards set forth in the Trust Agreement and the provisions of this Article.

ARTICLE X

AMENDMENT AND TERMINATION OF THE PLAN

Section 1 - Modification, Suspension or Discontinuance

Although it is expected that the Plan will continue indefinitely, it may be amended, suspended or terminated at anytime by the Company on account of business necessity or adverse economic conditions, but no such action of the Company shall operate to permit any part of the assets of the Fund to be used for, or diverted to, purposes other than for the exclusive benefit of the Members or their Beneficiaries. Neither shall it be applied retroactively so as to adversely affect or reduce in any way the benefit accrued to any Member on account of service prior to the date of such amendment, suspension or liabilities of the Plan have been satisfied.

Section 2 - Disposition of the Fund on Plan Termination

Upon the termination of the Plan, the liability of the Company to make contributions shall cease and the assets of the Fund shall be allocated after the satisfaction of all outstanding Fund expenses, taxes, duties, fees and charges incidental to the administration, management and termination of the Plan, for benefit of each Member accrued to the date of such termination or discontinuance, to the extent then funded, and payable in accordance with the following priorities:

(a) The Members Individual Account Balance attributable to Company contributions and to the Members own contributions to Fund C as of the dates of such termination or discontinuance shall be non-forfeitable to such Member. Any assets remaining in Fund B after the payment of the individual account balances of all Members shall be transferred to Fund A.

(b) The rights of each Member to benefits under Fund A accrued to the date of such termination or discontinuance, to the extent then funded, shall be vested in such Members and payable in accordance with the following priorities:

(i) **First**, all benefits due and payable but not yet paid at the date of termination to or in respect of Members whose employment has been terminated prior to such date by reason of retirement, death, or total and permanent disability shall be paid the outstanding balance of such benefits to the extent then funded; pro-rata if Fund A is not sufficient.

(ii) Any funds remaining, **Second**, those Members eligible for retirement under normal, optional, or late retirement shall receive the value of their accrued benefits, to the extent then funded; pro-rata if Fund A is not sufficient.

(iii) Any funds remaining, **Third**, those Members involuntarily separated (except for just cause) by the Company shall be paid, to the extent then funded, the excess, if any, of the amount payable by the Company in accordance with the Labor Code over the amount, if any, already received under the Plan; pro-rata if Fund A is not sufficient.

(iv) Any funds remaining, **Fourth**, all Members who have not yet received the full amount of their benefits accrued at date of termination or discontinuance determined using the same formula as in normal retirement shall be paid such unpaid accrued benefits, to the extent then funded; pro-rata if Fund A is not sufficient.

Any amount remaining after satisfying (i), (ii), (iii) and (iv) above shall revert to the Company.

Section 3 - Payment of Benefits on Plan Termination

A Member or former Member who is entitled to a payment under Section 2 hereof shall be entitled to receive such amount forthwith. By agreement amongst the Company, the Retirement Committee and the Member, payment of the amount may be deferred in the case of a Member who is still employed by the Company until the termination of his employment. In such event the amount due to the Member shall be credited with interest at a rate determined by the Retirement Committee on the advice of the Actuary.

ARTICLE XI

NON-REVERSION OF FUND

The Company shall have no right, title or interest whatsoever in the contributions made by it to the Fund and no part of the Fund shall revert to the Company except that which may remain after satisfaction of all liabilities of the Plan, as a result of overpayment made by the Company.

ARTICLE XII

EFFECT OF SOCIAL LEGISLATION

Section 1- Social Security and Employees' Compensation

Whatever benefits may be due to the Member on account of the Social Security and Employees' Compensation Act existing as of the Effective Date of the Plan shall not be deducted from the benefits granted under this Plan.

Section 2- Other Laws, Contracts, Agreements, Government Awards, Rules and Regulations

Except as otherwise provided by law, the benefits provided for by this Plan shall, at the discretion of the Company be reduced by, or be used to reduce or offset the amount of, all other benefits, emoluments, contributions or other payments that the Company may be required to pay to any person arising out of the termination of the employment of a Member for any reason (including death), by virtue of any present or future contracts, agreements, awards, legislation, or lawful order of competent authority including collective bargaining agreements, Labor Code or any similar legislation thereof.

Section 3- Integration with Statutory Benefits

If a Member or his Beneficiary shall have received or be entitled to receive any benefit to the extent and in the manner now or thereafter provided by Law in connection with retirement, disability, death or termination of employment of such Member, the Company shall have the right to apply the benefits paid under this Plan for the satisfaction of such statutory benefits.

A Member, who is qualified to receive retirement benefits under Republic Act 7641, or any similar future law amending or superseding it, providing for a minimum retirement benefit, shall not receive a benefit under this Plan lower than the benefit provided by Law. In no case, however, shall the Member be entitled to more than one benefit whether granted by any retirement law, other laws, agreement, contracts, or this Plan as provided under Sections 1 and 2 of this Article.

ARTICLE XIII

PLAN QUALIFICATION

The Rules have been designed to meet the requirements of tax laws and Bureau of Internal Revenue regulations for a tax-qualified retirement plan. The Company reserves the right to amend any provision of the Plan in order that the Plan shall maintain its tax-qualified status in accordance with present and future BIR regulations or otherwise to secure the most favorable taxtreatment of contributions to, benefits from, and income of the Fund.

In case the benefits payable under the Plan are subject to tax, the Trustees shall, if required by the relevant legislation or regulations, deduct from the benefits the corresponding withholding tax.

ARTICLE XIV

MISCELLANEOUS PROVISIONS

Section 1 – Non-Transferability of Benefits

No benefits payable to or in respect of a Member under the provisions hereof shall be subject in any manner to anticipation, alienation, transfer, assignment, pledge or encumbrance; nor shall any such benefits be in any manner liable for or subject to the debts or liabilities of the Member except as may specifically be provided by Law.

Section 2 - Rights of Members

Nothing herein contained shall be deemed to give any Member the right to be retained in the service of the Company or to interfere with the right of the Company to discharge such Member at any time, nor shall it give the Company the right to require a Member to remain in its service, nor shall it interfere with the Member's right to terminate his service at any time.

Section 3 - Fluctuations in Currency

Article 1250 of the Civil Code of the Philippines (Republic Act No. 386), which provides that "In case an extraordinary inflation or deflation of the currency stipulated should supervene, the value of the currency, at the time of the establishment of the obligation shall be the basis of payment unless there is an agreement to the contrary" shall not apply to any of the payments made or to be made under the provisions of this Plan.

Section 4 – Currency of Benefits and Contributions

All benefits and contributions shall be computed in terms of Philippine Pesos.

Section 5 – Proof of Age and Other Data

Proof of age and other data, when required must be established by evidence satisfactory to the Retirement Committee. The Company's records as to Continuous Service and compensation may be accepted by the Retirement Committee for Plan purposes.

Section 6 - Entitlements Derived from Rules

No Member shall have any vested rights under the Plan except to the extent that such rights may accrue to him upon compliance with all the conditions and requirements established by the Rules of the Plan for receipt of benefits herein.

Section 7 - Recoupment of Direct Payment by Company

In the event that the Company makes a payment from its own funds of any benefit or part thereof to or in respect of a Member under these Rules or in the event that the Company makes any other payment from its own funds of any other amount properly chargeable under these Rules or the Trust Agreement to the Fund then the Company shall be entitled to be reimbursed for such payment from the Fund.

Section 8 - Transfer of Benefits to or from Plan

In the event that a Member who joins the Plan has been a member of another retirement plan and such other plan agrees to transfer to the Fund assets representing the Member's benefit in such other plan, then the Trustees with the consent of the Company, may accept such assets into the Fund. The benefits which the Member would otherwise receive under these Rules shall therefrom be varied in such form as the Company, the Trustees and the Member shall agree, after taking the advice of the Actuary.

Where a Member becomes entitled to a benefit from the Plan, the Trustees may, at the request of the Member and with the consent of the Company, authorize the Trustees to pay such benefit directly to the trustees of another plan of which the Member is or is about to become a member instead of paying it to the Member directly.

If a Member ceases to be a Member of this Plan and becomes or is about to become a member of another retirement plan, being a retirement plan nominated and approved by the Company, the Trustees shall, at the request of the Company and the Member, transfer to the trustees of such other retirement plan the amount certified by the Actuary as representing the value of the Member's accrued benefits in the Fund.

Section 9 - Management Powers

Nothing contained in these rules and regulations shall be deemed as a limitation on the inherent powers and prerogatives of the Company management.

Section 10 - Applicable Laws

The laws of the Republic of the Philippines shall govern in resolving any questions under the Plan.

Section 11 - Superseding Any or All Existing Retirement Plans (if applicable)

This Plan shall supersede any or all retirement plans sponsored by the Company for its Employees in effect as of the Effective Date of the Plan.

APPROVED BY:
Name
Title
Date

SOCIAL INSURANCE

Final IAA Guidelines of Actuarial Practice For Social Security Programs

Standard of Actuarial Practice 2
In Relation to

Financial Analysis of Social Security Programs

(Adopted 29 October 2021)

Contents

Section 1. General

1.1. Purpose – This SAP provides guidance to members performing financial analyses of Social Security Programs (SSPs), or reviewing, advising on, or opining on such analyses, to give intended users confidence that:

1.1.1. Actuarial services are carried out professionally and with due care;
1.1.2. The results are relevant to their needs, are presented clearly and understandably, and are complete; and
1.1.3. The assumptions and methodology (including, but not limited to, models and modelling techniques) used are disclosed appropriately.

1.2. Scope – This SAP applies to members when performing or reviewing, advising on, or opining on financial analyses of SSPs.

1.3. Compliance – A member may fail to follow the guidance of this SAP but still comply with it where the member:

1.3.1. Complies with requirements of law that conflict with this SAP.

1.3.2. Complies with requirements of the actuarial code of professional conduct applicable to the work that conflict with this SAP.

1.3.3. Departs from the guidance in this SAP and provides, in any report, an appropriate statement with respect to the nature, rationale, and effect of such departure.

Paragraphs 2.6, 2.8, and 2.9 of SAP 1, as modified by paragraph 2.6 of this SAP, cover the situation where the member is directed to use certain assumptions or methodology. The member who complies with these paragraphs is not deviating from this SAP.

1.4. Relationship to SAP 1 – Compliance with SAP 1 is a prerequisite to compliance with this SAP, except where SAP 1 is overridden by this SAP. Whenever guidance in this SAP overrides the guidance in SAP 1 the caption **[This paragraph replaces paragraph x.y [title of paragraph x.y] in SAP 1]** will be shown at the start of the paragraph. References in SAP 1 to "this SAP" should be interpreted as applying equally to this SAP 2, where appropriate.

1.5. Defined Terms – This SAP uses various terms whose specific meanings are defined in the Glossary.

1.6. Effective Date – This SAP is effective for actuarial services performed on or after [Adoption Date].

Section 2. Appropriate Practices

2.1. Consideration of all Relevant Features of the SSP and Law – The member should consider all relevant SSP features, the policies and the stated intentions of the sponsoring organization, and current law, if that information exists and is reasonably available to the member. The member should also take into account established practice (if relevant) when no law exists with regard to certain benefit provisions or financial measures (for example, the basis for future indexation of retirement benefits). For a newly established or substantially changed SSP, the member should take into account other relevant information, including relevant experience in comparable SSPs.

2.2. Data – The member should consider what data are required in order to perform, review, advise on, or opine on the financial analysis of the SSP. These data might include:

a. National or regional demographic statistics on variables such as fertility, mortality (life expectancy), morbidity, and migration (if such data are not available on a national or regional basis, the member might consider information from a wider geographical area that might apply, or it may be necessary to rely on relevant and reliable statistics of international organizations);

b. Demographic status and experience of the SSP, as applicable;

c. Economic experience, labor market conditions, and inflation;

d. Financial attributes of the SSP, such as contributions, investment earnings, and liquidity of assets;

e. Benefits of, or claims on, the SSP;

f. Number and experience of classes of contributors and beneficiaries of the SSP;

g. Covered salaries and past service credits; and

h. Censuses and population surveys covering, for example, family statistics.

2.3. Assumptions – If the member sets the assumptions, the member should use neutral assumptions in a financial analysis of an SSP. Neutral assumptions are such that the member expects that the resulting projection of the SSP experience is not a material underestimate or overestimate.

2.3.1. The member should consider performing an experience analysis to the extent that the available data permit, to analyze past experience and to set future assumptions.

2.3.2. The member should select assumptions that reflect the time horizon of the analysis (which might be 75 years or more). The member may select different assumptions for different time intervals in the projection (e.g., a common technique for this is to use recent experience as the basis for the model assumptions for the first "n" years of projection, with longer-term trends applied to the ultimate assumptions after the first n years (select and ultimate)).

2.3.3. The member should consider any automatic balancing mechanisms that exist in an SSP when selecting the model variables and assumptions for an SSP financial analysis. The member should consider to what extent the SSP is "immunized" from the volatility of some variables (e.g., life expectancy) by the automatic balancing mechanisms.

2.3.4. Credible experience data might not exist for a newly introduced SSP, or for new benefits to be provided by an existing SSP. To establish assumptions in such cases, the member may:

a. Investigate the risk characteristics of the potential covered population through surveys or enquiries until credible data are available;

b. Consider the relevant external experience, including:

- Other SSPs (including the program being replaced, if any), or
- Other countries;

c. Use reasonable proxies or default values as may be appropriate.

If credible experience data do not exist, the member should disclose in the report that the financial analysis has been based on incomplete data (and perhaps none relating to the SSP itself), and should consider recommending that financial analyses should be performed again as new information becomes available.

2.3.5. If the member uses assumptions that include margins, then the member should disclose in the report the basis and rationale for the margins and explain the relationship between the result using the assumptions that include margins and the result using neutral assumptions.

2.3.6. The member should consider including in the analysis projections based on other sets of assumptions such as those that would result in high projected costs and those that would result in low projected costs when such projections are helpful in analyzing the uncertainty of the projections and communicating the financial status of an SSP.

2.4. Consistency with the Financing Method and Purpose of the Financial Analyses –The member should, primarily, use a methodology that is consistent with the financing method used for the SSP.

2.4.1. For pay-as-you-go or partially funded SSPs, the analysis should use an open group methodology, under which contributions and benefits of both current and future participants are considered.

2.4.2. For fully funded SSPs (that is, where accrued liabilities are intended to be funded over participants' working years), the analysis should use a closed group methodology, under which only current participants are considered, with or without their assumed future benefit accruals.

However, the member may use both open and closed group scenarios for a more comprehensive financial analysis or to satisfy the objectives of such analysis.

He may also consider reporting the results of the financial analysis primarily under:

a. An open group methodology for pay-as-you-go or partially funded SSPs; and
b. A closed group methodology for fully funded SSPs.

should he deem it to be more appropriate. In such circumstances, the justification should be communicated in the report.

If the law specifies a methodology for measuring the actuarial assets and obligations that does not follow either section 2.4.1 or 2.4.2, as applicable, the member should communicate that fact. The member should also comply with the guidance of paragraph 2.6 of this SAP.

2.5. Independent Expert Review – A financial analysis is often subject to review by an independent expert.

2.5.1. This review might address:

a. Whether the assumptions used in the financial analysis are within a reasonable range both separately and in the aggregate;

b. Whether the results of the financial analysis are within a reasonable range; or

c. Other aspects of the financial analysis.

2.5.2. "Independent expert" means a suitably experienced reviewer who:

a. Has not been involved in preparing the work that is subject to review; and

b. Is not employed by the principal or its sponsoring agencies.

In this context a reviewer contracted by the principal to perform the review is not considered to be employed by the principal or its sponsoring agencies.

2.5.3. The member who prepared the financial analysis should cooperate with the reviewer by providing the reviewer with any requested material in the member's possession if the terms of the member's engagement so permit, and by being available to discuss data, methodology, assumptions, and other factors as necessary, with the reviewer.

2.6. Assumptions and Methodology Mandated by Law – [This paragraph replaces paragraph 2.9 "Assumptions and Methodology Mandated by Law" in SAP 1] When an assumption or methodology is mandated by law, the member should apply the guidance of paragraph 2.8 of SAP 1 as if the assumption or methodology were prescribed by the principal or another party.

Section 3. Communication

3.1. Report on Financial Analysis –

3.1.1. The member should communicate the results of any financial analysis in a report that:

a. Includes enough information to enable sound decisions to be made;

b. Discloses who the principal is, what the purpose of the financial analysis is, and the instructions given to the member;

c. Indicates the nature and timing of future cash flows being quantified;

d. States the nature and significance of material risks faced by the SSP;

e. Explains the approach taken to the risk in the analysis;

f. Indicates the nature and extent of any material uncertainty in the information it contains; and

g. Indicates the sensitivity of the results to variations in key assumptions and methodology.

3.1.2. There are several measures the member might use to present the results, including:

a. Projected cash flows and ending positions;

b. Discounted cash flows; and

c. Required contribution rates for sustainability.

3.1.3. This section applies specifically to reports concerning the projected financial status of an SSP. The member should include at least the following information in an SSP financial analysis report. The appendix (which is educational and not part of the guidance of this SAP) shows lists of possible content for most sections of a report.

a. Description of the relevant provisions of the SSP;

b. Key dates:

- Valuation date;
- Report date; and
- Date up to which all relevant information had been taken into consideration, if it differs from the report date.

c. Methodology, data, and assumptions;

d. Results and findings;

e. Analysis of results; and

f. The actuarial opinion.

3.1.4. The member should include a formal statement in the report that the report has been prepared, and the member’s opinion given, in accordance with the applicable local standards of practice or this model SAP.

3.2. Actuarial Opinion – The member should provide an opinion on the member’s assignment:

3.2.1. Unless paragraph 3.2.3 applies, the opinion should state the extent to which the following hold, or do not hold:

a. The data upon which the report is based are sufficient and reliable;

b. The assumptions used for the report are reasonable and appropriate both in the aggregate and individually; and

c. The methodology employed is appropriate and consistent with accepted actuarial practice.

3.2.2. Unless paragraph 3.2.3 applies, the opinion should include a statement with respect to the extent to which the SSP is financially sustainable over the period covered by the projections used for the financial analysis. Financial sustainability of an SSP relates to its continuous capacity to support the benefits offered by the SSP when considering the applicable financing rules and the future demographic and economic environment in which it will operate.

3.2.3. The member may answer questions about an existing financial analysis of an SSP. (For example, the member might be asked to estimate the effect of using a revised population projection while keeping all other assumptions the same.) In such case the opinion’s scope (especially what is not included) should be clearly articulated and pertinent to the question.

APPENDIX

Possible Report Content

Note: This appendix is provided for informational purposes and is not part of the SAP. It contains lists the task force drafting the SAP assembled to show possible items covered by the various sections of the member's report.

1. **Description of the provisions of the SSP related to:**
   a. Coverage;
   b. Nature of the SSP, e.g., defined benefit or defined contribution;
   c. Financing approach, e.g., pay-as-you-go, partially funded, or fully funded;
   d. Source of funding, e.g., worker or employer contributions, transfers from government revenues, including legislated or contractual contribution rates; and
   e. Benefit provisions, e.g., contingencies covered, formulae, amounts, restrictions, and eligibility conditions.

2. **Methodology, data, and assumptions:**
   a. Description of the methodology used;
   b. Key demographic assumptions such as mortality (longevity), morbidity, fertility, migration, and unemployment;
   c. Key historical demographic data, such as:
      i. Eligible and beneficiary population by relevant demographic characteristic groupings, and how these populations compare to the total population;
      ii. Dependency ratios;
      iii. Employment earnings by age groups and gender, and averages;
      iv. Contributory earnings and averages by age groups and gender;
      v. Labor force participation rates by age groups and gender; and
      vi. Covered payroll and workforce;
   d. Key economic data and assumptions such as rates of inflation, economic growth, and return on investments (if any);
   e. The extent, if any, of interdependency among assumptions;
   f. Summaries of the data used as a basis for the SSP financial analysis assumptions, and as a starting point for the projections; and
   g. Sources, quality, and relevance of the data used.

3. **Results and findings:**
   a. Projected demographic values at selected future points in time, such as:
      i. Eligible and beneficiary population by relevant demographic characteristic groupings, and how these populations compare to the total population;
      ii. Dependency ratios;

iii. Employment earnings by age groups and gender, and averages;

iv. Contributory earnings and averages by age groups and gender;

v. Labor force participation rates by age groups and gender; and

vi. Covered payroll and workforce.

b. Financial projections showing cash flows and balance sheet values for the recent past and for the future, such as:

i. Contributions;

ii. Investment earnings;

iii. Other income;

iv. Total income;

v. Benefits or claims;

vi. Administrative expenses;

vii. Total expenditures;

viii. Annual balance (income minus expenditure);

ix. Actuarial deficit and funded ratio as of valuation date and other representative dates (for fully-funded pension schemes);

x. Nature of assets and/or individual accounts;

xi. Market value of financial or tangible assets;

xii. Fund value, if any; and

xiii. Value of notional assets (such as value of future contributions, if that is recognized as an asset).

The results may be expressed in relation to one or more relevant volume measures, such as the size of the jurisdiction's economy.

c. Cost rates as appropriate:

i. Pay-as-you-go cost rate;

ii. General average premium or partially funded cost rate; or

iii. Fully funded cost rate.

d. A presentation designed to provide an indication of the financial sustainability of the SSP, if appropriate.

4. **Analysis of results:**

a. Reconciliation with the prior report, along with explanations of significant changes in results.

b. Discussion of the pattern of financial projections (e.g., as a result of the ageing of the population, maturity of the SSP, and recent changes in SSP design or financing) and the implications thereof. The member may include a comparison of how benefits are projected to grow or decline as a result of different levels of inflation or economic growth and during which part of the projection period, as an indicator of potential stability or instability of the system in the longer term.

c. Sensitivity of results to variations in one or more assumptions.

d. Effect of automatic balancing mechanisms (if any) under each scenario used for the projections in the report, where "effect" covers both how the automatic balancing mechanism alters the key parameters of the SSP (such as the pension age, or determination of benefits) and how the alteration of the key parameters changes the amounts paid to beneficiaries.

e. Findings with respect to the short-, medium-, and long-term financial sustainability of the SSP with due regard to the funding rules under the law if such funding rules exist.

f. Indications of possible sources of future financial instability (e.g., depreciation of future benefits either because of non-indexation or because indexation may lag behind economic growth, or inadequacy of future contributions due to non-indexation of contribution limits).

g. Potential recommendations on possible measures to ensure the long-term financial sustainability of the SSP.

h. Impact of any options or guarantees embedded in the benefits of the SSP on the cash flows shown.

i. The suitability of the approach for calculation of any capitalized value of liabilities used for an SSP in light of the particular funding method and the time horizon used.

Glossary

The terms below are defined for use in this SAP.

Accepted Actuarial Practice – A practice or practices that are generally recognized within the actuarial profession as appropriate to use in performing actuarial services within the scope of a standard of actuarial practice or the applicable professional standards of practice.

Actuarial services – Services based upon actuarial considerations provided to intended users that may include the rendering of advice, recommendations, findings, or opinions.

Adoption Date – The date on which this SAP was adopted as a final document by the Actuarial Society of the Philippines.

Communication – Any statement (including oral statements) issued or made by a member with respect to actuarial services.

Data – Facts often collected from records, experience, or observations. Data are usually quantitative but may be qualitative. Examples of data include membership or policyholder details, claims details, asset and investment details, operating expenses, benefit definitions, and policy terms and conditions. Assumptions are not data, but data are commonly used in the development of actuarial assumptions.

Financial Analysis – Any formal actuarial analysis. What constitutes a formal actuarial analysis is a matter for the actuary's judgment but might include work required by law and work requested by the principal to inform decisions. A financial analysis might include but is not limited to:

a. Determination of discounted point in time values,
b. Projection of cash flows and associated fund values, and
c. Determination of future contribution rate(s).

Intended user – Any legal or natural person (usually including the principal) whom the member intends, at the time the member performs actuarial services, to use the output of the actuarial services.

Law – Applicable acts, statutes, regulations, or any other binding authority (such as accounting standards and any regulatory guidance that is effectively binding).

Member – An Affiliate, Associate or Fellow member, in good standing, of the Actuarial Society of the Philippines.

Model – A simplified representation of relationships among organizations or events using statistical, financial, economic, or mathematical concepts. A model has a specification, uses assumptions, data, and methodologies to produce results that are intended to provide useful information on that system.

Opinion – An opinion expressed by a member and intended by that member to be relied upon by the intended users.

Principal – The party who engages the provider of actuarial services. The principal will usually be the client or the employer of the member.

Professional Judgment – The judgment of the member based on actuarial training and experience.

Report – The member's communication(s) presenting some or all of the output of actuarial services to an intended user, including any results, advice, recommendations, findings, and opinions in any recorded form, including paper, word processing or spreadsheet files, e-mail, website(s), slide presentations, and audio or video recordings.

Report Date – The date on which the actuary issues a report to intended users. It usually follows the valuation date.

Social Security Program (SSP) – A program with all the following attributes regardless of how it is financed and administered:

1. Coverage is of a defined segment, or all, of the population, often on a compulsory or automatic basis;
2. Benefits are provided to, or on behalf of, individuals;
3. The program, including benefits and financing method, is prescribed by law;
4. The program is not financed through private insurance;
5. Program benefits are principally payable or delivered upon old age, retirement, death, disability, and survivorship, and the following benefits (if provided) are only ancillary to the principal benefit(s):
    a. Unemployment benefits;
    b. Medical expenses;
    c. Benefits provided due to work-related injuries, work-related death, or occupational diseases;
    d. Short term social assistance benefits (e.g. food stamps);
    e. Benefits provided for disaster relief (e.g. insurance, or recovery funding, for flood, drought, hurricane/typhoon, earthquake/tsunami); and
    f. Financial insurance or financial guarantees (e.g., for loans, bank deposits, pension payments, financial securities, insurance payments from insolvent insurers).

Society – The Actuarial Society of the Philippines.

Valuation Date – The effective date of the analysis by the actuary. It usually precedes the report date.

Work – All actuarial activities performed by a member related to actuarial services. It usually includes acquisition of knowledge of the circumstances of the assignment; obtaining sufficient and reliable data; selection of assumptions and methodology, calculations, and examination of the reasonableness of their result; use of other persons' work; formulation of opinion and advice; documentation; reporting; and all other communication.

FINAL IAA GUIDELINES OF ACTUARIAL PRACTICE FOR SOCIAL SECURITY PROGRAMS

(Adopted by Council of the International Actuarial Association (IAA) October 21, 2002 – Effective January 1, 2003)

Editor's Note: This material is being included in the ASP Member's Manual for reference only. As of time of update, the Board of Governors is in the process of reviewing the latest ISAP2 – Financial Analysis of Social Security Programs that IAA has adopted in October 13, 2013 with conformance changes adopted in April 23, 2017. The ISAP2 is being transformed for local applicability.

A. INTRODUCTION

Many Social Security Programs (SSP) face major financial challenges in planning for the future due, among other things, to the effects of changing demographic structures over time. Important political decisions are being planned, considered and/or made in order to meet these challenges. In many cases, the main concern is future long-term costs. Therefore the need arises to perform financial projections and analyses of SSPs. This was acknowledged also as early as 1952 in Article 71 (3) of the Social Security (Minimum Standards) Convention, No. 102 of the International Labour Organisation (ILO).

Actuaries possess significant expertise in preparing long-term financial projections and therefore have an important role carrying out analyses of SSPs. Accordingly it is vital that all demographic and economic analyses carried out by actuaries provide reasonable projections of long-term future costs and financial impact on which those important decisions can be based.

In many countries, actuarial professional bodies set professional standards and guidelines of actuarial practice for insurance and pension programs, but generally they do not apply to SSPs. Actuarial work for SSPs is also carried out in many countries where the profession is not well developed and no standards of practice exist. The need for guidelines of actuarial practice in this area has also been identified by the International Social Security Association (ISSA) and the ILO. These IAA Guidelines of Practice were established to fill the gap and aim at ensuring that all actuaries involved in this type of work provide reliable financial evaluations.

Actuaries should take into account sound actuarial principles and actuarial standards set by any actuarial associations to which they belong. However, these Guidelines shall prevail only to the extent that they complement and are not in conflict with local requirements in the country concerned, including provisions in the social security legislation specifically referring to actuarial reviews of the SSP. Compliance with these Guidelines by practitioners should enable the users of such actuarial work to have confidence in the professionalism, objectivity and scientific rigour of actuaries. These Guidelines are also intended to promote the development of consistent actuarial practice throughout the world.

While these Guidelines are not binding on actuaries, all actuaries engaged in work of this nature are recommended to adopt them. The Guidelines will also provide a suitable framework for other experts working in this field unless local actuarial standards or guidelines apply.

These Guidelines become effective on January 1, 2003.

B. SCOPE

1. Type of program

These Guidelines cover SSPs having the following attributes:

(a) Prescribed by legislation.
(b) Covering a defined wide population, generally on a compulsory or automatic coverage basis.
(c) The benefits provided by the program are generally payable in respect of one or more of the following: old age, retirement, death, disability, invalidity, survivorship, health, sickness, maternity, unemployment, work-related injuries.

These Guidelines apply to the above-mentioned programs irrespective of the manner in which they are financed.

Moreover, these Guidelines may also be appropriate for use, if not otherwise directed, by actuaries responsible for evaluations of public pension programs specifically sponsored by a government or a quasi-governmental organization as an employer for its employees, as well as for social security programs which are in accordance with the spirit of the scope of these Guidelines but are not covered by the precise wording.

2. Type of actuarial work

These Guidelines cover actuarial work including:
- Actuarial reports on the projected financial status of an SSP or equivalent reports
- Statements of opinion, papers or presentations on SSP policy matters, such as the adequacy of contributions and/or benefits relating to the existing provisions, or proposals for changes therein, or establishment of a new scheme.

When the SSP is operated by a separate entity, e.g. by an insurance company or a workers compensation board, these Guidelines do not apply to actuarial work related to the financial reporting of that entity, the calculation of its liabilities for year end or to the calculation of its premiums or rates for the immediately following fiscal periods or other similar work.

C. PRINCIPLES OF ACTUARIAL PRACTICE

In producing actuarial work with respect to SSPs the actuary should comply with the following principles:

1. Scientific rigour

The actuary should ensure that the methodology used for the long-term financial projections is based on actuarial principles. The actuary should comply with any general or specific professional guidance that may apply in the relevant circumstances. The actuary should also ensure that the calculations accurately reflect the methods and assumptions adopted. In this context, the actuary should indicate in the report that assumptions, though reasonably determined, are not predictions and that eventual differences between future experience and the report's assumptions will be analysed and taken into account in subsequent reports.

2. Objectivity

If the determination of assumptions used for demographic and financial projections is part of the actuary's mandate, he/she should ensure that they are determined without inappropriate political or external influences. If the actuary is not mandated to determine the assumptions but they are set by another entity, and whenever external work is relied upon in the determination of assumptions, the actuary should state the origins of the assumptions and, when needed to give a fair view of the SSP, show a sensitivity analysis of the impact of alternative assumptions.

3. Transparency, explicitness, simplicity and consistency of the information supplied in the report.

When preparing a report, a paper or a presentation the actuary should aim to communicate as clearly as possible, having regard to the various audiences to whom it is addressed and the different stakeholders who will place reliance on the results. The actuary is accordingly recommended to include in the report an executive summary written in plain language, describing the purpose and the main findings of the report.

D. INFORMATION TO BE INCLUDED IN ACTUARIAL REPORTS

Actuarial reports on SSPs should include or make reference to all relevant and material information taking into account the purpose of the report and to whom it is addressed. The content of an actuarial report varies depending upon the nature of the actuarial work involved. Therefore the detailed lists of information in this chapter are only exemplary. The following general list applies more specifically to reports on the projected financial status of an SSP or equivalent reports.

1. Executive Summary

(a) Purpose of the report
(b) Identification of the program
(c) Identification of key assumptions
(d) Main results of financial projections
(e) Main conclusions

2. Introduction

(a) To whom the report is addressed
(b) Identification of the SSP under review
(c) The purpose of the report, including a reminder that projections are dependent upon the underlying data, methodology and assumptions.
(d) The starting and ending dates of the projection period.
(e) Reference to the relevant preceding reports.
(f) Contemplated date of next report.

3. Description of the provisions of the SSP concerned

Financial projections of an SSP depend, *inter alia*, on the provisions of the program. Written reports should accordingly include a description of the provisions of the program that are materially relevant to the projections, e.g. coverage, financing, benefits.

4. Data

The actuary should endeavour to obtain reliable and sufficiently complete data materially relevant to the actuarial work, such as the:

- Demographic experience of the program and the country.
- Economic experience of the program and the country, such as contributions, benefits, investment earnings and assets if any.
- Number of contributors and beneficiaries of the program.
- Payroll or exposure and loss information by workers' compensation classification or employment class.

The actuary is reliant on the accuracy of data and should therefore take steps to assess how the information provided for the evaluation is consistent with relevant information from other sources.

The actuary should describe the relevant data used for the demographic and financial projections and comment on the sufficiency and reliability of the data. If some data are considered insufficient for the purposes of the financial projections, the report should mention the consequential limitations on the results.

The report should indicate the three main areas in which data was used for the purposes of the financial projections:

(a) Starting point of the projection period;
(b) Analysis of past experience as a basis for determining the assumptions used for the financial projections;
(c) Validation of the projection methodology.

5. Assumptions

The assumptions should be chosen according to the purpose of the investigation. Normally for an SSP, assumptions are expected to be determined on:

(a) A realistic basis, as opposed to a conservative or a liberal basis, so as not to bias the financial projections. Each assumption should be individually realistic.

(b) An explicit, as opposed to implicit, basis to the extent possible.
(c) A basis taking into account:
- Internal consistency, e.g. all assumptions should be mutually consistent by virtue of their correlation or interrelationship.
- Overall consistency, e.g. the economic and demographic assumptions used should be consistent with the long-term experience and the outlook for the economy.

The actuary should describe in the report the rationale used for the determination of all assumptions used for the projections.

Actuarial reports prepared for SSPs are often concerned with the long-term future and in such cases the assumptions should reflect expected long-term trends rather than giving undue weight to recent experience. However, where appropriate, estimates for the earlier years should take account of short-term trends, phasing in to the longer-term assumptions as necessary.

Given the uncertainty surrounding the assumptions, it may be appropriate for the actuary to consult other professionals with relevant expertise on deciding what assumptions to make about the future.

Where a report is part of a series, and there have been changes in assumptions from the previous report, the actuary should take steps to explain any material impact that changes in assumptions have on the financial projections.

6. Methodology

The methodology employed for the financial projections should be described in a manner that provides sufficient information for an actuary or other person with relevant expertise to assess the results of the report.

7. Results

The actuarial report should include all results of the demographic and financial projections that are relevant to the purpose of the report and to whom it is addressed. The actuary should present the results in a form that is consistent with the specific terms of reference of the evaluation or review and having regard to the nature of the SSP and the financing methods under which it is operating, particularly when these are laid down in the social security legislation.

The following model framework for the projection results to be included in the report is presented, it being understood that adjustments may need to be made to the framework to take into account the nature of the particular report. Most of the results would normally be found in either of the following two areas of the report:

Sections on data, methodology and assumptions

(a) Population by age groups and sex and in total
(b) Dependency ratios
(c) Employment earnings by age groups and sex, and averages
(d) Contributory earnings by age groups and sex, and averages

(e) Pensionable earnings by age groups and sex, and averages
(f) Covered payroll and workforce by sector of economic activity

Section on cash flow financial projections

(g) Contribution rate
(h) Pay-as-you-go-rate
(i) Contributions
(j) Investment earnings
(k) Other income
(l) Total income
(m) Benefits
(n) Administrative expenses
(o) Total expenditures
(p) Assets

The results should also make clear whether and to what extent expenditure other than benefits has been included and this expenditure should also be taken into account in the statements about adequacy of contributions. Irrespective of the financing method, the results shown should include a summary of the income, expenditure and assets of the program by calendar and/or fiscal year, or by other suitable intervals, in respect of both the past experience of the program and the projection period. The results should be shown as real values and, when needed, also as nominal values, or the effect of inflation should be shown in some other appropriate way. Alternatively or in addition it may be appropriate to show the results in relation to some volume measure or the change in it.

8. Analysis of projection results

Besides the presentation of the financial projections discussed in the previous subsection, the report should also present an analysis of those results along the following lines:

(a) Sensitivity analyses, showing the effects on the main projection results of variations in key assumptions, should be presented, in order to provide an indication of the degree to which the financial projections are affected by each assumption. The corresponding auxiliary results can also serve as a basis for deriving a reasonable approximation of the projected effect of changing in the values of one or more of the key assumptions.

(b) Reconciliation with the previous report should be made and explanations of significant changes in results should be included in the report.

(c) Explanations of the pattern of financial projections over the years (ageing of the population, maturing of the program, recent changes in the program financing or benefit provisions, etc.) and the implications thereof.

(d) Effect, if material, on the financial projections of events subsequent to the beginning of the projection period.

9. Conclusions

The actuary may include remarks beyond those listed above but should bear in mind that the main objective of an actuarial report is normally limited to the presentation of the actuary's estimate of the costs and projected financial status of the existing program and/or proposed changes therein. It is important to ensure that the readers of the report will have a sound understanding of the future financial prospects for the SSP concerned, taking into account the inevitable uncertainties in making projections. In this connection, the report should provide an indication of the eroding effect of inflation on the real value of benefits for plans that do not provide full benefit protection against inflation.

10. Attestations

In the report, the actuary should provide an opinion regarding the:

- Sufficiency and reliability of data.
- Reasonableness of assumptions.
- Appropriateness of the methodology and its consistency with sound actuarial principles
- Report's compliance with, and departures from, any local standards and guidelines and the IAA Guidelines of Actuarial Practice.

Where specified in the terms of reference of the evaluation or review, or in the legislative requirement for an actuarial report, the actuary should provide any opinion required on the financial soundness or balance of the SSP, on the adequacy or otherwise of contributions or on the necessary future level of contributions.

The report should also include a reminder that the results of the evaluation are based on assumptions concerning uncertain future events and outcomes and that the eventual experience will most likely differ, possibly materially, from that indicated in the projections.

11. Actuary's Name, Signature, Position Held and Date

RISK

Standard of Actuarial Practice 6
In relation to
Enterprise Risk Management Programs

(Adopted 15 November 2019)

CONTENTS

Introduction

This Standard of Actuarial Practice (SAP) provides guidance to members who provide actuarial services involving enterprise risk management (ERM) programs that address insurer risks. This Standard of Actuarial Practice is substantially consistent with the International Standard of ActuarialPractice (ISAP), particularly ISAP 6 (Enterprise Risk Management Programs and IAIS Core Principles), which is a model template for actuarial standard-setting bodies, encouraged to be adoptedby the International Actuarial Association (IAA) to the extent appropriate in the jurisdiction. This Standard is also consistent with the Actuarial Society of the Philippines' Standard of Actuarial Practice in Relation to General Actuarial Practice. The Actuarial Society of the Philippines (ASP) is a full member of the IAA.

ISAP 6 standards are within the scope of regulations consistent with two of the Insurance Core Principles (ICP) of the International Association of Insurance Supervisors (IAIS): ICP 8 Risk Management and Internal Controls, and ICP 16 Enterprise Risk Management for Solvency Purposes.These ICPs are intended to encourage insurance regulators to incorporate the concepts expressed therein into the regulation of insurers. According to ICP 8 and ICP 16, an insurer's management is responsible for establishing and operating frameworks to manage the risks to which the insurer is exposed, recognizing that the intrinsic nature of insurance is to share or to manage risk.

Depending on the level of sophistication, insurers' approaches to risk management may range from simple consideration of the adequacy of current financial resources to integrated holistic consideration and management of a wide range of risks. Insurers, their stakeholders and regulators all therefore have a strong interest in the reliable operation and transparent governance by insurers ofan effective risk management system. The risk management system envisaged by ICP 8 and ICP 16 includes the identification and measurement of risks, a risk management policy including an explicit Asset and Liability Management (ALM) policy, investment policy and underwriting risk policy, the development and maintenance of a risk tolerance framework, and the Own Risk and Solvency Assessment (ORSA).

Members perform actuarial services in connection with ERM programs, including acting as an employee of an insurer, as an independent professional, as part of an external audit team or as a regulator of insurers. Members are also called upon to give a professional opinion regarding the ERMprogram to the regulator.

This Standard of Actuarial Practice addresses ERM programs that often involve stress testing, reversestress testing, scenario testing and other modeling techniques. ISAP 5 (Insurer Enterprise Risk Models) provides helpful guidance on these subjects and members reading this SAP may find ISAP 5 to be a valuable resource.

This Standard of Actuarial Practice is intended to:

- Facilitate convergence in standards of actuarial practice within and across jurisdictions inconnection with ERM programs that are within the scope of regulations consistent with ICP 8 and ICP 16;
- Increase public confidence in actuarial services for ERM purposes; and
- Demonstrate the ASP's commitment in achieving effective ERM programs for insurers.

Section 1. General

1.1 Purpose

This Standard provides guidance to members when performing actuarial services involving ERM programs. It is expected to help increase public confidence in the ERM work provided by members by giving intended users confidence that:

- Actuarial services are carried out professionally and with due care;
- The results are relevant to their needs, are presented clearly and understandably, and arecomplete; and
- The assumptions and methodology used are disclosed appropriately.

1.2 Scope

This Standard applies to members when performing actuarial services with responsibility for, or significant involvement in, the development, implementation, maintenance or review of some or all of the components of ERM programs including ORSA. This Standard applies to a member only to the extent of the member's responsibility and involvement.

1.3 Compliance

A member may fail to follow the guidance of this Standard but still comply with it where themember:

1.3.1 Complies with the requirements of law that conflict with this Standard;

1.3.2 Complies with requirements of the actuarial code of professional conduct applicable to the work that conflict with this Standard; or

1.3.3 Departs from the guidance in this Standard and provides, in any report, an appropriatestatement with respect to the nature, rationale, and effect of any such departure.

1.4 Relationship to Standard of Actuarial Practice in Relation to General Actuarial Practice

Compliance with Standard of Actuarial Practice in Relation to General Actuarial Practice is a prerequisite to compliance with this Standard. References to the **Standard of Actuarial Practice in Relation to General Actuarial Practice** should be interpreted as applying equallyto this Standard, where appropriate.

1.5 Reasonable Judgement

The member should exercise reasonable judgement in applying this Standard.

2.3.1 A judgement is reasonable if it takes into account:

a. The spirit and intent of this Standard;
b. The type of assignment; and
c. Appropriate constraints on time and resources.

2.3.1 Nothing in this Standard should be interpreted as requiring work to be performed that is not proportionate to the scope of the decision or the assignment to which it relates and the benefit that intended users would be expected to obtain from the work.

2.3.1 Any judgement required by this Standard (including implicit judgement) is intended to be the member's professional judgement unless otherwise stated.

1.6 Defined Terms

This Standard uses various terms whose specific meanings are defined in the Glossary. Theseterms are highlighted in the text with a dashed underscore (e.g., member).

1.7 Effective Date

This Standard is effective for actuarial services performed on or after [Adoption Date].

Section 2. Appropriate Practices

2.1 Understanding of Insurer's Risk Management System and ERM Framework

The member should have, or obtain, sufficient understanding of the risk management system and ERM framework of the insurer and should consider whether the risk management elementsrequired by regulations are in place, including risk management policies, risk tolerance statements, an ORSA, and the insurer's assessment of its regulatory capital requirements.

2.2 Proportionality

In applying paragraph 1.4.2., the member should also consider proportionality in respect of thenature, scale and complexity of the underlying risks.

2.3 Identification, Assessment and Management of Insurer Risks for an ERM Program

2.3.1 A member who is responsible for, or significantly involved in, identifying insurer risks should consider factors including, but not limited to, the following:

a. The strategic objectives of the enterprise;

b. The processes for collecting information and whether the staff have adequate qualifications, training and experience to understand and identify the risks;

c. Whether the risk identification process is sufficient to identify current and emerging risks that are reasonably foreseeable, relevant, and material includingrisks that directly or indirectly impact the financial condition and other objectives of the insurer (e.g. reputational risk);

d. The risks specifically referred to in regulations;

e. The time frame over which the risks may emerge and may impact the insurer;

f. The risks that may arise from reasonably foreseeable changes in the business ofthe insurer (operations, markets, products) and from business conduct;

g. Whether underlying risks within financial structures that have limitedtransparency have been sufficiently identified (e.g. off-balance sheet exposures,complex asset or reinsurance structures);

h. Whether the reasonably foreseeable causes of insurer risks and theirconsequences have been sufficiently identified;

i. Risks arising or increasing as a consequence of risk management activities (e.g.credit risk arising from the transfer of risk);

j. The impact that an insurer's culture, governance structure and remuneration systems may have on the ability and willingness of the management and staff toidentify and manage risks, and whether culture, governance structure or remuneration generates, magnifies or mitigates risks; and

k. Input regarding the identification of risks from management, other knowledgeable persons within the insurer, other subject matter experts and supervisors.

2.3.1 A member who is responsible for, or significantly involved in, assessing the probability and impact of the insurer's risks should consider factors including, but notlimited to, the following:

a. The qualitative assessment of risks in addition to, or instead of, assessing them quantitatively;

b. Risk correlations, risk aggregations and tail risks (e.g. catastrophe and pandemicrisks, and complex outsourcing risks);

c. The appropriateness of the risk modelling, stress testing, reverse stress testing and scenario testing techniques that are applied;

d. The extent to which the risk models that measure the probability and impact of risks provide results that are consistent with information expressed by market prices for the risks concerned or related risks;

e. The consistency among the various valuation methodologies underlying the ERM program;

f. The operation and effectiveness of the processes and mechanisms used toaddress risk control and risk mitigation;

g. The appropriateness of the assumptions regarding future actions taken by management and by external parties, taking into account prior experiences in theindustry with similar actions;

h. Input regarding probability and impact from management, other knowledgeablepersons within the insurer, other subject matter experts and supervisors; and

i. Consistency of risk assessments over time.

2.3.2 A member who is responsible for, or significantly involved in, implementing or maintaining risk management controls, mitigation, monitoring or communication andreporting of the insurer's risks should consider factors including, but not limited to, the following:

a. The insurer's risk management policies and risk appetite and tolerance statements;

b. The relationship between the insurer's financial strength and risk profile, and theinsurer's risk management system;

c. Any significant inconsistency in the evaluation of the insurer's risk tolerances and risk limits;

d. The extent to which the results of the risk models used to measure the economiccosts and benefits of risk mitigation are consistent with information expressed by market prices for the risks concerned or related risks;

e. The operation and effectiveness of the processes and mechanisms used toaddress risk control and risk mitigation;

f. The appropriateness of the assumptions regarding future actions taken by management and by external parties, taking into account prior experiences in theindustry with similar actions;

g. The culture within the insurer to commit to, and implement, risk mitigationactions when needed;

h. The impact of reasonably foreseeable future adverse circumstances on theavailability and effectiveness of future risk mitigation practices;

i. The existence and effectiveness of feedback loops in the risk managementprocess; and

j. How the nature and relative importance of risks may change over time.

2.4 Enterprise Level Risk Management

2.4.1 A member who is responsible for, or significantly involved in, performing an aggregate risk assessment of the insurer should, in addition to assessing the elements as addressed in section 2.3. above, consider factors including, but not limited to, the following:

a. The financial strength, risk profile, business management, governance structure and risk environment of the insurer;

b. Whether the risk management processes are suitably aligned with the insurer's objectives and strategy, regarding aggregate risk taking and regarding each major risk category, as reflected by the risk appetite, risk tolerance and risk limits;

c. The interdependence of risks relating to the insurer's assets and liabilities, notingthat correlation of risks between different asset classes, products and business lines may not be linear, and may change under stressed conditions;

d. Off-balance sheet exposures that may revert to the insurer in times of difficulty;and

e. Diversification benefits that result from aggregation of risks.

2.4.2 A member who is responsible for, or significantly involved in, developing, implementing, maintaining or reviewing the insurer's ERM framework should, in addition to assessing the elements as addressed in section 2.4.1. above, consider factorsincluding, but not limited to, the following:

a. The engagement of the Board in assessing, setting, monitoring and reviewing theinsurer's risk appetite and risk profile, and whether the interests of policyholders and other relevant stakeholders are considered appropriately within thoseprocesses;

b. The adequacy of the risk management resources and capabilities within the insurer for the current and expected risk profile and risk management strategies;

c. The quality, extent and effectiveness of independence, challenge and monitoringreflected in the framework;

d. The extent and results of recent reviews and audits of control effectiveness, andmanagement's response to the findings;

e. The management of potential conflicts of interest;

f. The extent to which risk management and risk assessments are used in the decision-making practices of the insurer;

g. The effectiveness of risk communication channels within the insurer, includingrisk escalation processes, and with its supervisors;

h. The effectiveness and timeliness of the reporting of, and response to, incidencesand breaches related to the operation of the ERM framework within the insurer;

i. The operational quality and effectiveness of key ERM framework related policies, processes and mechanisms, including, but not limited to, outsourcing management, business continuity management (including pandemic response management), whistle blowing policies, fraud and privacy risk management, model risk management and business conduct risk management;

j. The extent to which the ERM framework is adaptive to changes to the insurer and to its environment;

k. The extent that the ERM framework complies with regulatory requirements andguidelines applicable to it;

l. The adequacy of the insurer's ORSA; and

m. Contingency plans to restore the insurer's financial strength and viability in severe adverse circumstances.

2.4.3 In applying sections 2.4.1. and 2.4.2., if the insurer is part of a group, the member should consider factors including, but not limited to, the following:

a. The risks and benefits of belonging to a group structure, recognizing potential limits on fungibility of capital and on transfer of assets between separate legal entities;

b. Reasonably foreseeable changes in the group structure which could impact the capital and solvency of the insurer and its ability to continue in business;

c. Risk modelling, stress testing, reverse stress testing and scenario testing should include changes in the group structure and in the support that the insurer receivesfrom other members of the group;

d. Assumptions that may be suitable for a self-standing insurer may not be suitablewhen the insurer is part of a larger group;

e. Imposition of risk management controls and tolerance limits by group management;

f. Differences in legal and regulatory requirements between jurisdictions; and

g. Contagion effect of adverse circumstances in other members of the group whichcould impact the capital and solvency of the insurer.

2.5 Own Risk and Solvency Assessment

2.5.1 The member responsible for, or significantly involved in, developing, implementing, maintaining or reviewing an ORSA for an insurer, should consider, in addition to the items in sections 2.3. and 2.4. above, factors including, but not limited to, thefollowing:

a. The time horizon considered by the ORSA;

b. Whether the qualitative and quantitative risk assessments and the financial projections used in the ORSA are appropriate for their intended purpose;

c. Any changes to the insurer's risk profile and risk appetite since the previousORSA;

d. The various accounting bases of the insurer;

e. Reasonably foreseeable changes in the external environment;

f. Allowance for new business, and for the run-off of existing and new business;

g. Access to new capital in times of financial stress;

h. Differences between the insurer's regulatory capital requirements and theinsurer's own assessment of its capital needs;

i. The quality and adequacy of the insurer's capital resources in relation to qualityand adequacy criteria established by the supervisor;

j. The degree of severity reflected in the risk modelling, stress testing, reversestress testing and scenario testing; and

k. The circumstances that may trigger an ORSA to be performed at a time otherthan during the regular review schedule.

Section 3. Communication

3.1. General Principles

Any communication should be appropriate to the particular circumstances and take the skills, understanding, levels of relevant technical expertise, and needs of the intended user into consideration to allow the intended user to understand the implications of the member's communication.

3.1.1. Form and Content – The member should determine the form, structure, style, level ofdetail, content, and relevant disclosures of each communication to be appropriate to the particular circumstances, taking into account the intended users.

3.1.2. Clarity – The member should word each communication to be clear and use language appropriate to the particular circumstances, taking into account the intended users.

3.1.3. Timing of Communication – The member should issue each communication within a reasonable time period. The timing of the communication should reflect any arrangements that have been made with the insurer. The member should consider the needs of the intended users in setting the timing.

3.1.4. Identification of the Member – A communication shall clearly identify the issuing member. When two or more individuals jointly issue a communication, at least some of which is actuarial in nature, the communication shall identify all responsible members, unless the members judge it inappropriate to do so. The name of anorganization with which each member is affiliated may also be included in thecommunication, but the member's responsibilities are not affected by such identification.

3.2. Disclosures

The member should disclose, as applicable to the actuarial services provided:

3.2.1 Where risk exposures cannot be, or are not, reliably or meaningfully identified or quantified (2.3.1., 2.3.2., 2.4.1., 2.4.2.);

3.2.2 Where the selected assumptions or risk scenarios adopted give rise to ranges of outcomes or frequencies that are materially less severe or frequent than indicated by historic risk experience, known and expected future changes or reasonably foreseeablepotential extreme adverse events (2.3.2., 2.4.1.); and

3.2.3 Any significant inconsistency that exists between the insurer's financial strength and risk profile, and the insurer's risk management system (2.3.3.).

Glossary

The terms below are defined for use in this Standard of Actuarial Practice.

Actuarial services - Services based upon actuarial considerations provided to intended users thatmay include the rendering of advice, recommendations, findings, or opinions.

Adoption Date – The date on which this Standard of Actuarial Practice was adopted as a final document by the Actuarial Society of the Philippines.

Communication - Any statement (including oral statements) issued or made by a member with respect to actuarial services.

IAA – The International Actuarial Association.

Intended user - Any legal or natural person (usually including the principal) whom the member intends, at the time the member performs actuarial services, to use the output of the actuarial services.

Law - Applicable acts, statutes, regulations or any other binding authority (such as accounting standards and any regulatory guidance that is effectively binding).

Member – An Affiliate, Associate or Fellow member, in good standing, of the Actuarial Society of the Philippines.

Model - A simplified representation of relationships among organizations or events using statistical,financial, economic, or mathematical concepts. A model has a specification, uses assumptions, data,and methodologies to produce results that are intended to provide useful information on that system.

Opinion - An opinion expressed by a member and intended by that member to be relied upon by the intended users.

ORSA - A confidential internal risk assessment conducted by an insurer on the material and relevant risks associated with its business and the sufficiency of capital resources to support those risks on current and forward-looking basis.

Reverse Stress Testing – A process for identifying events or scenarios that would lead to a predetermined adverse outcome for an organization.

Scenario Testing - A process for assessing the impact of one possible event or several simultaneously or sequentially occurring possible events on an organization’s financial position.

Stress Testing - A process for measuring the impact of adverse changes in one or relatively few factors affecting an organization’s financial position.

Work - All actuarial activities performed by a member related to actuarial services. It usually includes acquisition of knowledge of the circumstances of the assignment; obtaining sufficient and reliable data; selection of assumptions and methodology, calculations, and examination of the reasonableness of their result; use of other persons’ work; formulation of opinion and advice; documentation; reporting; and all other communication.

HEALTH

Republic of the Philippines
Department of Finance
INSURANCE COMMISSION
1071 United Nations Avenue
Manila

Circular Letter (CL) No.:	2020-22
Date:	24 March 2020

CIRCULAR LETTER

TO : ALL HEALTH MAINTENANCE ORGANIZATIONS (HMOs) DOING BUSINESS IN THE PHILIPPINES

SUBJECT : VALUATION STANDARDS FOR HEALTH MAINTENANCE ORGANIZATION (HMO) AGREEMENT LIABILITIES

WHEREAS, Section 1, Executive Order (EO) No. 192, s. 2015, mandates that jurisdiction over Health Maintenance Organizations (HMOs) shall be transferred from the Department of Health (DOH) to the Insurance Commission (IC) in order to regulate and supervise the establishment, operations and financial activities of HMOs;

WHEREAS, the IC shall have the authority to exercise the following functions, among others:

a. Issue rules and guidelines, with respect to the establishment of HMO minimum capitalization, net worth, reserve funds and security deposit requirements, as well as the criteria for qualification and disqualification of directors, officers and marketing personnel, and the procedure for the submission of reportorial and/or examination requirements, registration of contracts and plans, adjudication of claims, and other relevant matters, as necessary;
b. Regulate, supervise, and monitor the operations and management of HMOs to ensure compliance with EO No. 192, s. 2015, existing laws, rules, regulations and such other directives and circulars issued by the Insurance Commissioner;
c. Prepare, approve or amend, rules, regulations, orders, and circulars, and issue opinions, provide guidance on and supervise compliance with such rules, regulations, orders, and circulars;
d. Exercise such other powers as may be provided by law as well as those which may be implied from, or which are necessary or incidental to carry out the express powers granted to the IC to achieve the objectives and purposes of EO No. 192; and
e. Pursuant to existing laws, rules, and regulations, impose sanctions, and/or appropriate penalties.

NOW, THEREFORE, pursuant to the power granted to the Insurance Commissioner to "issue rules and guidelines with respect to x x x reserve funds x x x" under Section 4 (a) of EO No. 192, s. 2015 dated 12 November 2015, the undersigned hereby issues the attached valuation standards for HMO Agreement liabilities.

This Circular shall take effect immediately.

DENNIS B. FUNA
Insurance Commissioner

VALUATION STANDARDS FOR HEALTH MAINTENANCE ORGANIZATION AGREEMENT LIABILITIES

1. Introduction

1.1. Every Health Maintenance Organization (HMO) supervised by the Insurance Commission (IC) shall value their HMO Agreement Liabilities in accordance with this Valuation Standards.

2. Scope and Application

2.1. This Valuation Standards shall apply to all HMO Agreements issued by HMOs for HMO products defined under IC Circular Letter No. 2017-19.

3. Key Definitions

3.1. In this Valuation Standards, unless the context otherwise requires:

3.1.1. "Company" refers to an HMO supervised by the IC.

3.1.2. "Client" refers to the Principal Member/Payor, in the case of Individual/Family or the Client Company/Association in the case of Corporate/Group.

3.1.3. "Actuary" refers to an in-house actuary of the Company or an external consulting actuary accredited by IC as an HMO actuary.

3.1.4. "Health Maintenance Organization (HMO) Agreement or HMO Agreement" refers to the contract between the Company and the Client for the delivery of a pre-agreed or designated health care benefits and services by the Company to the member for a fixed pre-paid fee regardless of the payment option chosen by the Client.

3.1.5. "Administrative Services Only (ASO) Endorsement or ASO Endorsement" refers to the document affixed to the HMO Agreement whenever all or a portion of the fixed pre-paid fee is in the form of an enrolment fee, administrative fee and a fund. The ASO Endorsement is the document that states which of the benefits in the HMO Agreement are fund-based; and that all of the risk related to benefit payments drawn from the fund is borne by the Client.

3.1.6. "Membership Fee" refers to the fees arising for the period being reported from HMO Agreements where the HMO assumes the risk of funding the member's health care services and related administrative costs.

3.1.7. "Enrolment Fee" refers to the amount of fee arising for the period being reported for each member to be covered under an ASO Endorsement to be able to access the network. This is sometimes referred to as the network access fee.

3.1.8. "Administrative Fee" refers to the amount of fee arising for the period being reported for the administration of the fund and handling of claims payment under an ASO Endorsement.

3.1.9. "In-force Agreement" refers to a contract for which the Company has liabilities for promised or contracted benefits, or for the delivery of services. An in-force contract is a contract wherein (a) the Membership Fee is up-to-date or within the grace period; or (b) the coverage may still be reactivated, as provided for in the contract.

3.1.10. "ASO Fund" refers to the amount of fund owned by the Client which the Company will use to provide for benefits covered under an ASO Endorsement.

3.1.11. "HMO Agreement Liabilities" refers to the measure of the liabilities of the HMO for its In-force Agreements as of valuation date which is composed of the "HMO Agreement Reserves", "ASO Fund Liabilities" and "Unearned Administrative Fee Reserves" as applicable.

3.1.12. "HMO Agreement Reserves" refers to all benefit liabilities for membership fee-based benefits or where the fixed pre-paid fee is in the form of a membership fee where the risks are borne by the Company, which is the aggregate of the Claim Reserves and Membership Fee Reserves as defined below.

3.1.13. "Claim Reserves" refers to claims incurred but not yet paid as of the end of the valuation date. It includes claims due and unpaid, claims in the course of settlement, resisted claims and those which are incurred but not reported at a designated level of confidence, as well as direct and indirect expenses related to settling all outstanding claims, whether reported and unreported, as of valuation date.

3.1.13.1. "Due & Unpaid (D&U) Claims" refers to the liabilities for claims that have been reported, adjudicated and processed, but for which final payment has not been recorded as of valuation date.

3.1.13.2. "In Course of Settlement (ICOS)" refers to the liabilities for claim already known and identified but not yet adjudicated, settled and paid by the Company as of valuation date.

3.1.13.3. "Resisted Claims" refers to amount of claims that are in dispute such as those for which a known litigation situation exists.

3.1.13.4. "Incurred but not Reported (IBNR)" refers to the amount to be provided for claims in respect of claim events that have occurred but have not been reported to the Company as of the valuation date.

3.1.13.5. "Claims Handling Expense Reserve" refers to the estimated amount of expenses for settling all claims, whether reported or unreported, outstanding as of valuation date.

3.1.14. "Membership Fee Reserves" refers to all future claim payments and related expenses for policy maintenance and claims settlement, to be made after the valuation date, arising from future events for which the Company is liable under its HMO Agreements, and is computed as the higher of the Unearned Membership Fee Reserves and Unexpired Risk Reserves at a designated level of confidence.

3.1.14.1. "Unearned Membership Fee Reserves" or "UMFR" refers to the amount of reserve for that portion of the membership fee, net of taxes and commissions paid or due to the Company which is applicable to the period of coverage extending beyond the valuation date.

3.1.14.2. "Unexpired Risk Reserves" or "URR", refers to the amount of reserve required to cover future claims and expenses, at a designated level of confidence, that are expected to emerge from an unexpired period of cover.

3.1.15. "ASO Fund Liabilities" refers to all liabilities for fund-based benefits where the risks are borne by the Client, which is set-up equal to the Previous Period ASO Fund plus additional contributions to the fund less Fund Withdrawals (FW) as defined below.

3.1.16. "Fund Withdrawals" refers to the amount withdrawn from the ASO Fund to pay the cost of benefits availed by the members and its related expenses under an ASO Endorsement.

3.1.17. "Projected Fund Withdrawals" refers to the estimated amount to be withdrawn from the ASO Fund to pay the cost of benefits for claims (a) that have been reported, adjudicated and processed, but for which final payment has not been recorded as of valuation date; (b) already known and identified but not yet adjudicated, settled and paid by the Company as of valuation date; (c) that are in dispute such as those for which a known litigation situation exists; (d) that have occurred but have not been reported to the Company as of the valuation date; and (e) its related expenses under an ASO Endorsement .

3.1.18. "Unearned Administrative Fee Reserves" or "UAFR" refers to the amount of reserve for that portion of the Administrative fee, net of taxes and commissions paid or due to the Company which is applicable to the period of coverage extending beyond the valuation date.

4. Data and Systems

4.1. The Company's Chief Executive Officer (CEO) or a Responsible Officer with a comparable rank shall ensure that the Company's database is properly maintained so that the membership fees and claims data provided to the Actuary is accurate and complete. The CEO or the Responsible Officer must furnish the data to the Actuary and must allow his/her Actuary reasonable access to the Company's database.

4.2. The Actuary shall apply reasonable tests to satisfy himself that the membership fees and claims data is accurate and complete. A check for both integrity and completeness of data should precede the valuation work. Furthermore, the Company shall build, if it has not done yet in the past, and maintain a historical claims database of at least five (5) years.

4.3. The Company shall create loss development triangles on both paid and incurred claims. The length of historical data needed in creating the loss development triangles must be based on the Company's underlying business.

4.4. Companies which have insufficient data shall be required to use as much data as they currently have until they have accumulated the appropriate length of historical claims data for valuation purposes.

4.5. The Company shall also maintain records on historical earned and unearned membership fees as well as commissions and other expense information in relation to policy maintenance and claims settlement, for the purpose of estimating future expenses for valuation of HMO Agreement reserves.

4.6. The Company shall determine the granularity of data for the valuation of HMO Agreement reserves.

5. Basis of Assumptions

5.1. As much as practicable, the valuation of HMO Agreement reserves shall be based on the Company's actual historical experience and/or industry data. Any deviations and the use of professional judgment must be supported by a strong rationale and must be documented in Section C of the Actuarial Valuation Report, as described in Annex A.

5.2. Membership Fee used in the calculation of the HMO Membership Fee Reserves shall be net of taxes and commissions.

5.3. The Actuary shall gather information from the Underwriting Department or its equivalent to provide information on the following areas: market outlook, changes in pricing levels, changes in the mix of business, renewal rates and changes in terms and conditions.

5.4. The Actuary shall also gather information from the Claims Department or its equivalent to provide information on the following areas: typical claims process from notification to settlement, claims expense inflation, operational changes in the claims function, delays in reporting of claims that may affect the projection of liabilities, and changes in initial estimates.

6. Valuation Methodology

6.1. Where the fixed pre-paid fee is in the form of a pre-agreed membership fee, the liability shall be the HMO Agreement Reserves which is composed of the Membership Fee and Claim Reserves both determined using best estimate assumptions, with an appropriate Margin for Adverse Deviation (MfAD) for expected future experience.

6.2. The Actuary shall be responsible in determining the level of HMO Agreement reserves using basis no less stringent than that prescribed in Sections 7 to 10 below.

6.3. Where the fixed pre-paid fee is a combination of the enrolment fee, administrative fee and a fund under an ASO Endorsement, the liability shall be the ASO Fund Liabilities and the Unearned Administrative Fee Reserves (UAFR).

7. Membership Fee Reserves

7.1. Membership Fee Reserves shall be determined as the higher of UMFR and URR.

7.2. The UMFR shall be calculated using 1/365th method.

7.3. URR shall be calculated as the best estimate of future claims and expenses, with MfAD as computed in Section 9. This best estimate relates to expected future claim payments and related expenses to be incurred after the valuation date, arising from future events.

7.3.1. Expected future claims shall include all claims which might occur during the unexpired period.

7.3.2. Expected future expenses shall include Agreement maintenance expenses and claims management expenses (i.e., direct and indirect claims settlement costs).

7.4. A computation should be performed to determine whether the URR required is greater or smaller than the UMFR. If the URR is greater, then the difference should be booked as an additional reserve on top of the UMFR.

8. Claim Reserves

8.1. Claim Reserves shall be calculated as the sum of D&U Claims, ICOS, Resisted Claims, Claims Handling Expense Reserve and IBNR, with MfAD as computed in Section 9.

8.2. D&U Claims, ICOS, and Resisted Claims shall be based on actual claims reported but have not yet been settled as of valuation date. The Company shall ensure integrity of the data inputs as well as minimize uncertainties in the claims processing, subject to paragraph 4.2.

8.3. The Claims Reserves shall be calculated based on standard actuarial projection techniques or combination of such techniques, such as but not limited to the following methods: Development Method, Tabular Method, Exposure Method, and Loss Ratio Method.

The Actuary shall determine the appropriateness of the methodology considering the characteristics of the data and the maturity of the business.

8.4. Claim Reserves shall also include a provision for Claims Handling Expense Reserves, which covers the estimated expenses of settling all claims, both reported and unreported, outstanding as of valuation date.

8.5. The Actuary shall ensure the reliability of the expected loss ratios by obtaining estimates from various sources, such as underwriters, the business plan, pricing actuaries, market statistics, or from a historic view of profitability and loss ratios.

8.6. In valuing the Claim Reserves, the Actuary should consider other factors such as but not limited to: varying expense structure, operational changes in claims management, underwriting changes such as business mix and membership fee changes, changes in claims handling process, and external conditions.

8.7. To ensure sufficiency of reserves, the Actuary shall conduct a back-testing exercise of the Claims Reserves by comparing the previous year's Claims Reserves of expected current year claim developments, with actual current year claim developments. The results of such shall be documented in Section D of the Actuarial Valuation Report, as outlined in Annex A. In cases where the Claims Reserves was proven insufficient to cover actual claims development, the Actuary shall revisit the assumptions for Claims Reserves valuation and document the rationale for this deterioration.

9. Margin for Adverse Deviation

9.1. The actuary shall estimate the MfAD based on applicable statistical methodologies such as but not limited to Bootstrapping Method, Mack Method or combination of such methodologies to bring the actuarial best estimate of HMO Agreement Reserves at the 75th percentile level of sufficiency. The data, basis and analysis in the determination of the MfAD shall be included in Annex A.

9.2. The purpose of the MfAD is to allow for inherent uncertainty of the best estimate of the HMO Agreement Reserves and to consider the variability of claims experience in the best estimate.

10. Reserves under an ASO Endorsement

10.1. ASO Fund Liabilities is the aggregate of the Previous period ASO Fund less Fund Withdrawals (FW) plus additional contributions to the ASO Fund.

10.2. Unearned Administrative Fee Reserves (UAFR) shall be calculated using 1/365th method.

10.3. The ASO Fund for the given period must at least be equal to the ASO Fund Liabilities.

10.4. The minimum ASO Fund Liabilities for each ASO Account must be zero (0). If the ASO Fund Liabilities for an ASO Account is negative, it should be transferred to Due from ASO Account. The negative ASO Fund Liabilities of an Account should not be used to reduce the Aggregate ASO Fund Liabilities.

10.5. The Projected Fund Withdrawals shall be calculated using the same principles in the calculation of the Claims Reserves (refer to Sections 8 and 9) and a schedule shall be provided for in the Actuarial Valuation Report.

11. **Actuarial Valuation Report**

11.1. The Actuary shall prepare an actuarial valuation report to be submitted to the IC. The actuarial valuation report, at a minimum, shall contain the following information (see **Annex A** for details):

A. Scope of Review

B. Data Requirements

C. Valuation Methodologies and Assumptions

D. Analysis of Experience

E. Valuation Results & Discussion

F. Certification by the Actuary

G. Certification by the Chief Finance Officer

H. Certification by the Chief Executive Officer (CEO) or Responsible Officer

11.2. The Certifications to be provided by the Actuary, the Chief Finance Officer (CFO) and the Chief Executive Officer (CEO) or Responsible Officer shall be duly notarized.

ADDENDUM TO VALUATION STANDARDS
FOR HEALTH MAINTENANCE ORGANIZATION
AGREEMENT LIABILITIES

1. Introduction

1.1. The Insurance Commission (IC) recognizes that there are Health Maintenance Organizations (HMO) that have issued products that are not in accordance with the products defined under IC Circular Letter No. 2017-19 for which the HMOs have outstanding liabilities.

1.2. In view of this, HMOs shall value their reserve liabilities for these types of products in accordance with the Valuation Standards set forth below.

2. Key Definitions

2.1. In this Valuation Standards, unless the context otherwise requires:

2.1.1. "Company" refers to an HMO supervised by the IC.

2.1.2. "Client" refers to the Principal Member/Payor, in the case of Individual/Family or the Client Company/Association in the case of Corporate/Group.

2.1.3. "Actuary" refers to an in-house actuary of the Company or an external consulting actuary accredited by IC as an HMO actuary.

2.1.4. "HMO Agreement" or "Contract" refers to the contract between the Company and the Client for the delivery of a pre-agreed or designated health care benefits and services by the Company to the member for a fixed pre-paid fee.

2.1.5. "Membership Fee" or "Consideration" refers to the price for the purchase of the HMO product, paid either in one lump sum or in instalment payments.

2.1.6. "In-force HMO Agreement" or "In-force Contract" is a contract for which the Company has liabilities for promised or contracted benefits, or for the delivery of services. An in-force contract may be anyone of the following:

2.1.6.1. A contract wherein considerations are still payable and which payments are either up-to-date or within the grace period provided for in the contract;

2.1.6.2. A contract wherein all considerations have been fully paid but benefits are not yet being paid or services are not yet being utilized;

2.1.6.3. A contract wherein considerations have been fully paid and benefits are already being paid or services are being utilized, but have not been completely paid or delivered.

2.1.7. "Claim Reserves" refers to claims incurred but not yet paid as of the end of the valuation date. It includes claims due and unpaid, claims in the course of settlement, resisted claims and those which are incurred but not reported at a designated level of confidence, as well as direct and indirect expenses related to settling all outstanding claims, whether reported and unreported, as of valuation date.

2.1.7.1. "Due & Unpaid (D&U) Claims" refers to the liabilities for claims that have been reported, adjudicated and processed, but for which final payment has not been recorded as of valuation date.

2.1.7.2. "In Course of Settlement (ICOS)" refers to the liabilities for claim already known and identified but not yet adjudicated, settled and paid by the Company as of valuation date.

2.1.7.3. "Resisted Claims" refers to amount of claims that are in dispute such as those for which a known litigation situation exists.

2.1.7.4. "Incurred but not Reported (IBNR)" refers to the amount to be provided for claims in respect of claim events that have occurred but have not been reported to the Company as of the valuation date.

2.1.7.5. "Claims Handling Expense Reserve" refers to the estimated amount of expenses for settling all claims, whether reported or unreported, outstanding as of valuation date.

2.1.8. "Aggregate Reserves for Long-Term Contracts" refers to the actuarial reserves for HMO products that have period of coverage and payment period of more than 1 year. It consists of the liabilities for all benefits stipulated in the HMO Agreement or Contract which are provided **directly** by the Company for all in-force contracts.

3. Data and Systems

3.1. The Company's Chief Executive Officer (CEO) or a Responsible Officer with a comparable rank shall ensure that the Company's database is properly maintained so that the membership fees/considerations and claims data provided to the Actuary is accurate and complete. The CEO or the Responsible Officer must furnish the data to the Actuary and must allow his/her Actuary reasonable access to the Company's database.

3.2. The Actuary shall apply reasonable tests to satisfy himself that the membership fees/considerations and claims data is accurate and complete. A check for both integrity and completeness of data should precede the valuation work. Furthermore, the Company shall build, if it has not done yet in the past, and maintain a historical claims database of at least five (5) years.

3.3. The Company shall create loss development triangles on both paid and incurred claims. The length of historical data needed in creating the loss development triangles must be based on the Company's underlying business.

3.4. Companies which have insufficient data shall be required to use as much data as they currently have until they have accumulated the appropriate length of historical claims data for valuation purposes.

3.5. The Company shall also maintain records on historical earned and unearned membership fees as well as commissions and other expense information in relation to policy maintenance and claims settlement, for the purpose of estimating future expenses for valuation of its HMO Agreement reserves.

3.6. The Company shall determine the granularity of data for the valuation of HMO Agreement reserves.

4. Valuation Methodology

4.1. The Actuary shall be responsible in determining the level of the actuarial reserve liabilities for all the benefits stipulated in the contract using basis no less stringent than that prescribed in the following paragraphs.

The benefits may be provided by the HMO directly or indirectly by transferring the responsibility for the delivery of such benefits to a third party (such as the insurance benefits which is transferred to an insurance company).

4.2. The actuarial reserves for benefits shall be determined on a prospective basis.

4.3. The Aggregate Reserves for Long-Term Contracts is the reserves for benefits provided **directly** by the HMO and must be equal to the present value of all future benefits directly provided by the Company less the present value of the future contribution to reserves for such benefits. The schedule of contribution to reserves for benefits directly provided by the Company must be provided in Annex A.

4.4. The actuarial reserves for benefits provided **indirectly** by the HMO must be equal to the present value of the cost of providing these benefits less the present value of the future contribution to reserves to provide for these benefits. The schedule of contribution of reserves for benefits indirectly provided by the HMO must be provided in Annex A. For insurance benefits provided indirectly by the HMO under the contract, the actuarial reserve is the Insurance Premium Reserves as indicated in Section 8.

4.5. The Aggregate Reserves for Long-Term Contracts should never be less than the corresponding termination/surrender values indicated in the contract.

4.6. The period within which contributions to reserves are assumed to be made should not exceed the period within which considerations are to be paid. For paid-up plans, future contributions to reserves are zero.

4.7. Contribution to Reserve for a particular period should not exceed the Gross Consideration for the same particular period.

4.8. Expense reserves shall be set up for expenses to be incurred on the plan after the plan is fully paid as indicated in Section 8.

5. Basis of Assumptions

5.1. Assumptions used in the valuation of actuarial reserves should reflect current experience of the Company with respect to those assumptions, adjusted only for expected future trends, which are reasonable and realizable, and appropriate margin for adverse deviation (MfAD) from the expected experience. Justification should be made for any assumptions used that do not reflect current experience and must be documented in Section C of the Actuarial Valuation Report, as described in Annex A.

5.2. When updating assumptions, the changes in the assumptions and the effect of such changes on the actuarial reserves should be disclosed in the actuarial valuation report.

5.3. The Actuary shall gather information from the Underwriting Department or its equivalent to provide information on the following areas: market outlook, changes in pricing levels, changes in the mix of business, renewal rates and changes in terms and conditions.

5.4. The Actuary shall also gather information from the Claims Department or its equivalent to provide information on the following areas: typical claims process from notification to settlement, claims expense inflation, operational changes in the claims function, delays in reporting of claims that may affect the projection of liabilities, and changes in initial estimates.

5.5. The discount rate assumption shall be based on the lower of the following (a) yield rate or series of yield rates that are expected to be earned from the assets of the funds that back-up the corresponding actuarial reserves over the remaining term of the contracts involved, or (b) the risk-free discount rates equivalent to the zero-coupon spot yield that match the remaining term of the contracts and the currency of the cash flows as prescribed by the IC.

5.6. The effects of inflation shall be recognized in actuarial assumptions. The inflation rate to be used shall be appropriate to the cash flow and applicable to the Philippine setting.

5.7. The expense assumptions shall be based on the expense studies of the Company and should reflect the medium or long-term trends that match the remaining duration of the contracts.

5.8. The morbidity/hospitalization/utilization assumptions shall be based on rates of morbidity/hospitalization claims/utilization rates that are appropriate to the nature of the risks covered based on the Company's actual experience. The utilization assumption must take into account the special features in the contract such as but not limited to the transferability benefit. If actual experience is not available or if the Company's actual experience is inappropriate to be used, the basis and justification for the assumptions used shall be provided.

5.9. The effects of surrenders and lapses must always be considered. The Company's own experience should serve as a guide in making assumptions, with due regard to changing practices and market conditions. If lapse and/or surrender experience is not yet available, the basis and justification for the assumption used shall be provided.

5.10. The level of non-guaranteed benefits to be valued, including the dividends under the contract/HMO Agreement, shall be determined with due regard to the Company's duty to treat its members/Clients fairly and meet the members'/clients' reasonable expectations.

The Actuary must disclose the basis for the dividend scale.

6. Claim Reserves

6.1. Claim Reserves shall be calculated as the sum of D&U Claims, ICOS, Resisted Claims, Claims Handling Expense Reserve and IBNR, with MfAD as computed in Section 7.

6.2. D&U Claims, ICOS, and Resisted Claims shall be based on actual claims reported but have not yet been settled as of valuation date. The Company shall ensure integrity of the data inputs as well as minimize uncertainties in the claims processing, subject to paragraph 3.2.

6.3. The Claims Reserves shall be calculated based on standard actuarial projection techniques or combination of such techniques, such as but not limited to the following methods: Development Method, Tabular Method, Exposure Method, and Loss Ratio Method.

The Actuary shall determine the appropriateness of the methodology considering the characteristics of the data and the maturity of the business.

6.4. Claim Reserves shall also include a provision for Claims Handling Expense Reserves, which covers the estimated expenses of settling all claims, both reported and unreported, outstanding as of valuation date.

6.5. The Actuary shall ensure the reliability of the expected loss ratios by obtaining estimates from various sources, such as underwriters, the business plan, pricing actuaries, market statistics, or from a historic view of profitability and loss ratios.

6.6. In valuing the Claim Reserves, the Actuary should consider other factors such as but not limited to: varying expense structure, operational changes in claims management, underwriting changes such as business mix and membership fee changes, changes in claims handling process, and external conditions.

6.7. To ensure sufficiency of reserves, the Actuary shall conduct a back-testing exercise of the Claims Reserves by comparing the previous year's Claims Reserves of expected current year claim developments, with actual current year claim developments. The results of such shall be documented in Section D of the Actuarial Valuation Report, as outlined in **Annex A.** In cases where the Claims Reserves was proven insufficient to cover actual claims development, the Actuary shall revisit the assumptions for Claims Reserves valuation and document the rationale for this deterioration.

7. Margin for Adverse Deviation

7.1. The actuary shall estimate the MfAD based on applicable statistical methodologies such as but not limited to Bootstrapping Method, Mack Method or combination of such methodologies to bring the actuarial best estimate of HMO Agreement Reserves at the 75th percentile level of sufficiency. The data, basis and analysis in the determination of the MfAD shall be included in Annex A.

7.2. The purpose of the MfAD is to allow for inherent uncertainty of the best estimate of the HMO Agreement Reserves and to consider the variability of claims experience in the best estimate.

8. **Other Reserves**

8.1. Where deemed appropriate, the actuary shall include other reserves, such as but not limited to the following:

8.1.1. "Insurance Premium Reserve" refers to the reserve set up for the insurance premiums to be paid by the Company to the Insurance Company for the insurance benefits provided for in the contract. The insurance benefit is one of the benefits stipulated in the HMO Agreement or Contract which is provided indirectly by the Company.

8.1.2. "Expense Reserve" refers to the reserve set up for expenses that will be incurred after the paying period for HMO Agreements or Contracts where the payment period is shorter than the period of coverage.

8.2. The actuary shall estimate the Other Reserves based on generally accepted actuarial principles. The data, basis and analysis in the determination of the Other Reserves shall be included in Annex A.

9. **Actuarial Valuation Report**

9.1. The Actuary shall prepare an actuarial valuation report to be submitted to the IC. The actuarial valuation report, at a minimum, shall contain the following information (see **Annex A** for details):

A. Scope of Review
B. Data Requirements
C. Valuation Methodologies and Assumptions
D. Analysis of Experience
E. Valuation Results & Discussion
F. Certification by the Actuary
G. Certification by the Chief Finance Officer (CFO)
H. Certification by the Chief Executive Officer (CEO) or Responsible Officer

9.2. The Certifications to be provided by the Actuary, the Chief Finance Officer (CFO) and the Chief Executive Officer (CEO) or Responsible Officer shall be duly notarized.

Annex A

Report on Actuarial Valuation of HMO Agreement Liabilities
Name of Company: ______________________________
For the period ended dd/mm/yyyy

Section A: Scope of Review

1. Purpose of report

2. Name of Actuary (whether the Actuary is an employee of the HMO or an external consultant), professional qualifications, and the capacity in which he/she is carrying out the valuation of HMO Agreement Reserves, Projected Fund Withdrawals, UAFR, Aggregate Reserves for Long-Term Contracts, Insurance Premium Reserve, and Expense Reserve

3. Confirmation from the Actuary of compliance with requirements with this Valuation Standards, and reasons, if any, for not complying fully with any requirements

Section B: Data Requirements

1. The basis on which the analysis has been carried out

2. The source of the data and how it was extracted

    a. Description of the company's current underwriting policies: specific market segments targeted, risk selection process, any major recent changes in membership fees and agreement conditions, any recent changes in levels of underwriting authorities, any recent changes in key personnel and delegation of authority, and any changes in level of deductibles or agreement limits

    b. Description of the company's claims management policies: guidelines for case reserving, policies on opening and closing of claims, operational changes in claims function, large loss concerns and uncertainties

3. Documentation of any adjustments made to the data to allow for abnormal items such as large losses, etc. including the nature, amount and rationale for the adjustment

a. Description of significant events during the year affecting the claim experience and how these were taken into account in the valuation of the liabilities

b. Description of other effects considered including economic, technological, medical, legislative environment, social trends, competition, court decisions, consumerism, etc.

4. Documentation of quantitative information which may have an impact on valuation, if applicable

Section C: Valuation Methodologies and Assumptions

1. Detailed discussion on the valuation methods, assumptions, and professional judgment used in the estimation of the following:
    a. Membership Fee Reserves (Unearned Membership Fee Reserves and Unexpired Risk Reserves)
    b. Claim Reserves (Due and Unpaid Claims, In Course of Settlement, Resisted Claims, and Incurred But Not Reported)
    c. Claims Handling Expense Reserve and other related expenses
    d. Margin for adverse deviation
    e. Unearned Administrative Fee Reserves, if applicable
    f. Projected Fund Withdrawals, if applicable
    g. Aggregate Reserves for Long-Term Contracts, if applicable
    h. Insurance Premium Reserves, if applicable
    i. Expense Reserves, if applicable
    j. Discounting, if applicable

2. When more than one method is used, the basis for choice of results

3. Justification for key differences in assumptions between valuations of membership fee and claim reserves

4. Any material deviations from this Valuation Standards in terms of valuation methodologies and assumptions, and basis for these deviations

Section D: Analysis of Experience

1. For year-end valuation, detailed analysis of the company's actual experience of both URR and claim reserves versus expected experience in previous year-end valuations, including justifications for any material change observed. The experience analysis should cover claims payments and incurred cost movement.

2. Detailed analysis of the company's actual versus projected fund withdrawals in previous valuations, including justifications for any material change observed.

3. Comparative analysis between current and previous valuation such as discussion of reserve movements.

Section E: Valuation Results and Discussion

This shall include a summary of the valuation results. Companies shall provide a short narrative discussing their valuation results for each class of business.

Section F: Certification by the Actuary

The Actuary shall provide a certification as set out below:

I have undertaken the actuarial valuation of *(Name of HMO)* as of *(date of valuation).*

I have conducted tests necessary to verify the reasonableness and integrity of the data submitted by *(Name and Position of CEO or Responsible Person)*.

I hereby certify that:

1. The actuarial assumptions and formulations used in this actuarial valuation are in accordance with generally accepted actuarial principles and practices;

2. The reserves for all benefits are valued in accordance with the assumptions,

3. [The insurance benefits included in the HMO Agreement are covered under a separate insurance contract – to be included if applicable];

4. The information contained in this Report are accurate to the best of my knowledge and that I have calculated the (*HMO Agreement Reserves, Projected Fund Withdrawals from ASO Fund, UAFR, Aggregate Reserves for Long-Term Contracts, Insurance Premium Reserve, and Expense Reserve*) in

accordance with the Valuation Standards prescribed by the Insurance Commission.

Name & Signature of HMO Actuary
Date: ____________________________
IC Accreditation No: ________________
PTR No.: _________________________

Section G: Certification by the Chief Finance Officer (CFO)

The CFO shall provide a certification as set out below:

"I hereby certify that the ASO Fund Liabilities as reflected in the Financial Statements are accurate to the best of my knowledge and are in accordance with the Valuation Standards prescribed by the Insurance Commission. I further certify that a negative ASO Fund Liability of an ASO Account was not used to reduce the Aggregate ASO Fund Liabilities but was transferred to Due from ASO Account."

Signature over Printed Name of CFO
Date: ____________
PTR No.: ________________

Section H: Certification by the CEO or Responsible Officer

The CEO/Responsible Officer shall provide the following certification:

"I hereby certify that the database is properly maintained and I have satisfied myself that the data provided to the certifying Actuary are accurate and complete."

Signature over Printed Name of
Chief Executive Officer/Responsible Officer

Date: ____________

SECTION V –

ASP ADMINISTRATION GUIDELINES, AGREEMENTS, FORMS

ASP Guidelines for Sponsorship of Events

(Approved by the ASP Board on September 2020)

I. Introduction and Purpose

The Actuarial Society of the Philippines (ASP) is actively in promoting the actuarial career and increasing its brand visibility in schools and universities. One way to do this is through sponsoring events such as school organization events or mathematics competition. This guideline aims to set out the process in requesting and approving sponsorship to an event. This aims to ensure that ASP would get acceptable value out of the money it shells out to an event considering the criteria indicated in this document.

II. Request for Approval of Sponsorship of Event

Only an ASP member can request for sponsorship of an event. The Member-Requestor must fill out the Request for Sponsorship of Event template attached in Appendix I. In this template, the following information are to be provided:

1. Event information and event profile

   Indicate in the request the following information about the event
   - Name and schedule
   - Organizer
   - Event objective
   - Recommended Sponsorship package and fee (attach brochure if possible)

   When requesting for sponsorship of an event, please ensure that this event fit in with the ASP image and actuary profession. For instance, ASP will likely sponsor events promoting numeracy than sport events.

2. Reasons for sponsoring the event

   The requestor should provide the benefits to ASP for sponsoring the event. Examples of which are:
   - Increase ASP brand visibility
   - Network and connect to potential future members of the ASP and/or potential partners to promote actuarial career such as members of the academe
   - Collect information about or insights from potential future members and partners in promoting the actuarial career for consideration in future initiatives of the ASP
   - Community goodwill – ASP could get better brand mileage when the Society shows it cares about spreading positive messages and helping the community.

   The event need not provide ASP benefit right away as long as there will be a long-term way to leverage from this "investment".

3. Target Audience

   The target audience in the event should be clear. For instance, this could be high School students where most students are deemed competent in mathematics or statistics and most of existing members graduated (Science High School, UP Integrated School), or university students with Statistics or Mathematics degree.

4. Extent of Reach

   In the request, please indicate the number of attendees and how many of them can possibly pursue an actuarial career. We would prefer sponsoring an event when most of the attendees are those who can possibly pursue the career.

5. Budget cost

   Indicate how much ASP will be spending in this event include sponsorship fee, ASP giveaways, member-volunteers allowances and so on.

6. Event Plan

   Member-Requestor should provide a plan, including proposed ASP activities and resources needed, to maximize the potential benefits of the event for the ASP. It is preferred that we make the most of the event based on the recommended package.

III. Approval of Request

All submitted Request for Sponsorship of Event be subject to review and approval of the Chairman of Membership Committee. Once approved, this will be further escalated to the ASP Board for final approval.

Considerations for approval are but not limited to:
- Fit of the said event to ASP strategic goals
- Quality of the planned activities to maximize ASP benefits to the said event based on recommended package.
- Available ASP budget

Scorecard for approval is found in Appendix II.

Appendix I: Request Template

Request for Sponsorship of Event

Requestor	
Date:	MMMM DD, YYYY
To:	Chairman of Membership Committee ASP Board
Re:	**Request for Approval of Sponsorship of <Event Name – Event Date>**

1. **Event information and event profile**

   Indicate in the request the following information about the event
   - Name and schedule
   - Organizer
   - Event objective
   - Recommended Sponsorship package and fee (attach brochure if possible)

2. **Reasons for sponsoring the event**

   Provide the benefits to ASP for sponsoring the event. Examples are:
   - Increase ASP brand visibility
   - Network and connect to potential future members of the ASP and/or potential partners to promote actuarial career such as members of the academe
   - Collect information about or insights from potential future members and partners in promoting the actuarial career for consideration in future initiatives of the ASP
   - Community goodwill – ASP could get better brand mileage when the Society shows it cares about spreading positive messages and helping the community.

3. **Target Audience and Extent of Reach**

   Indicate the Target Audience of the event. For instance, this could be high School students where most students are deemed competent in mathematics or statistics and most of existing members graduated (Science High School, UP Integrated School), or university students with Statistics or Mathematics degree.

   Indicate the number of attendees and how many of them can possibly pursue an actuarial career. We would prefer sponsoring an event when most of the attendees are those who can possibly pursue the career.

4. **Budget cost**

   Indicate how much ASP will be spending in this event include sponsorship fee, ASP giveaways, member-volunteers allowances and so on.

A sample budget template and expenses are shown below and these are not exhaustive. List down all expense items that will apply.

Expense Details	Cost (Php)
Sponsorship Package	15,000
ASP Giveaways -	5,000
Per diem of volunteer members (5 pax)	5,000
Total Cost	**25,000**

5. **Event Plan**

Indicate event activities and sponsor privileges and the corresponding activities planned by ASP, with corresponding objectives, under each item. Please see sample below.

Event Activities/ Sponsor privileges	ASP Activities	Objective
Contest Proper	During break, show video on how to be an actuary.	Promote actuarial career among high school students and university students
Sponsor booth	Conduct survey to students about knowledge of students about ASP, actuary and plans to pursue an actuarial career. Secure students email address for future promotional materials.	Collect information for consideration in future ASP activities.

Appendix II: Scorecard for Approval

Criteria	Assessment*	Weight
Available Budget	5 - within budget (not higher than 10%) 3 - higher than budget by 10% 1 - not budgeted	40%
Fit of the said event to ASP strategic goals*	5 – at least 3 strategic goals of ASP 3 – at least 2 strategic goals of ASP 1 - at least 1 strategic goal of ASP	30%
Quality of the planned activities to maximize ASP benefits to the said event based on recommended package.	5 – all of the activities of recommended package will be maximized/participated 3 – 75% of the package 1 –50% or less of the package	30%
Weighted Score*		

Proposed passing score is more than 3.

Potential strategic goals that can be achieved are:

- Promotion of actuarial career
- Potential increase in membership particularly if at least 50% of the attendees are interested in topics/courses related to mathematics or statistics
- Increase of awareness to ASP brand of relevant entities such as schools and universities

GUIDELINES FOR RECORDING AND SHARING OF RECORDED SEMINARS, CONVENTION PRESENTATIONS AND ASP EVENTS

(Approved by the ASP Board on June 3, 2021)

On Consent:

The ASP needs to obtain the speaker's consent on the following:

1. Recording of the seminar or convention presentation
2. Sharing of the recorded seminar or presentation to the participants
3. Sharing of the speaker's materials to the participants

The speaker may provide consent to all or any of the items above. Only when consent has been provided will the ASP record and share the recording or presentation materials to the participants.

On Storage and Sharing of the Recorded Seminars or Convention Presentations

The recordings will be stored locally by the ASP secretariat and may be edited / formatted to reduce file size, while maintaining the integrity of the seminar or presentation. The final file to be shared to the eligible participants may be available through a platform deemed suitable to the ASP's needs. Currently, this is through the society's YouTube channel.

A. Who may access the recording?

1. All registered participants of the seminar or the convention will automatically be provided access to the recordings.
2. ASP members or guests who have not registered to the seminar / convention may gain access to the recording only by purchasing this from the ASP.

B. How will I access the recording?

1. The recording will be available only to those who have been granted access rights by the ASP. They will be provided a link by the ASP to view the recorded event.
2. Currently, the platform is the society's YouTube channel. The eligible member or guest, whether a registered participant or one who has purchased access to the recording, needs to have a YouTube account in order to view the recorded seminar or presentation. This YouTube account needs to be provided during registration to the event or when purchasing the recording to ensure that he will be included to the list with access rights.
3. The recording can only be viewed in the platform and the eligible member or guest has no option to download or save this locally.
4. The recording will be available for viewing for a defined duration that may be determined by the ASP from time to time.
5. The ASP may change the viewing platform any time and will duly inform the members,

especially those with access rights, of the change.

6. For conventions, the recordings may be available on a per presentation basis, as opposed to one continuous recording of the entire event.

C. <u>How much is each recording?</u>

1. For registered participants, the access to the recording is already included to the event fees.
2. For ASP members or guests who did not register to the event, the fee to access the recording is as follows:
    a. If the event is a convention, the fee is the same price as the registration fee, or the amount exclusive of hotel accommodations and meals. This will further be prorated based on the number of speakers who have provided their consent for the recording of the event. Also, convention recordings will be available only as a package. Interested members or guests may not purchase access to individual convention presentations.
    b. Else, the fee is the same price as the registration fee for the event. This would apply to seminars, review sessions and other non-convention events, whether virtual or face-to-face.

D. <u>Will I earn CEP points for purchasing access to the recording?</u>

1. ASP members or guests who purchased access to the recording will be credited the full CEP for the event.
2. There is no additional CEP point for registered participants who will access the event recordings.
3. The CEP credit will be granted after submitting a CEP point application to the ASP Secretariat.

MEMORANDUM OF AGREEMENTS

ASP-PLIA: ROLE OF ACTUARIES IN PLIA'S TECHNICAL COMMITTEE

ASP – IC: IC-ASP CASE EVALUATION REFERRAL FRAMEWORK

ASP - PLIA MOA : ROLE OF ACTUARIES IN PLIA'S TECHNICAL COMMITTEE

KNOW ALL MEN BY THESE PRESENTS:

This Memorandum of Agreement executed this 21st day of September 2012 in Makati City, by and between:

ACTUARIAL SOCIETY OF THE PHILIPPINES, an association duly organized and existing under Philippine laws with principal office at Unit 819 Cityland 10 Tower 2 HV dela Costa Street, Salcedo Village, Makati City, represented herein by its Board of Governors, hereinafter referred to as "ASP";

-and-

PHILIPPINE LIFE INSURANCE ASSOCIATION, an association duly organized and existing under Philippine laws with principal address at Unit 54 Legaspi Suites, 178 Salcedo Street, Legaspi Village, Makati City represented herein by its Technical Committee, hereinafter referred to as "PLIA"

WITNESSETH: That –

WHEREAS, ASP is the duly recognized organization of actuaries in the Philippines engaged in the education and accreditation of actuaries and in setting the appropriate standards of actuarial practice in the Philippines;

WHEREAS, PLIA is the duly recognized organization of all licensed life insurance companies in the Philippines engaged in strengthening the life insurance industry thru active engagement of all stakeholders in the industry including professional organizations and regulators;

WHEREAS, ASP and PLIA recognize the need to clarify the roles of the ASP and the Technical Committee of PLIA in the life insurance industry for the guidance of all stakeholders involved, in particular the regulators and the member-companies of PLIA.

NOW, THEREFORE, for and in consideration of the foregoing premises, the parties hereto have mutually agreed as follows:

1. ASP and PLIA shall meet regularly, the dates and places of meetings to be mutually agreed on upon effect of this agreement, to discuss matters which are pertinent to carrying out the intents and provisions of this agreement.

2. **OBLIGATIONS OF ASP.** ASP shall have the following obligations:

    a) To establish minimum standards of actuarial practice that will provide guidance to its members, the member-companies of PLIA and the regulators in the pursuit of supervising life insurance business in the Philippines.

b) To issue opinions on actuarial practice and actuarial matters, when appropriate, to guide all stakeholders, in particular its members, the member-companies of PLIA and the regulators.
c) To develop and update on a regular basis decrement tables and other actuarial studies that are essential to the life insurance industry e.g. Philippine mortality table.
d) To provide an opinion on issues related to the actuarial practice, as may be needed as inputs in amending the Insurance Code.

3. **OBLIGATIONS OF PLIA.** PLIA thru its Technical Committee shall have the following obligations:

a) To facilitate dialogues with the regulators on business issues that affect the life insurance industry, including technical issues that may be subjective in nature e.g. level of conservatism required by regulators.
b) To liaise with the regulators in establishing procedures relating to life insurance product approvals and other regulatory requirements imposed on life insurance companies involving actuaries in life insurance companies, e.g. expeditious product approval.
c) To provide opinion on business issues affecting the life insurance industry that require judgment call such as but not limited to, minimum capitalization, RBC factors as used in risk-based capital requirements;
d) To support ASP, and endorse participation of PLIA-member companies in actuarial industry studies relevant to the life insurance industry such as developing and updating decrement tables.
e) To address the business aspects of the forthcoming amended Insurance Code, e.g. required company submissions.

4. **SEPARATION OF ROLES.** It is understood that actuaries who represent their respective life insurance companies in the PLIA Technical Committee or any other committee of PLIA, neither represent the opinion of the ASP, nor act in behalf of the ASP. Conversely, actuaries, when expressing views or opinions as an official representative of the ASP, neither represent the views of PLIA nor the life insurance company employing such actuary.

4. **NON-DISCLOSURE.** Both parties shall use all reasonable means to ensure security of all data contained in any oral communication, printed or electronic document, and other medium or form. Neither party shall copy, distribute, reproduce or disclose any information which shall come to its knowledge or to which it may have access as a result of this Agreement without the prior written consent of the other party.

Both parties warrant that it shall obligate its members and staff, respectively, who may be assigned under this agreement to undertake in writing similar obligations stipulated in this and the preceding provisions.

5. **ASSIGNMENT**. Both parties herein may not assign this Agreement or the obligations to be performed hereunder to any person or entity without the prior written consent of the other party.

6. **TERM**. The term of this Agreement shall be in effect from 21 September 2012 and shall continue to be in full force and effect until terminated by any of the parties by giving ninety (90) days prior written notice to the other party.

7. **SEVERABILITY**. If any part, term or provision of this Agreement is held by the courts to be illegal or in conflict with the laws, the validity of the remaining portions or provisions shall not be affected, and the rights and obligations of the parties shall be construed and enforced as if the Agreement did not contain the particular part, term, or provision held to be invalid.

8. **AMENDMENT**. This Agreement may not be modified except in writing signed by the duly authorized representatives of the parties.

9. **VENUE**. Any and all actions arising from or in connection with this Agreement shall be brought in the proper courts of Manila to the exclusion of all other venues.

10. **NO PARTNERSHIP/JOINT VENTURE**. Nothing contained in this agreement shall be construed to create the relationship of partnership or joint venture between the parties.

IN WITNESS WHEREOF, the parties herein set their hand on the date and at the place first above written.

ACTUARIAL SOCIETY OF THE PHILIPPINES	**PHILIPPINE LIFE INSURANCE ASSOCIATION**
Name: ______________________	Name: ______________________
Position: ____________________	Position: ____________________

SIGNED IN THE PRESENCE OF

______________________ ______________________

IN WITNESS WHEREOF, the parties hereto set their hand on the date and at the place first above written.

ACTUARIAL SOCIETY OF THE PHILIPPINES	PHILIPPINE LIFE INSURANCE ASSOCIATION
Name: Peter Darvin	Name: Gregorio S. Mercado
Position: PRESIDENT	Position: President

SIGNED IN THE PRESENCE OF

RONALD G. CABRALES	George C. Mina

ACKNOWLEDGMENT

Republic of the Philippines)
________ ________ ____) S.S.

NOV 1 1 2013 BEFORE ME, a Notary Public for and in ________ ________ this ____ day of ________ 20___ appeared

Name	Government ID	Date/Place Issued
	(TIN NO.)	
RSP		
PETER C. DARWIN	106 - 908 - 421	
PLIA		
Gregorio D. Mercado	202 - 494 - 003	

known to me and to me known as the persons who executed the foregoing Agreement and they acknowledge to me that the same is their free and voluntary act and deed as well as of the Corporations herein represented.

WITNESS MY HAND AND SEAL.

Notary Public
Commission expires on December 31, 2012
[illegible] - Quezon City Chapter
[illegible] - Makati City
MCLE Compliance No. [illegible]
[illegible] No. [illegible]
Appointment # 433, 2011-2012

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ASP-IC Case Evaluation Referral Framework

MEMORANDUM OF AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

This Memorandum of Agreement (MOA) entered on this **18th** day of **March**, 2021, in the City of Manila, Philippines, by and between:

> The **INSURANCE COMMISSION**, a national government agency duly organized and existing under and by virtue of Republic Act. No. 275, as amended by Republic Act No. 10607, with principal office at the Insurance Commission Building, 1071 United Nations Avenue, Ermita, Manila (hereinafter referred to as the "IC"), represented herein by the Insurance Commissioner, **ATTY. DENNIS B. FUNA.**

- and -

> The **ACTUARIAL SOCIETY OF THE PHILIPPINES**, a professional organization of actuaries in the Philippines with office address at Unit 819, Cityland 10 Tower II, H.V. Dela Costa St., Salcedo Village, Makati City (hereinafter referred to as the "ASP"), represented herein by its President, **MR. JOEL CLARO A. PERLADO.**

(both parties hereinafter collectively referred to as the "Parties")

WITNESSETH: That

WHEREAS, the IC regulates and supervises all insurance companies, mutual benefit associations and trusts for charitable uses, pre-need companies and health maintenance organizations in accordance with the Insurance Code of the Philippines, as amended by Republic Act No. 10607, Republic Act No. 9289, otherwise known as the Pre-Need Code of the Philippines, and Executive Order No. 192, Series of 2015;

WHEREAS, the ASP, pursuant to its Articles of Incorporation, aims to: (1) Serve as the recognized professional membership organization for actuaries in the Philippines which will qualify and develop competent professional actuaries; (2) Promote and maintain high professional and ethical standards among actuaries; and (3) Adopt rules and regulations and/or institute measures for the maintenance of high professional conduct, honor and integrity of the members in dealing among themselves as well as with the insurance industry or the insuring public;

WHEREAS, per Title 6, Sec. 345 of the Insurance Code of the Philippines, as amended by Republic Act No. 10607; Chapter IV Sec. 16 and Chapter IX Sec. 40 of the Pre-need Code of the Philippines; and Circular Letter Nos. 2015-33 and 2017-20, the IC shall have the power to accredit any person as an actuary for any insurance company, mutual benefit association, pre-need company and health maintenance organization ("HMO") provided he/she has satisfied the minimum requirements as defined under existing laws and guidelines issued by the IC, and to disaccredit or revoke/suspend such accreditation based on various grounds provided under existing laws and issuances of the IC;

Page 1 of 6

WHEREAS, accredited actuaries are required to certify several documents submitted by various entities regulated by the IC, such as, but not limited to, the following, *viz*: (1) Policy reserves, claims or loss reserves and net due and deferred premiums; (2) Statements of bases and net premiums, loading for gross premiums, and on non-forfeiture values and reserves, when applying for approval of gross premiums, reserves and non-forfeiture values; (3) Asset share/Viability studies when applying for approval of new products or enhancement or repricing of existing products; (4) Policies of insurance under any plan submitted to the Commissioner as required by law; and (5) Annual statements and valuation reports submitted to the Insurance Commissioner, as required by law;

WHEREAS, the ASP has established a system of self-regulation of its members including the evaluation of any referrals relating to the work performed by its members;

WHEREAS, the IC recognizes the critical role of actuaries in ensuring the financial soundness of its regulated entities and upholding the rights and interests of the public and the need for the actuaries to perform their duties with utmost integrity and excellence;

WHEREAS, the Parties recognize the need to institutionalize the process of the IC's referral to the ASP of concerns involving the work performed by the Actuaries for investigation for possible violations and/or non-consistencies with specific provisions of the latter's Standards of Practice, Code of Conduct and other professional guidelines adopted by it (hereinafter collectively referred to as "Professional Standards").

NOW, THEREFORE, for and in consideration of the foregoing premises, the IC and ASP, represented by their respective heads, hereby agree to enter into this MOA in accordance with the following terms and conditions:

Section 1. Objectives

1.1. The purpose of this MOA is to establish a framework to implement IC's referral for investigation of concerns relating to the work performed by the Actuaries for possible violations and/or non-consistencies with specific provisions of the Professional Standards;

1.2. This MOA likewise provides for the arrangement for the sharing of only such information that may be relevant and necessary to implement the referral framework, subject to applicable data privacy laws and regulations and the provisions of the By-Laws of the ASP.

Section 2. Scope

2.1 Referrals under this MOA shall be limited to concerns involving actuarial work performed by the Actuary under evaluation in his or her capacity as the Actuary of a company or consulting firm, including the clients of such consulting firm, for which he or she performed such work. This MOA shall not cover work performed by the Actuary under evaluation in a capacity other than as the Actuary of the said company or consulting firm, including the clients of such consulting firm.

2.2 Should the concern/s, subject of the referral, involve work performed by the Actuary under evaluation for a company or consulting firm, including the clients of such

Jocelyn C. Fabi

consulting firm, with which the said Actuary is no longer connected or affiliated, because of which the said Actuary may no longer have access to such information and documents that he or she may need to set forth or support his or her position on the subject matter of the referral, such circumstances shall be so indicated in the Evaluation Report to be submitted by the ASP to the IC.

Section 3. Roles and Responsibilities of the Parties

Insurance Commission

3.1 The IC shall conduct an examination of the documents certified by Actuaries, such as actuarial valuation reports, product actuarial notes, product contracts, and such other documents pertaining to actuarial matters submitted to the IC by any of its regulated entities.

3.2 If, after careful review and evaluation of all relevant documents and after due consultations and discussions with the concerned Actuary have been held, the IC finds that said Actuary may have performed work that violated and/or is not consistent with the ASP's Professional Standards or may not be compliant with any of the IC's rules and regulations, the IC shall refer its findings to the ASP for appropriate evaluation, together with all supporting documents relative to the said concern and in the appropriate form prescribed by the ASP, which may be in soft or hard copy/ies.

3.3 The referral by the IC shall contain all facts and information that would enable the ASP to evaluate the subject of the referral. The referral shall also clearly identify, whenever possible, the specific provision/s of the ASP's Professional Standards against which the IC wants to ask the ASP to evaluate the subject concern/s for possible inconsistency.

3.4 The IC shall be available for consultations / meetings to discuss matters pertaining to any referral submitted to the ASP.

Actuarial Society of the Philippines

3.5 Upon receipt of the IC's referral, the ASP shall evaluate the concern/s, subject of the referral, to determine if the subject concern/s is a violation and/or not consistent with the specific provision/s of the Professional Standards identified by the IC in its referral, if any.

3.6 The evaluation will be conducted by ASP in accordance with its own rules and procedures.

3.7 The ASP shall transmit to the IC its Evaluation Report within sixty (60) days from receipt of the complete documents and information necessary for and pertinent to the evaluation to be conducted, unless an extension is advised. This Evaluation Report shall contain the objective results of the evaluation, without any recommendation as to any action to be taken, including such circumstances that may have affected or limited the evaluation process.

3.8 The ASP shall be available for consultations / meetings to discuss matters pertaining to any referral submitted by the IC.

Section 4. Actions by the IC and the ASP

4.1 The IC, considering the results of the ASP's evaluation of the subject referral, shall have the sole power and discretion to determine the appropriate disciplinary action, if any, to be imposed on the subject Actuary, in relation to the accreditation provided by the IC. In addition, the IC shall inform the ASP of the action it will take, if any, or the termination of its investigation / evaluation without action, within ninety (90) days from receipt of the ASP's Evaluation Report, unless an extension is advised.

4.2 The ASP, considering the results of its investigation finding an Actuary guilty of violation and/or work non-consistent with the ASP's Professional Standards, shall have the sole power and discretion to determine the appropriate action, if any, to be taken on the Actuary in relation to his/her membership in the ASP.

Section 5. Sharing and Exchange of Information

5.1 It is hereby agreed that any and all information covered under this MOA shall be treated with utmost confidentiality by the Parties and shall be subject to such restrictions and conditions prescribed under existing laws, and rules and regulations issued by IC, applicable data privacy laws, as well as the By-Laws of the ASP.

5.2 All documents and information endorsed or disclosed by the IC to the ASP in the course of any referral under this MOA, shall not be shared by the ASP, except to the member subject of the referral and to members who will directly participate in the evaluation of the subject referral and the approval of the corresponding results of the evaluation.

5.3 The Evaluation Report to be submitted by the ASP, including all appurtenant information and documents thereto, shall not be shared by the IC, except to such personnel of the IC who will directly participate in considering the said report for whatever action, if any, the IC may decide to take on the Evaluation Report.

Section 6. Dispute Resolution

6.1 The Parties shall exert their best efforts to amicably settle any dispute arising out of or in connection with this MOA. In case of failure to amicably settle such disputes, the Parties shall observe the applicable dispute resolution mechanisms as may be provided for by law, rules and/or regulations.

6.2 Any dispute involving data privacy concerns should be initially referred for mediation in compliance with NPC Circular No. 18-04 – "Rules on Mediation before the National Privacy Commission, Rules of Procedures of the NPC" and Republic Act No. 9285, otherwise known as the "Alternative Dispute Resolution Act of 2004".

FORM

Section 7. Effectivity and Termination

7.1 This MOA shall take effect immediately upon signing by the last Party. The last Party executing this MOA shall provide all Parties a copy thereof.

7.2 This MOA may be terminated by either party by a written notice of termination sent to the other party, at least, thirty (30) days prior to the intended date of termination. The termination shall take effect thirty (30) days after receipt by the other party of the said written notice of termination

7.3 The notice of termination should not affect any pending matters with either party, and should, therefore, be resolved and accomplished with urgency at the soonest possible time in view of the termination of the MOA.

IN WITNESS WHEREOF, the parties have caused this MOA to be executed by their duly authorized signatories on the date and place first above-written.

INSURANCE COMMISSION
By:

DENNIS B. FUNA
Insurance Commissioner

ACTUARIAL SOCIETY OF THE PHILIPPINES
By:

JOEL CLARO A. PERLADO
President

SIGNED IN THE PRESENCE OF:

George S. Ongkeko Jr.

Jocelyn C. Fadri

MARICEL G. BASALLOTE

Ariel S. Meneses

JOINT ACKNOWLEDGMENT

REPUBLIC OF THE PHILIPPINES)
City of Manila) s.s.

JUN 18 2021

BEFORE ME, a Notary Public, for and in the City of Manila, this ___ day of _______ 2021, personally appeared the following:

Name	Designation	Competent Evidence of Identity	Date/Place of Issue
DENNIS B. FUNA	Insurance Commissioner	OFFICE ID NO. 2004	2016 / MANILA
JOEL CLARO A. PERLADO	President	LTO NON-PROF DRIVER'S LICENSE N02-93-202956	Expiration Date Jan 31, 2022

FOR

Known to me to be the same persons who executed the foregoing instrument as identified through their Competent Evidence of Identity as defined by the Rules on Notarial Practice and they acknowledged to me that the same is their free and voluntary act and deed and of the entities represented.

This instrument consisting of six (6) pages, including this page whereon this Acknowledgment is written, refers to a Memorandum of Agreement signed by the parties together with their instrumental witness on each and every page thereof.

WITNESS MY HAND AND NOTARIAL SEAL, on the date and place first written above.

ATTY. PEDRO D. GENATO
Notary Public Until Dec. 31, 2021
Notarial Commission 2020 - 044 Mla.
1150 [illegible] Manila
NOTARY PUBLIC
IBP# 092834 Pasig - For 2021
PTR # 9823043 Mla. 1-4-2021
Roll # 12888, TIN # 132-436-687
MCLE Compl. No. VI- 0021170 until 4-14-2024

Doc. No. 79;
Page No. 141;
Book No. 76;
Series of 2021.

Jocelyn C. Fadri

REQUEST FOR GUIDANCE/EVALUATION OF ISSUES/CONCERN

The Actuarial Society of the Philippines (ASP), as a self-regulating professional organization, is committed to ensuring that all its members constantly exhibit the highest level of competence, integrity and professionalism. With the recent initiatives undertaken by the Insurance Commission to further strengthen the insurance industry through relevant regulation, we are deeply aware of the increasing responsibilities and technical demands on actuaries.

The ASP has a process in place for reviewing standards, providing interpretations, evaluating possible breach of actuarial standards, professional ethics, and prescribed code of conduct. This process is facilitated by the Professional Standards and Review Council (PSRC). Anyone who requires an interpretation of ASP actuarial standards or has a concern relating to the professional conduct or work of any ASP member, can invoke this process and raise his/her requirements to the PSRC. Members or external groups, including the Insurance Commission, can use the attached form "ASP Form for Guidance and Evaluation".

The ASP Board and PSRC shall continue to collaborate with regulators and industry partners, in particular the Insurance Commission, to ensure continued adherence to actuarial standards, code of conduct, and professional ethics. These parties and even individual ASP members will be advised to course requests for interpretation and evaluation of concerns to the PSRC, using the attached form.

Actuarial Society of the Philippines
Unit 819, Cityland 10 Tower II H.V.Dela Costa St, Salcedo Village Makati City, Phils. + (632) 8920893
www.actuary.org.ph

REQUEST FOR GUIDANCE / EVALUATION OF ISSUES OF CONCERN*

Please provide the background or circumstances underlying the concern or request for guidance.

- Describe the particular aspects where the concern arose from: Example pricing formulations, assumptions setting, etc.
- Names of parties involved (with consideration of disclosure requirements)

Please specify the cause of concern or matters for which request for guidance is being sought.

- Specify provisions/sections of the Standards , Code of Ethics, regulations that need clarification or that may have been breached

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Actuarial Society of the Philippines

Unit 819, Cityland 10 Tower II H.V Dela Costa St, Salcedo Village Makati City, Phils. + (632) 8920660

www.actuary.org.ph

Please enumerate copies of any supporting documents enclosed with this form.

1)
2)
3)
4)
5)

For situations involving a member of the ASP, the review process used by the PSRC requires that the member is informed of the circumstances of the concern(s) raised, including the identities of the source(s) of information/concern.

Submitted by: ____________________________ Date __________

Signature over Printed Name

Company: ____________________________

Contact Numbers: ____________________________

Email Address: ____________________________

**Kindly submit this form in a sealed envelope to the Professional Standards and Review Council (PSRC), together with supporting documents, if any.*

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ANNEX A –

SUPERSEDED PRINCIPLES, GUIDELINES AND STANDARDS OF ACTUARIAL PRACTICE

PUBLIC EXPRESSION OF PROFESSIONAL OPINION

(November 1994)

No opinion shall be publicly expressed by or on behalf of the Actuarial Society of the Philippines except on matters within the special professional competence of actuaries and then only if such opinion has been approved by a majority of all the members of the Board of Governors.

A member of the A.S.P. who wishes to express a professional opinion in his individual capacity may do so without obtaining prior clearance from the Board of Governors, provided that it is published with his name and under his own accountability.

PROCESS FOR ADOPTION OF ACTUARIAL PRINCIPLES AND STANDARDS OF PRACTICE

(Adopted August 1998)

1. General Actuarial Principles are adopted by the Actuarial Society of the Philippines (ASP) from those developed and published by leading international actuarial organizations like the Society of Actuaries and the Casualty Actuarial Society of the United States of America. These associations were selected because the basic foundation, framework and organization of actuarial practice in the Philippines have been adopted from actuarial practice in the United States of America. The ASP may develop its own actuarial principles for certain disciplines where none are available.

2. From the General Actuarial Principles, the ASP promulgates guidelines to actuarial practice and standards of practice, taking into account the insurance laws and regulations, and other applicable Philippine laws that affect an institution's functions and activities which require the expertise of an actuary.

3. A technical committee is organized by the ASP Board of Governors from the membership to prepare an exposure draft of the principles, guidelines and/or standards for the discipline or area of specialization. The exposure draft is presented for discussion in a forum, at a special meeting or regular meeting of Fellows, where reactions and comments are solicited and recorded. The technical committee subsequently undertakes revisions if necessary. Depending on the importance of the issues raised during the exposure of the draft, a revised draft may be presented a second time or third time, until substantial differences of opinion are resolved. The views of the Professional Standards and Review Council may be solicited during the drafting or revision process.

4. The amended paper is then officially submitted to the ASP Board of Governors for approval or other action.

5. When approved by the Board of Governors, the principles, guidelines and/or standards are printed and distributed to all members of the ASP.

PRINCIPLES REGARDING PROVISIONS FOR LIFE RISKS
(Adopted 1997)

SOCIETY OF ACTUARIES COMMITTEE ON ACTUARIAL PRINCIPLES*

ABSTRACT

The Committee on Actuarial Principles is charged with identifying, circulating, and organizing actuarial principles (as distinct from standards) and recommending the resulting statements of principles to the Board of Governors for review and adoption. In October 1995, the Board accepted the Committee's statement entitled "Principles Regarding Provisions for Life Risks." This statement, which constitutes the following paper, is an expression of opinion by the Committee on Actuarial Principles and has been authorized by the Board of Governors. It has not been submitted to the vote of the membership and thus should not be construed as an expression of opinion by the Society of Actuaries.

BACKGROUND

The purpose of this statement is to describe principles and considerations regarding the provision made by insurance organizations relative to life actuarial risks. The terminology used to describe this provision is diverse and varies not only by jurisdiction but also in some cases by accounting purpose. For example, the provision is called a "reserve" in the U.S. and an "actuarial liability" in Canada. In addition, the provision sometimes consists of both an accounting liability item and a designated portion of accounting surplus. Some sense of adequacy or sufficiency adheres to each such provision but varies from system to system. This statement is intended to apply consistent notions of adequacy and sufficiency of provisions for life actuarial risks, however defined. It is hoped that the use of a neutral term ("provision") will permit a wide application of the principles without unnecessary confusion.

This statement may be regarded as an extension of "Principles of Actuarial Science," an earlier expression of opinions of the committee [TSA XLIV (1992) 565-628], which articulates general principles that apply to the areas of actuarial practice within the purview of the Society of Actuaries. The Glossary appended to this statement contains the Principles and Definitions originally set forth in "Principles of Actuarial Science."

This statement consists of three parts:

A. Definitions
B. Principles with Discussions
C. Considerations.

Clear and precise Definitions are essential for accurately articulating Principles. This statement uses terms defined in "Principles of Actuarial Science" and defines additional terms as needed.

* Arnold A. Dicke, *Chair*, Allan Brender, Daniel F. Case, Carol Randolph Gramer, Stuart Klugman, Donald M. Peterson, Joseph H. Tan, and Warren R. Luckner, SOA Staff Liaison.

Principles are defined in "Principles of Actuarial Science" as "statements grounded in observation and experience." The Principles presented in this document represent applications of the general principles to a defined area of practice. Brief Discussions explain and illustrate the Principles.

The Considerations provide a current context for application of the Principles and discuss areas in which Standards (defined in "Principles of Actuarial Science" as "rules of behavior, including, in particular, directives as to when and how professional judgment should be employed") may be needed.

A. DEFINITIONS

1. Terms Previously Defined

The following terms defined in "Principles of Actuarial Science" are used in this statement: *actuarial assumption, actuarial model, actuarial risk, actuarial value, asset, benefit, cash flow, consideration, degree of accuracy, degree of actuarial soundness, insurance system, obligation, potentially valid, premium structure, risk (or risk subject), scenario,* and *valid*. Definitions of these terms are found in the Glossary.

2. Additional Terms

A *life insurance and annuity system* is an insurance system in which the actuarial risks to be financed arise primarily from human mortality. The obligations related to the payment of benefits by a life insurance and annuity system are called *life risk obligations*.

An *accounting method* is a set of rules that assigns values (called *accounting values*) to the assets and obligations of a life insurance and annuity system. A *block* (or *block of life risk obligations*) is a subset of the life risk obligations of a life insurance and annuity system, together with the future considerations associated with these obligations.

The insurance subsystem consisting of a block and a collection of assets or portions of assets is called a *component* of the life insurance and annuity system. A component is said to be *in full compliance* if on a given date all applicable contractual, legal, and regulatory constraints that require or prohibit the assignment of specific assets to the block are satisfied.

The accounting value assigned to a block of life risk obligations on a given date (the *valuation date*) is called the *provision* for that block on that date. The sum of the provisions for all blocks of a life insurance and annuity system is called the (*aggregate*) *provision* for the system. A component of a lifeinsurance and annuity system is said to achieve *accounting balance* on the valuation date if the total accounting value of the assets in the component equals the provision for the block of life risk obligationsin the component on that date. An *allowable asset allocation* is an assignment or reassignment on the valuation date of assets or portions of assets to each block of a life insurance and annuity system, so thateach of the resulting components is in full compliance and achieves accounting balance on that date.

A provision for a block of life risk obligations on a given valuation date will have been *ultimately sufficient* relative to an allowable asset allocation if, in the end, all benefits could have been paid as promised from the net cash flows generated directly or indirectly by the assets assigned to the block and by the considerations associated with the block. The likelihood on a given date, based on a valid actuarial model, that a provision will be ultimately sufficient relative to a specific allowable asset allocation is called the *indicated level of adequacy* of the provisions relative to the asset allocation. If the actuarial value calculated using a valid actuarial model of the system, or of a component consisting of a block of life risk obligations and the assets assigned to the block by an allowable asset allocation, is negative for a given scenario under that model, the absolute value of that actuarial value is called the *indicated current deficiency* of the system or of the block for that scenario.

B. PRINCIPLES

1. PRINCIPLE (Likelihood of Ultimate Sufficiency). The likelihood on a given valuation date that a provision for a block of life risk obligations will be ultimately sufficient relative to a specific allowable asset allocation depends upon:
- **(a) the risk subjects covered,**
- **(b) the actuarial risks involved,**
- **(c) the future obligations and considerations arising from the financing of these risks,**
- **(d) the assets allocated to the block on the valuation date, and**
- **(e) the strategy for reinvesting or financing net future cash flows.**

DISCUSSION. The likelihood of ultimate sufficiency for a block of life risk obligations depends on the enumerated factors, which represent aspects of the life insurance and annuity system. Each of these factors is in turn affected by external influences, such as the economic environment. The enumeration is not complete; for example, factors such as management capability may come into play. The actuarial risks may include risks besides those for which the financial security system was instituted. Some of the actuarial risks may involve events that fail to qualify as insurable events, for example, by being subject to control by an insured. Future obligations may include contractual benefits, such as withdrawal benefits and the payment of nonguaranteed elements, in addition to life insurance and annuity benefits. The premium structure of the life insurance and annuity system may also affect ultimate sufficiency. For example, if this structure involves broad groupings, ultimate sufficiency may be affected by adverse selection. The extent to which future obligations and considerations may be varied to reflect future circumstances will also affect ultimate sufficiency.

The ultimate sufficiency of the provision is affected by the cash flows generated by the assets allocated to the block and by investments of positive net cash flows and financing requirements for negative net cash flows. The cash flows, in turn, are not certain as to receipt or timing of receipt. Alternative sets of such assets may have the same accounting value but may generate significantly different cash flows and thus may have a different result as regards ultimate sufficiency. Constraints on allowable allocations will reduce the ways available to fund the obligations and thus may require a larger provision to achieve ultimate sufficiency. Conversely, the adoption of a strategy for reinvesting or financing net future cash flows that is capable of responding to potential changes in future obligations and considerations may reduce the provision that is required to achieve this goal.

The definition of ultimate sufficiency assumes that (a) the block of obligations is closed and (b) the net cash flows generated directly or indirectly from the initial assets and from subsequent considerations remain in the component until needed to fund the obligations. In theory, it is possible to track all cash flows deriving from the initial assets and subsequent considerations and reinvestments of cash flows. However, in real life applications, such investments may be in "assets" such as new business strain, which involve complex, hard-to-monitor cash flows.

Since ultimate sufficiency can be verified only in unrealistically simple situations, the ability to estimate the likelihood of ultimate sufficiency is of more theoretical than practical value. However, this theoretical possibility allows the use of actuarial models to test the choice of provisions (together with the choice of assets allocated to the block) and to determine relative likelihoods. As a practical matter, the model usually involves simplifying assumptions, such as a reinvestment assumption that ignores any use of future cash flows to fund new business.

2. **PRINCIPLE (Estimation of the Likelihood of Ultimate Sufficiency). Any valid actuarial model that takes account of the dependencies enumerated in Principle 1 can be used to estimate the likelihood that a provision for a block of life risk obligations will be ultimately sufficient relative to a specific allowable asset allocation.**

DISCUSSION. Models used to estimate the likelihood of ultimate sufficiency may vary with respect to the degree of summarization of in-force data, the extent of refinement of the actuarial assumptions used, and the stochastic representation of various actuarial risks, among other factors. Among the models incorporating appropriate dependencies, no one unique model is selected by the validation process. It is not possible to state that the indicated level of adequacy from one such valid model represents a better estimate of the likelihood of ultimate sufficiency than the indicated level of adequacy from another such valid model.

The indicated level of adequacy depends on the assumptions inherent in the actuarial model, including aspects of the assumed future economic environment. The indicated level of adequacy is prospective, but the actuarial model is generally validated against past experience. It is incorrect to conclude on the basis of subsequent experience that the actuarial assumptions were inappropriate or that the indicated level of adequacy was overstated or understated.

Historical validation of economically sensitive elements, in particular, is useful only if the past period used for validation resembles the current period with respect to economic conditions.

If an actuarial risk variable is associated with events that do not qualify as insurable events, stochastic modeling may not result in useful estimates.

3. **PRINCIPLE (Changes in the Indicated Level of Adequacy). The indicated level of adequacy calculated on a date subsequent to an original valuation date can differ from the originally calculated indicated level of adequacy, even if the respective models have the same degree of accuracy and the assumptions regarding future events are unchanged and remainappropriate.**

DISCUSSION. Recalculation of the indicated level of adequacy after the passage of time will normally result in a changed value, even if the life insurance and annuity system appears unchanged. To begin with, the assumption set required to produce the estimate is reduced with the passage of time, especially for a closed block, that is, a block of life risk obligations into which no new business has been injected. This is true even if assumptions remain appropriate. Assumptions may be considered appropriate if deviations can be explained as random fluctuations and if no information is available indicating that changes in the assumptions should be made. While a later estimate may be considered to be a better estimate, this does not mean that the indicated level of adequacy will converge smoothly to a value. To be sure, for a closed block, as time passes, if the assets begin to exceed the expected value of future obligations, the indicated level of adequacy may approach one. Conversely, if the expected future obligations exceed the assets and all expected future investment income and considerations, theindicated level of adequacy will approach zero. However, there are many situations in which an intermediate value will remain appropriate until the cash flows and cash flow requirements of the blockare nearly complete. Significant fluctuations may occur close to the end of this process.

Nevertheless, the indicated level of adequacy can be an important tool for managing a block of liabilities. For example, if the block is managed so that the indicated level of adequacy remains above a fixed level, possibly by injecting additional assets from time to time, the likelihood of fulfilling the obligations of the block may be enhanced.

4. **PRINCIPLE (Aggregation). For some life insurance and annuity systems, the aggregate provision required to achieve a given indicated level of adequacy will be reduced if two or more selected blocks of life risk obligations are combined into a single block.**

DISCUSSION. Equivalently, for some blocks the indicated level of adequacy may be increased by combining the associated components without adding or substituting assets. This effect, sometimes referred to as "liability-side hedging," may arise from negative correlations between the risks in different blocks (for example, mortality improvement risks associated with life insurance and annuities) or from the fact that the combined block may require net cash flows that are easier to fund with the cash flows of available assets than would be the case for the blocks taken separately. An example of this latter situation is a combined block of deferred and immediate annuities. Note that this effect is distinct from the reduction in aggregate provision that occurs if provisions whose indicated levels of adequacy exceed the required level are reduced, provisions whose indicated levels of adequacy fall short of the required level are increased, and assets are appropriately reallocated.

5. **PRINCIPLE (Current Deficiencies). Two or more blocks of life risk obligations with provisions having the same indicated level of adequacy relative to a valid actuarial model may have different indicated current deficiencies relative to a given scenario under the model.**

DISCUSSION. The indicated current deficiency for a given scenario can be determined as the amount of cash that must be added to the component to pay all obligations under that scenario. The likelihood that benefits will be paid (indicated level of adequacy) is distinct from the indicated current deficiencies for those scenarios under which benefits are not expected to be able to be paid. The actuarial values for a given scenario under a valid actuarial model of two components may differ, even if the provisions for the associated blocks of obligations have the same indicated levels of adequacy relative to that actuarial model when all tested scenarios are considered. This may be caused either by differences in the initial assets or differences in the actuarial risks, risk subjects, or obligations involved. Calculation of the indicated current deficiencies under various scenarios may be useful in surplus planning, solvency testing, and the management of industry guarantee associations.

C. CONSIDERATIONS

1. Provision Methodologies

One of the typical elements of an insurance accounting system is a methodology for establishing provisions for risk obligations.

Historically, the most common methodology involved formula reserves. A "formula reserve" is one of a set of values, assigned by a rule or formula, representing the provision to be established at each of a given set of future dates ("valuation dates") for the risk obligations remaining or projected to be remaining from a given block on that date. An "actuarial formula reserve" for a block as of a given valuation date relative to a given actuarial model is the formula reserve under which the provision at that valuation date equals the actuarial value at that date of the future cash flows arising from the obligations of the block less the actuarial value at that date of the future considerations payable to the block projected by the actuarial model. Statutory reserves and GAAP benefit reserves (under *SFAS 60*) in the U.S. are examples of an actuarial formula reserve. In both cases, calculated net premiums are used in place of actual gross premiums. This substitution represents an assumption in the actuarial model regarding expenses and profits. A desirable feature of actuarial formula reserves is the ability to calculate values as of future valuation dates.

An alternative approach is the "asset adequacy method," in which the provision for a block of risk obligations is taken to be the minimum aggregate accounting value of assets that allow the provision to attain a given indicated level of adequacy relative to an allowable asset allocation. The indicated level of adequacy for a provision calculated under the asset adequacy method is obviously predetermined, but, unlike the actuarial formula method, provisions as of future valuation dates are not easily projected.

When an accounting method includes a provision methodology that allows the projection of provisions required or desired as of future dates, another concept of adequacy may be of interest. The "indicated level of accounting adequacy" is an estimate of the likelihood as of a given valuation date that, in addition to paying all benefits as promised, the accounting values of the assets allocated to the block will exceed the projected provisions at each of a defined set of future dates. It is clear that the indicated level of accounting adequacy, if available, will always be less than or equal to the indicated level of ("economic") adequacy on the same valuation date. In other words, accounting adequacy is a stricter test because it does not allow shortfalls of assets relative to projected provisions for a block to be financed from possible future excesses.

2. Actuarial Submodels

Actuarial models used in developing or testing the provision made by life insurance and annuity systems relative to life actuarial risks usually involve several actuarial submodels. Typical submodels are associated with such actuarial risks as mortality, lapse, and investment default.

The validity of the actuarial model depends on which actuarial risks are represented by submodels and whether the submodels are valid or potentially valid. Among valid or potentially valid submodels, those which take account of "induced experience" (see Principle 4.4 in the Glossary) and future "antiselection" (see Principle 4.3 in the Glossary) are more likely to remain valid at future times.

3. Dependence on Status

The actuarial model used to calculate or test provisions may depend on the status of an insured event. For example, an actuarial model used in connection with provisions for obligations associated with events that have already occurred (for example, claim provisions for death benefits) or that are currently occurring (for example, provisions for annuities in payment status) may incorporate greater detail on the amount and timing of payments in progress, while a model used in connection with provisions for events that have yet to occur may incorporate greater detail on present-value assumptions.

4. Provision for Expenses

Normally, the expenses incurred in fulfilling the benefit obligations of a block are considered obligations of that block. If, as in the case of expenses related to claim payment, expected future expenses are provided for by considerations already received, an expense provision can be established. Conversely, if an expense that has been incurred is to be provided for by cash flows at one or more later dates, an offset to the provision can be used to defer recognition of the expense, or a portion thereof, until those dates.

5. Asset Allocation

The range of allowable asset allocations will affect the indicated level of adequacy of provisions.

Variations in this range from year to year may affect comparability. Absent separate accounts or other contractual arrangements, the allocation of assets to a block creates no legal or contractual right to specific assets. Moreover, again absent separate account or other contractual arrangements, the loss associated with the default of an asset need not be charged solely to the component to which the asset has been assigned.

6. Experience Adjustment

Provisions may be based, in whole or part, on the experience of the life insurance and annuity system. Provisions may be adjusted if the experience of the life insurance and annuity system differs materially from that originally assumed. If the adjustment is made only if the new provision is larger than the old, the process is called "loss recognition." If periodic experience adjustments are required and if a pattern can be discerned, projected provisions at future valuation dates may be adjusted to reflect this pattern. This process is referred to as "trending."

7. Treatment of Profit Margins or Contributions to Surplus

The actuarial model associated with an actuarial formula reserve may specify the treatment of profit margins or contributions to surplus. Some models recognize these margins currently; others spread the margins over the life of the block of obligations, either explicitly or by the inclusion in assumptions of "provisions for adverse deviation."

8. Other Obligations

The term "other obligations" is used to indicate obligations of the life insurance and annuity system not arising from the actuarial risks assumed by the system. The existence of other obligations may limit the allowable asset allocations. For example, an obligation for incurred expense may need to be backed by cash, reducing the cash available for assignment to other blocks of obligations.

Note: The following glossary of Principles and Definitions was originally published as part of "Principles of Actuarial Science," by the Society of Actuaries Committee on Actuarial Principles, in *Transactions of the Society of Actuaries*, Volume XLIV, 1992, pp. 565-91.

GLOSSARY

PRINCIPLES OF ACTUARIAL SCIENCE

1.1 PRINCIPLE (Statistical Regularity). Phenomena exist such that, if a sequence of independent experiments is held under the same specified conditions, the proportion of occurrences of a given event stabilizes as the number of experiments becomes larger.

1.2 PRINCIPLE (Stochastic Modeling). A phenomenon displaying statistical regularity can be described by a mathematical model that can estimate within any desired degree of uncertainty the proportion of occurrences of a given event in a sufficiently long sequence of experiments.

2.1 PRINCIPLE (Diversity of Preferences). Different people may assign different current monetary values to the same economic good.

2.2 PRINCIPLE (Time Preference). Money has time value; that is, people tend to prefer receiving money in the present to receiving that same amount of money in the future.

2.3 PRINCIPLE (Present Value Modeling). For many persons, there exists a mathematical model that can estimate the current monetary value that the person would assign to any future cash flow.

3.1 PRINCIPLE (Modeling of Actuarial Risks). Actuarial risks can be stochastically modeled based on assumptions regarding the probabilities that will apply to the actuarial risk variables in the future, including assumptions regarding the future environment.

3.2 PRINCIPLE (Validity of Actuarial Models). The change over time in the degree of accuracy of an initially valid actuarial model depends upon changes in:

a. the nature of the right to receive or the duty to make a payment;

b. the various environments (regulatory, judicial, social, financial, economic, etc.) within which the modeled events occur; and

c. the sufficiency and quality of the data available to validate the model.

3.3 PRINCIPLE (Combinations of Cash Flows). The degree of uncertainty of the actuarial value of a combination of cash flows reflects both the uncertainties affecting each underlying actuarial risk variable and the process of combination.

4.1 PRINCIPLE (Risk Classification). For a group of risks associated with a given actuarial risk, it is possible to identify characteristics of the risks and to establish a set of classes based on these characteristics so that:

a. each risk is assigned to one and only one class; and

b. probabilities of occurrence, timing and/or severity may be associated with each class in a way that results in an actuarial model which, for some degree of accuracy, is:

(1) valid relative to observed results for each class or group of classes having sufficient available data, and

(2) potentially valid for every class.

4.2 PRINCIPLE (Pooling). If the actuarial risk associated with a risk classification system displays statistical regularity, it is possible to combine risk classes so as to ensure that there is an actuarial model associated with the new set of risk classes that is valid within a specified degree of accuracy.

4.3 PRINCIPLE (Antiselection). If the premium structure of a voluntary insurance system is based on a risk classification system such that a refinement of the system could result in significant differentials in considerations between risks originally assigned to the same class, there will be a tendency for relatively greater participation by those whose considerations would increase if the refinement were put in place.

4.4 PRINCIPLE (Induced Experience). The experience rates for events associated with a financial security system will tend to differ from those for the same events in the absence of any such system.

4.5 PRINCIPLE (Insured Experience). The experience rates for the insurable events of an insurance system will tend to differ from the overall rates of occurrence of the same events among all those subject to a given actuarial risk.

4.6 PRINCIPLE (Avoidance of Ruin). For most ruin criteria, there are combinations of values of the financial parameters that will reduce, below a given specified positive level, the ruin probability relative to an actuarial model.

4.7 PRINCIPLE (Actuarial Soundness). For most financial security systems, there are combinations of margins that will produce, relative to a valid actuarial model, a degree of actuarial soundness that exceeds a given specified level less than one.

DEFINITIONS

The assumptions upon which an actuarial model is based are called **actuarial assumptions**.

A model described by Principle 3.1, together with a present value model if applicable, is called an **actuarial model**.

An **actuarial risk** is a phenomenon that has economic consequences and that is subject to uncertainty with respect to one or more of the **actuarial risk variables**: occurrence, timing, and severity.

The **actuarial value** of a future cash flow that is contingent upon actuarial risk variables is the present value developed by an actuarial model associated with the actuarial risk variables.

The **actuarial value of a financial security system** relative to a given actuarial model is the actuarial value, developed by the model, of the combination of cash flows associated with assets, obligations, and considerations of the system.

An **asset** is money or economic goods held, or a right to receive future cash flows; an *obligation* is a duty to provide current or future cash flows.

A *financial security system* is an arrangement for risk financing in which one person assumes the obligation to make a payment (or series of payments), called a **benefit (benefits)**, that offsets undesirable economic consequences that may be experienced by a second person in return for the payment, by or on behalf of the second person, of one or more amounts, called *considerations*.

A **cash flow** is the receipt or disbursement at a point in time of an amount of money (or of an economic good with a monetary value).

A *financial security system* is an arrangement for risk financing in which one person assumes the obligation to make a payment (or series of payments), called a *benefit (benefits)*, that offsets undesirable economic consequences that may be experienced by a second person in return for the payment, by or on behalf of the second person, of one or more amounts, called **considerations**.

A cash flow whose occurrence or amount depends on the occurrence of an event that is not certain to occur is said to be **contingent**.

Credibility is the importance assigned to the experience of a given risk class or group of risk classes relative to other information for the purpose of experience adjustment.

The amount of money a person is willing to trade for a good at a specific point in time is the good's **current monetary value** to that person.

A measure of the probability that a financial security system is likely to be able to pay all benefits as promised is called the **degree of actuarial soundness** of the financial security system.

A **deterministic model** is a simplified stochastic model in which the proportion of occurrences of a given event estimated by the stochastic model is assumed to occur with probability one.

An **economic good** is something which has value to a person and which the person may consider exchanging for something else.

The result of an experiment is called an *outcome*; an **event** is a set of one or more possible outcomes.

The probability-weighted average of the numerical values taken on by a random variable is called the **expected value** of the random variable.

The **experience** of a financial security system is the data obtained in the operation of the system.

An **experience adjustment** is a change in considerations or benefits applicable to the various risk classes to reflect the experience of the financial security system.

Estimates, based on such data, of rates of occurrence or amounts of payment related to an actuarial risk are called **experience rates**.

An **experiment** is an observation of a given phenomenon made under specified conditions.

If the actuarial value can be expressed as a function of any variable associated with the financial security system and independent of the actuarial model, that variable is called a **financial parameter** of the financial security system.

A **financial security system** is an arrangement for risk financing in which one person assumes the obligation to make a payment (or series of payments), called a *benefit (benefits)*, that offsets undesirable economic consequences that may be experienced by a second person in return for the payment, by or on behalf of the second person, of one or more amounts, called *considerations*.

An event is said to be **insurable** if:

a. it is associated with a phenomenon that is expected to display statistical regularity;
b. it is contingent with respect to number of occurrences, timing and/or severity;
c. the fact of its occurrence is definitely determinable;
d. its occurrence results in undesirable economic consequences for one or more persons; and
e. its future occurrence, timing and/or severity are neither precisely known nor controllable by these persons.

A person is said to have an **insurable interest** in an insurable event to the extent that the occurrence of the event creates an economic need involving that person.

An **insurance system** is a financial security system in which:

a. the actuarial risks to be financed arise from insurable events;
b. the risk subjects are grouped according to a risk classification system;
c. the benefits payable are related to an insurable interest;
d. the actuarial value of benefits payable, developed by an actuarial model associated with the risk classification system, is finite; and
e. considerations are consistent with the actuarial value of the associated benefits.

An insurance system is **mandatory** if all persons in a group or in society are required legally or otherwise to participate; otherwise, it is voluntary. It is a **personal insurance system** if the decision to participate is made by each insured individually; it is a **group insurance system** if the decision is made on behalf of a group, although participation may be mandatory or voluntary for the members of the group; and it is a **social insurance system** if all members of society (or a defined subgroup of society) are eligible to participate.

The entities to which actuarial risk is transferred in an insurance system (whether private or governmental) are called **insurers**.

The amounts by which the values of financial parameters can be changed without reducing the expected actuarial value of the financial security system below zero are called **margins**.

A **mathematical model** is a scientific model in which the representation is expressed in mathematical terms.

Money is a means of exchange which may be traded for economic goods.

A *refinement of a risk classification system* is a risk classification system formed from another by subdividing one or more classes. If there are actuarial models associated with the original risk classification system and with the refinement such that these models assign the same probabilities of occurrence, timing and/or severity to classes that were not subdivided, but they assign differing probabilities to one or more of the subdivisions of at least one class, the refinement is said to be **more homogeneous** than the original system.

An *asset* is money or economic goods held, or a right to receive future cash flows; an **obligation** is a duty to provide current or future cash flows.

The result of an experiment is called an **outcome**; an *event* is a set of one or more possible outcomes.

Phenomena are occurrences which can be observed.

The process of combining risk classes described in Principle 4.2 is called **pooling**.

A mathematical model is **potentially valid** if it produces results that are consistent with available observations of the modeled phenomena and of similar phenomena and is capable of being validated relative to the specified observed results when sufficient data are available.

The **premium structure** of an insurance system is a set of considerations that reflect the assignment of risks to various risk classes.

The estimate of the current monetary value of a future cash flow given by a present value model under a fixed assumption regarding future economic conditions is called the **present value** of the cash flow relative to that assumption.

A model described by Principle 2.3 is called a **present value model**.

Probability is a measure which takes on values from zero to one and gives the likelihood of occurrence of an event.

A rule which assigns a numerical value to every possible outcome is called a **random variable**.

A **refinement of a premium structure** is a premium structure based on a refinement of a risk classification system.

A **refinement of a risk classification system** is a risk classification system formed from another by subdividing one or more classes.

A set of classes, a set of characteristics and a set of rules for using the characteristics to assign each risk to a class in such a way that the conditions of Principle 4.1 are satisfied with respect to a given group of risks is called a **risk classification system**. These classes are called **risk classes**, and the rules used for assigning risks to risk classes are called *underwriting rules*.

Risk control is a process that reduces the impact of one or more of the actuarial risk variables associated with the actuarial risk.

Risk identification is a process for determining whether a given person or object is a risk subject for a given actuarial risk.

A **risk management system** is an arrangement involving one or more of risk identification, risk control, and risk transfer or risk financing.

A person or object involved in an event associated with an actuarial risk is called a **risk subject** or **risk**.

Risk transfer or **risk financing** is a mechanism that provides cash flows that are contingent upon the occurrence of an event associated with the actuarial risk and that tend to offset undesirable economic consequences.

Ruin occurs when a financial security system first fails to satisfy all conditions required to remain in operation.

The statement of the conditions under which ruin occurs is called the **ruin criterion**.

The probability that ruin will occur within a specified period of time, as calculated using an actuarial model, is called the **ruin probability** of the financial security system relative to that model within that period of time.

The estimate of the current monetary value of a future cash flow given by a present value model under a fixed assumption regarding future economic conditions is called the *present value* of the cash flow relative to that assumption. Such a fixed assumption regarding future economic conditions is called a **scenario**.

A **scientific model** is an abstract and simplified representation of a given phenomenon. A phenomenon to which Principle 1.1 applies is said to display **statistical regularity**. A model satisfying Principle 1.2 is called a **stochastic model**.

The rules used for assigning risks to risk classes are called **underwriting rules**.

A mathematical model is said to be **valid within a specified degree of accuracy** relative to certain observed results if it reproduces these results within that degree of accuracy.

The process of determining the actuarial value of a financial security system is called a **valuation**.

PRACTICE GUIDE ON REPORTING UNDER PHILIPPINE ACCOUNTING STANDARD NO. 19 (PAS 19)

(Effective March 4, 2008)

Background

The Accounting Standards Council has prescribed the use of Philippine Accounting Standard No. 19 in accounting for the costs of providing retirement benefits for employees of an enterprise. Much of required information on the accounting for defined benefit plans will have to be supplied by actuaries.

Purpose

This Practice Guide is intended to provide valuation and reporting guidelines to practitioners rendering actuarial valuation reports under PAS 19. By doing so, it aims establishing a common understanding by actuaries of PAS 19 requirements. This Guide should complement the ASP's Standards of Actuarial Practice on the Valuation of Retirement Plans rather than replace it.

Valuation method

PAS 19 specifically requires the use of the Projected Unit Credit Method in the valuation of long-term and post-employment defined benefits. Such imposition, however, should not constrain the actuary in choosing other methods for use in funding valuations. It is quite possible, therefore, that the actuary will perform separate valuations for accounting and funding involving a single defined benefit plan.

Ancillary Benefits

Local defined benefit retirement plans often contain benefits for other modes of employee separation such as resignation, death and disability. If these benefits can be classified as defined benefits also, they should be treated as post-employment benefits and valued using the Projected Unit Credit Method also.

Sometimes, a defined benefit retirement plan will contain provisions for involuntary separation (e.g. retrenchment or redundancy). Such benefits should generally be considered as termination benefits rather than post-employment benefits if it is the employer's action which gives rise to the liability rather than the employee's service. One way to test this is the certainty of payment. If the benefit is certain to be paid and only the timing is uncertain, then it should be considered as a post-employment benefit. However, if the benefit is not certain to be made, then it should be considered as a termination benefit.

Termination benefits are reported as expense and liability when and only when the enterprise is demonstrably committed to terminate the employment of employees prior to normal retirement or provide termination benefits as a result of an offer made in order to encourage voluntary redundancy. While such benefits may be reported as part of the plan provisions, termination benefits should not be included in the valuation and this fact must be clearly disclosed in the valuation report. Please note that the occurrence of terminations within the year may or may not cause a curtailment adjustment in the postemployment benefit expense for the year.

Discount rate

Paragraph 78 of PAS 19 states that: "The rate used to discount post-employment benefit obligations (both funded and unfunded) shall be determined by reference to market yields at the balance sheet date on high quality corporate bonds. In countries where there is no deep market in such bonds, the market yields (at balance sheet date) on government bonds shall be used. The currency and term of the corporate sbonds or government bonds shall be consistent with the currency and estimated term of the post-employment benefit obligations."

Since there is no deep corporate bond market in the Philippines, PAS 19 effectively mandates the use of yields on government bonds for discounting post-employment benefit obligations. The most readily available source of such information is the Philippine Dealing & Exchange Corp. or PDEx which publishes Treasury reference rates in its website (www.pdex.com.ph). Actual done rates are also available at the Bureau of Treasury website (www.treasury.gov.ph). Unfortunately, done rates are available only occasionally and even when they are, they are not given for all durations. However, if and when done rates are available, they are the preferred rates to use. In any case, the gross rate should be used and no adjustment for any tax effects should be applied in discounting a liability.

The approach that best meets the requirement of PAS 19 would be to estimate the duration of each obligation and apply the appropriate discount rate to that obligation. However, this would entail the use of several discount rates in a single plan valuation. To cut down on the effort (and expense) of performing such detailed work, it is acceptable to use a single discount rate. (PAS 19 supports the use of single average discount rates.) The recommended approach for such an option would be to use a weighted average discount rate where the weights are the expected benefit payments. A less precise but still acceptable approach would be to get the weighted average duration (still using expected benefit payments as weights) and use the discount rate corresponding to such average duration. Since government bond yields are quoted only for specific tenors, it may be necessary to interpolate the rates if the duration of a particular benefit payment does not coincide with the available rates.

Realistic Assumption-Setting

The objective of PAS 19 is to present a fair value of both plan liabilities and assets. As such assumptions in the valuations used must be individually and collectively realistic. Demographic and financial assumptions which may materially affect the valuation must be made and included in the valuation. Conservatism may not be used as an excuse to exclude such assumptions.

Plan Assets

PAS 19 requires the use of fair values in reporting plan assets. Therefore, actuaries must ensure that they work only with such values in reporting plan assets under PAS 19. Smoothened asset values which are sometimes used in funding valuations are not considered fair values. It must also be noted that PAS 19 excludes unpaid contributions and shares of stocks of the plan sponsor that are not publicly traded from the definition of plan assets.

Asset Ceiling

PAS 19 limits the reporting of a defined benefit asset to the lower of (a) the amount determined under paragraph 54 and (b) the total of:

i. any cumulative unrecognized net actuarial losses and past service cost and
ii. the present value of any economic benefits available in the form of refunds from
iii. the plan or reductions in future contributions to the plan.

A refund is available to an entity only where it has an unconditional right to the refund:

i. during the life of the plan, without assuming that the plan liabilities must be settled in order to obtain the refund; or
ii. assuming the gradual settlement of plan liabilities over time until all members have left the plan; or
iii. assuming the full settlement of plan liabilities in a single event.

An entity should measure the economic benefit available as the amount of surplus at balance sheet date that it has a right to receive as a refund, less any associated costs.

Economic benefit in the form of a reduction in future contributions must be measured as the lower of the surplus and the present value of future service costs to the entity over the shorter of the expected life of the plan and the expected life of the entity.

For more guidance in the determination and measurement of the economic benefits arising from refunds or reduction in future contributions, practitioners are encouraged to refer to IFRIC 14.

Reporting Requirements

PAS 19 requires several disclosures. As a minimum, practitioners should include in their PAS 19 valuation reports the following actuarial items:

i. present value of the defined benefit obligation (active employees/pensioners)
ii. present value of the defined benefit obligation (terminated employees – for use in case of curtailments)
iii. present value of the defined benefit obligation (settled portion– for use in case of settlements)
iv. current service cost
v. interest cost
vi. expected return on assets
vii. past service cost (segregated into vested and non-vested components)
viii. actuarial gains/losses on plan assets and liabilities
ix. experience adjustments and effects of changes in actuarial assumptions expressed either as amounts or percentages (of plan liabilities or assets as the case may be)
x. average expected working life of employees (for use in amortizing gains/losses if corridor approach is used)
xi. average expected term of obligation (for use when single weighted discount rate is used)
xii. present value of economic benefit (for use in asset ceiling test)
xiii. all actuarial assumptions used

These are in addition to the required reporting information prescribed under the ASP Standards of Actuarial Practice on the Valuation of Retirement Plans.

Practitioners are encouraged (but not required) to include all the other disclosure requirements of PAS 19 such as:

i. amounts to be recognized in balance sheet (reconciliation of funded status)
ii. amounts to be recognized in the income statement
iii. amounts to be recognized in statement of realized earnings and expenses (SORIE)

iv. movement in the net liability (asset) recognized in the balance sheet
v. movement of the present value of obligation during the year
vi. movement of the plan asset balance during the year
vii. recognition of actuarial gains/losses
viii. effects of curtailments/settlements
ix. asset ceiling test

Practitioners reporting the above accounting information must ensure that they are knowledgeable with respect to the accounting requirements of PAS 19.

STANDARDS OF PRACTICE FOR THE VALUATION OF RETIREMENT PLANS

(Adopted November 18, 2005)

These Guidelines replaced the following documents:

(i) Recommendations for Valuation of Retirement Plans (November, 1991)

I. GENERAL

1. **Scope**. These Standards of Actuarial Practice (henceforth referred to as "Standards") set forth guidelines for members who perform actuarial valuations of defined benefit retirement plans covering persons in the Philippines. These Standards apply to:

   a. *Funding* of defined benefit retirement plans;
   b. *Assignment of costs to time periods* for defined benefit retirement plans;
   c. *Magnitude of defined benefit retirement plan obligations,* even for plans which are not funded or expensed on an actuarial basis; and,
   d. *Comparison of actuarial present values* among alternative benefit obligations.

2. **Acknowledgement**. These Standards have been based largely on the Actuarial Standard of Practice # 4 (Measuring Pension Obligations) issued by the Actuarial Standards Board of the American Academy of Actuaries.

3. **Purpose of the Valuation**. Actuarial valuations of retirement plans are performed for a number of purposes. The valuation report must state the purpose for the valuation.

4. **Approximations**. Approximations may be resorted to in cases where it may be advisable to do so as determined by the actuary. However, the use of approximations should not, in the actuary's judgment, materially affect the results of the valuation.

5. **Materiality**. Materiality should be determined in relation to each normal user of the valuation report. A difference is material if knowledge or ignorance of such difference would influence the judgment of the user regarding the actuarial status of the retirement plan, with due regard given to the purpose or the intended use of the calculations.

6. **Documentation**. The actuary should at all times be prepared to support the procedures he followed in the valuation process by means of adequate written records.

7. **Disclosure**. There must be adequate disclosure in a valuation report. Adequate disclosure means that all material and relevant facts concerning the actuarial valuation should be communicated to the users of the valuation report.

8. **Definitions**. Terms used in these Standards have the definitions assigned to them in Appendix I.

II. VALUATION PROCEDURES

1. **Procedures to be followed**. In order to prepare actuarial valuations of retirement plans, the following procedures should be performed:
   a. Select a calculation date;
   b. Determine plan provisions applicable to the calculation;
   c. Gather data necessary for the calculation including participant information and asset information;
   d. Select actuarial assumptions pertinent to the determination of the actuarial present value of benefits applicable to the calculation; and,
   e. Select a procedure to allocate costs to past and future periods. This procedure may include:
      e.1. an actuarial cost method
      e.2. an actuarial asset valuation method
      e.3. an amortization period

2. **Calculation Date**. Cost calculations should be made as of a specific date, with an adjustment for interest if contributions or cost accruals are to be made at a different date.
   a. *Information as of a Different Date.* Asset and participant information at the calculation date may be estimated on the basis of information furnished as of another date.
   b. *Events after the Calculation Date.* The treatment of events that are subsequent to the calculation date and prior to the date of the actuarial communication should be appropriate to the purpose for which the valuation is being performed. Unless the purpose of the calculation requires the inclusion of such events, they need not be reflected until subsequent years. However, the actuary generally should disclose such events if the conclusions which would otherwise be reached would be significantly affected by such eents.

3. **Plan Provisions**. All provisions of the plan adopted and effective on or before the start of the plan year should generally be taken into account in measuring benefit obligations, as should administrative practices with respect to matters not directly addressed in the plan. The treatment of prospective plan changes should be appropriate to the purpose for which the calculation is being performed. In general:
   a. Provisions adopted on or before the calculation date and effective during the plan year should be reflected on at least a pro-rata basis.
   b. Provisions adopted on or before the calculation date which are not effective until future years may, but need not, be reflected in current year funding or cost allocations.
   c. Provisions adopted after the calculation date need not be reflected until the following year.
   d. For purposes of projecting future years' funding or cost allocations, likely future changes in provisions, may, but need not, be reflected.

4. **Asset and Other Required Data**. The actuary should consider the following issues with respect to the quality of information used for calculations:
   a. *Types of Data.* The actuary should obtain at least the following data / information to be able to perform the basic actuarial calculations:

      a.1. Plan participant data

a.2. Retirement fund information
a.3. Retirement plan provisions and pertinent CBA provisions, company policies and Practices
a.4. Copy of the last valuation report, if available

Generally, all participants should be reflected in the actuary's calculations. Under appropriate circumstances, persons below a minimum age / service level may be excluded. Persons who are expected to become participants in the future, whether or not they are yet employed, may be reflected. Appropriate samples may be a satisfactory basis for the calculations.

b. *Hypothetical Data.* It may be appropriate to prepare models or illustrations based on hypothetical data.

c. *Sources of Data and Check Procedures*. The actuary will generally rely on the plan administrator, custodian of the assets of the retirement fund or some other officer of the plan sponsor for the necessary data who, in turn, may refer him to qualified third parties. The actuary should establish suitable check procedures to test the validity and verify the reasonableness of the data. If the actuary is not satisfied with the validity and reasonableness of the information, further inquiry should be made until he is so satisfied.

d. *Accruals and Prepayments*. Accrued contributions or prepayments should be reflected in assets on a basis consistent with the purpose and the reporting period for which costs are being determined, and costs should reflect interest equivalents on those accruals or prepayments.

e. *Insufficient Data*. The actuary should not perform an actuarial calculation if, in his judgment, the information available is substantially less than complete and cannot reasonably be approximated, i.e., there is sufficient uncertainty about the characteristics of the unknown information that would render the results of the calculations inadequate for the intended purpose.

f. *Disclosure*. The actuarial valuation report should mention the date as of which the data was compiled, the sources of the data, and any assumptions made with respect to unavailable information. A summary of statistics regarding plan participants should also be included in the report.

5. **Actuarial Assumptions**. The actuary must consider the following issues in the use of assumptions in his valuations:

a. *Appropriateness*. The actuarial assumptions should reflect the actuary's judgment of future events affecting the retirement program while complying with statutory and other parameters relevant to the purpose of the valuation. The actuarial assumptions should recognize the actual experience of the covered group as well as reflect expected long term trends without giving undue emphasis to recent past experience.

b. *Interrelationships*. Actuarial assumptions should be independently reasonable. The actuary should be satisfied that the assumptions used are consistent and reasonable in the aggregate.

c. *Selection of Assumptions and Factors*. The actuary should make an assumption about every contingency which materially affects the valuation results. A conscious decision should be made to ignore a given contingency where it is appropriate to do so. Some contingencies which the actuary should consider in making assumptions are:

c.1. investment return
c.2. inflation
c.3. salary increases
c.4. government-provided benefits
c.5. post-retirement benefit adjustments
c.6. incidence of retirement
c.7. mortality
c.8. disability
c.9. voluntary termination
c.10. involuntary termination
c.11. administrative expenses
c.12. modes of benefit payment

d. *Effect of Changes on Assumptions*. The actuary should consider that changes in plan design or external circumstances may significantly alter the level and trend of expected future experience. For example, a liberalization of early retirement benefits or external early retirement incentives may make advisable a revision in the assumed incidence of retirement.

e. *Plan-specific Assumptions*. In choosing actuarial assumptions, the actuary should consider not only information on general trends but specific information related to the plan. As a result of this information, the actuary may develop actuarial assumptions which differ from plan to plan or from group to group within a plan.

f. *Past Experience*. Past experience of the covered group is reflected in current costs through actuarial gains and losses. It may also be useful in forming a judgment about future experience. The long-range, prospective nature of benefit costs, however, dictates that the assumptions be based on expected long-term future trends.

g. *Disclosure*. The actuarial assumptions used should be described in the valuation report. Assumptions which in the actuary's judgment could materially affect the valuation but were not made should be disclosed. Assumptions made that do not satisfy this standard should likewise be disclosed. Finally, the report should also disclose the changes in the assumptions since the previous valuation and should indicate the effect of the changes.

6. **Actuarial Cost Methods**. The actuary should consider the following items in selecting and applying actuarial cost methods:

a. *Allocation Process*. The allocation process inherent in an actuarial cost method employs two parameters – pro-ration basis and period. The pro-ration basis is most commonly compensation, service, or a rate (imputed or plan-derived) of benefit accrual. The period is the time interval over which cost is allocated. Allocations may be done on an individual or aggregate basis.

b. *Allocation Methods*. Once the pro-ration basis and period parameters have been selected, an actuarial cost method defines the manner in which the actuarial present value of benefits is allocated over the period. Two fundamentally different ways in which this allocation has historically been made give rise to what can be characterized as the class of benefit allocation actuarial cost methods and the class of cost allocation actuarial cost methods. The primary difference between the two classes is whether the actuarial present value factors are applied before or after the allocation. The benefit allocation actuarial cost methods (primarily the family of unit credit actuarial cost methods) and cost allocation actuarial cost methods are acceptable classes of actuarial cost methods. There is no inherent reason to consider as automatically unacceptable any actuarial cost method that might not be characterizable under either of the two classes.

c. *Acceptable Methods*. An acceptable actuarial cost method should meet the following criteria:

c.1. The period over which the allocation is made for an individual should begin no earlier than the date of employment and not substantially later than the date of entry into the plan (e.g. completion of one year of service and attainment of age 21) and should not extend beyond the last assumed retirement age. Normally, the period of allocation should not end before the end of the period during which the participant is accruing a benefit under the plan. The period could be on an individual or group basis.

c.2. The pro-ration basis by which the allocation is made should usually have a logical relationship to some element of the plan's benefit formula. Acceptable bases include compensation, service, (rate of) benefit accrual, or any reasonable proxy for one or a combination of these. The pro-ration basis could be applied on either an individual or group basis (e.g. the actuarial present value of plan benefits for each individual allocated by that individual's own compensation or the actuarial present
value of plan benefits for the whole active life population allocated by the aggregated compensation).

d. *Relationship between Method and Policy*. Even where a plan sponsor's cost allocation or funding policy for a particular plan is based on an acceptable actuarial cost method, that method will, in most instances, influence the cost allocation or funding decision, but will not determine it. For example, an actuarial cost method's actuarial accrued liability at plan inception may define an unfunded actuarial accrued liability, but it will not define the amortization policy under which that amount is allocated or funded.

e. *Benefit Security*. In many cases, benefit security depends to a significant degree on the accumulation of sufficient plan assets. In these cases, concern about benefit security is an integral part of an actuarial cost method's acceptability as a basis for funding. Methods such as pay-as-you-go and terminal funding may not produce adequate benefit security.

f. *Purpose of the Valuation*. The purpose of valuation should be considered in the choice of the actuarial cost method.

g. *Disclosure*. The actuary should include in the valuation report:

g.1. a clear and concise description of the actuarial cost method;
g.2. changes in the actuarial cost method since the last valuation; and
g.3. the effect of the changes.

7. **Valuation of Assets**. Asset valuation is an integral part of the actuarial valuations of funded plans. In such cases, the valuation of assets and the valuation of liabilities are interdependent and one cannot be considered in isolation from the other.

a. *Selection of Methods*. Since fund assets will be used to support eventual cash flows, their value should reflect realizable amounts in the future. In general, the actuarial value of assets used in the valuation should bear a reasonable relationship to market value. In valuing the fund's assets, the following methods may be used, to the extent consistent with the purposes for which the valuation is being made:

a.1. Market value;

a.2. A method which recognizes the long-term value of the assets in the context of the economic assumptions selected. This method may require smoothing out the effects of short term volatility in market value;

a.3. Amortized value for bonds and other debt instruments; and,

a.4. A method which may involve the direct discounting of the expected investment income from all or some of the assets. The discount rate used should be consistent with the investment return assumption used in determining actuarial present values.

b. *Market Value Not Determinable*. Not all types of assets have a readily determinable current market value. Examples include certain insurance contracts and real estate. If market values are not available with respect to significant portions of the assets, the actuary should disclose this fact and the asset valuation method used for such assets.

c. *Disclosure*. The asset valuation method(s) used should be clearly stated in the valuation report. A comparison of the book and market values of assets, if available, should also be shown. Any changes made in the asset valuation method(s) since the last valuation and the effect of such changes should also be disclosed. Finally, any reliance on third parties as to the asset values must be disclosed.

8. **Amortization – Factors Considered**. Amortization may be required for such things as initial or unfunded actuarial liabilities, actuarial gains and losses and changes in actuarial liabilities due to plan amendments or changes in actuarial assumptions. The pattern of amortization during each selected period should be rational and systematic, such as a level annual peso amount or a level percentage of participants' payroll. The choice of an amortization period or range of periods should reflect:

   a. Any known limitations in the continuing ability of the plan sponsor to fund the plan. For example, consideration should be given to the probable future careers of the firm'sprincipals for the plan of a small professional corporation, or the probable future lifetime of the plan sponsor;
   b. The period over which the sponsor is benefited by the plan provision giving rise to the actuarial present value being amortized;
   c. The existing relationship between assets and actuarial liabilities;
   d. Progress toward meeting cash flow needs or a desired funding goal; and,
   e. Permissible smoothing of costs or contributions.

III. ACTUARIAL CALCULATIONS

1. **Actuarial Present Value of Benefits Accrued to Date**. The actuary may calculate actuarial present values of accrued benefits, where such calculations are supplemental to, and independent of, calculations made under the actuarial cost method used for determining pension cost or benefit recommendations. Frequently, the results of such calculations are compared to available assets as one measure of the funded status of the plan. Such supplemental calculations of actuarial present values would normally fall into three broad categories as set forth in the rest of this subsection. The procedures used to determine the actuarial present value of accrued benefits should reflect the actuary's best judgment as to the most meaningful figure for such actuarial present value in the light of the purposes for which

the calculation is to be used. In presenting the results, the actuary's report should clearly indicate the treatment afforded to matters such as the following:

a. The manner in which benefits are calculated in the case of a plan which limits the number of years that may be credited or which has a non-uniform benefit accrual formula;
b. Whether a projection of future earnings was applied in calculating benefits accrued to the calculations date;
c. Whether recognition was given to any benefits which, if an employee continued in employment, could become payable before normal retirement age with an actuarial present value greater than the actuarial present value of the accrued normal retirement benefit;
d. Whether benefit increases scheduled to occur after retirement were recognized;
e. Whether SSS or Pag-IBIG benefits, under an integrated offset plan, were reflected in full or pro-rated; and,
f. Whether average SSS or Pag-IBIG covered earnings, if applicable under an integrated step-rate plan, were related to past service only or were projected to normalretirement.

2. **Actuarial Present Value of Benefits Payable upon Plan Termination**. Where calculations are required to determine the actuarial present value of benefits payable in the event of a plan termination, the actuary may be required to calculate the actuarial present value of benefits payable for each relevant class of participants in accordance with termination priorities specified in the plan. The actuary should first determine the plan benefits for each covered participant as if the plan were terminating as of the calculation date. The actuary should then calculate the actuarial present value of such benefits by applying actuarial assumptions appropriate to a plan in the process of termination, such assumptions generally being limited to mortality, investment return, retirement age, election of optional forms and expense charges. For a retirement plan, however, that provides for the immediate payment of lump sum benefits upon plan termination, the actuarial present value of benefits payable upon plan termination would simply be the amount that would be payable if the plan were terminated on the calculation date.

3. **Actuarial Present Value of Vested Benefits**. Where calculations are required in the case of an active plan to determine the actuarial present value of vested benefits, the actuary should calculate the accrued benefit as of the calculation date. This benefit should then be multiplied by the vesting percentage defined under the plan. The actuary should then calculate the actuarial present value of such benefits by applying factors based on actuarial assumptions applicable to an active plan situation. The assumed investment return should be consistent with the plan's actuarial asset valuation method. The calculations should be made in accordance with the following procedures, to the extent they are applicable:

a. No recognition should be given to any benefit to which a covered employee could, only through advancement in service or age while in active employment, become entitled.
b. Cost-of-living or other benefit increases specified by the plan and assumed to occur after retirement, death, or other termination should be recognized.
c. There should be no projection of SSS or Pag-IBIG benefits or SSS or Pag-IBIG covered earnings, other than as specified by the plan for the purpose of determining the benefit of a covered employee who retires or terminates service on the calculation date.

4. **Actuarial Present Value of Accrued Benefits under an Active Plan**. Under many retirement plans, benefits accrued to the calculation date are directly computed on the basis of historical employee records. In such cases the actuary generally should calculate the actuarial present value of accrued benefits on the basis of such directly computed accrued benefits. A substantial number of retirement plans contain features such that an actuary may wish to employ an alternative calculation. Examples of such plans are:

    a. Plans with maximum credited service provisions or other non-uniform benefit accrual formulas;
    b. Plans with SSS or Pag-IBIG offset provisions where credited service used to compute such offsets is limited to a shorter period of credited service than that used to compute the gross pension benefit;
    c. Plans providing early retirement benefits with an actuarial present value greater than the actuarial present value of the accrued benefit to which the participant would be entitled commencing at normal retirement date;
    d. Plans with automatic cost-of-living increases; and,
    e. Contributory plans under which the plan's accrued benefit may have an actuarial present value less than that of accumulated employee contributions.

5. **Approximations**. The actuary may use appropriate approximations consistent with the intent of these Standards. Approximations, including the use of samples, are only acceptable if the results can reasonably be expected not to differ significantly from the results of detailed calculations, given the intended use of the calculations.

6. **Margins**. Margins may be imputed in the actuarial valuation of retirement plans for the following reasons:

    a. Insufficiency / unavailability of data;
    b. Unreliability of data;
    c. Use of approximations;
    d. Anticipated fluctuations in assets and liabilities;
    e. Uncertainty in the assumptions; and,
    f. Anticipated benefit improvements.

    It must, however, be understood by the actuary that margins are meant to be temporary and that maximum effort should be exerted to obviate the need for margins in future valuations. The actuary should identify in the valuation report the margins imputed in the calculations, their purpose and any changes made since the last valuation.

7. **Adjustment of Prior Calculation**. In deciding whether an approximation based on a prior calculation may be used in lieu of a detailed calculation, the actuary should consider such items as:

    a. Changes in number of participants;
    b. Changes in covered payroll;
    c. Changes in the average age and service of participants;
    d. Amendments to plan provisions;
    e. Changes in external factors; and,
    f. Length of period since a detailed actuarial valuation was performed.

    In approximating results based on prior actuarial calculations, the actuary should project assets and actuarial liabilities in a consistent manner.

8. **Ancillary Benefits**. In deciding whether an approximation may be used in lieu of a detailed calculation for ancillary benefits, the actuary should consider such items as:

   a. The magnitude of the benefit and its associated actuarial liabilities; and,
   b. The pattern of cost allocation in the approximation.

IV. ACTUARY'S RESPONSIBILITY

A fundamental consideration in a funding program is the extent to which assets can reasonably be expected to ultimately exceed or fall short of the value of accrued benefits. This standard indicates that the actuary does not have complete responsibility for each element of the pension funding and cost allocation decisions, but shares responsibility for certain elements with the plan sponsor, attorney, accountant, and statutory authorities. Nevertheless, the actuary remains responsible for assessing the implications of the overall results, in terms of short- and long-range benefit security and expected cost progression. The extent to which benefits of a plan should be funded in advance of the date when they must be paid is a decision to be made by the plan sponsor, with the assistance of the actuary, in light of many factors, including regulatory requirements, collective bargaining considerations and alternative uses of money.

V. REPORTING REQUIREMENTS

1. **General Requirements**. The actuary should prepare an actuarial valuation report containing sufficient information so that it will be clearly understood and properly interpreted by its intended user. The report should be so written as to permit another actuary to form an objective appraisal of the valuation. It must contain all actuarially computed items necessary for the purposes for which the valuation is made.

2. **Specific Requirements**. In addition to the disclosure items set out in the preceding portions of these Standards, every actuarial valuation report should contain:

   a. The name, signature and professional affiliation of the actuary responsible for its content;
   b. The name of the person or firm retaining the actuary for the report;
   c. An outline of the benefits being valued and of any benefits not considered in the actuarial calculations;
   d. The valuation date or the effective date of the calculations;
   e. A statement of the findings, conclusions, or recommendations necessary to satisfy the purpose of the valuation;
   f. A statement of opinion by the actuary regarding:

      f.1. the sufficiency and reliability of the data
      f.2. the adequacy and appropriateness of assumptions
      f.3. adherence to sound actuarial principles in the choice of methods for the valuation of assets and liabilities

   g. A statement by the actuary that the report has been prepared and opinions given are in accordance with generally accepted actuarial principles. (This statement can only be given if the actuary has followed the principles set out in these Standards);
   h. A disclosure of deviations from these Standards, if any, in the preparation of the

material presented in the actuarial valuation report; and,

i. A disclosure of any facts which, if not disclosed, might reasonably be expected to lead to an incomplete understanding of the report.

3. **Actuarial Communications Related to Accounting Standards**. The Accounting Standards Council prescribes the accounting standards for use in accounting for the costs of providing retirement benefits for employees in the employer's financial statements. An actuarial communication for purposes of these accounting standards must be identified as such. The results of calculations prepared for other purposes (e.g. funding, plan reporting, government requirements, plan terminations, etc.) are likely to be significantly different and the actuary should disclose this fact.

Appendix I – DEFINITION OF TERMS

Accrued Benefit or Accumulated Plan Benefit

The amount of an individual's benefit (whether or not vested) as of a specified date, determined in accordance with the terms of a retirement plan and based on compensation (if applicable) and service to that date.

Actuarial Accrued Liability, Actuarial Liability, Accrued Liability, or Actuarial Reserve

That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of retirement plan benefits and expenses which is not provided for by future Normal Costs.

Note: The presentation of an Actuarial Accrued Liability should be accompanied by reference to the Actuarial Cost Method used; for example, by hyphenation ("Actuarial Accrued Liability – XYZ," where "XYZ" denotes the Actuarial Cost Method) or by a footnote.

Actuarial Assumptions

Assumptions as to the occurrence of future events affecting benefit costs, such as: mortality, withdrawal, disability and retirement; changes in compensation; rates of investment earnings and asset appreciation or depreciation; procedures used to determine the Actuarial Value of Assets; characteristics of future entrants for Open Group Actuarial Cost Methods; and other relevant items.

Actuarial Cost Method or Funding Method

A procedure for determining the Actuarial Present Value of retirement plan benefits and expenses and for developing an actuarially equivalent allocation of such value to time periods, usually in the form of a Normal Cost and an Actuarial Accrued Liability.

Note: An Actuarial Cost Method is understood to be a Closed Group Actuarial Cost Method unless otherwise stated.

Actuarial Gain (Loss) or Experience Gain (Loss)

A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two Actuarial Valuation dates, as determined in accordance with a particular Actuarial Cost Method.

Note 1: The effect on the Actuarial Accrued Liability and/or the Normal Cost resulting from changes in the Actuarial Assumptions, the Actuarial Cost Method or retirement plan provisions should be described as such, not as an Actuarial Gain (Loss).

Note 2: The manner in which the Actuarial Gain (Loss) affects future Normal Cost and Actuarial Accrued Liability allocations depends upon the particular Actuarial Cost Method used.

Actuarial Present Value

The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions. For purposes of these Standards, each such amount or series of amounts is:

a. adjusted for the probable financial effect of certain intervening events (such as changes in compensation levels, SSS or Pag-IBIG, marital status, etc.);
b. multiplied by the probability of the occurrence of an event (such as survival, death, disability, termination of employment, etc.) on which the payment is conditioned; and,
c. discounted according to an assumed rate (or rates) of return to reflect the time value of money.

Actuarial Valuation

The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a retirement plan.

Actuarial Value of Assets or Valuation Assets

The value of cash, investments and other property belonging to a retirement plan, as used by the actuary for the purpose of an Actuarial Valuation.

Note: The statement of Actuarial Assumptions should set forth the particular procedures used to determine this value.

Actuarially Equivalent

Of equal Actuarial Present Value, determined as of a given date with each value based on the same set of Actuarial Assumptions.

Amortization Payment

That portion of the retirement plan contribution which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability or the Unfunded Frozen Actuarial Accrued Liability.

Normal Cost or Normal Actuarial Cost

That portion of the Actuarial Present Value of retirement plan benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method.

Note 1: The presentation of Normal Cost should be accompanied by reference to the Actuarial Cost Method used.

Note 2: Any payment in respect of an Unfunded Actuarial Accrued Liability is not part of Normal Cost (see Amortization Payment).

Note 3: For retirement plan benefits which are provided in part by employee contributions, Normal Cost refers to the total of employee contributions and employer Normal Cost unless otherwise specifically stated.

One-Year Term Cost

The Actuarial Present Value, as of a valuation date, of all benefits expected to become payable in the future as a result of an event or events expected to occur during a valuation year.

Open Group / Closed Group

Terms used to distinguish between two classes of Actuarial Cost Methods. Under an Open Group Actuarial Cost Method, Actuarial Present Values associated with expected future entrants are considered; under a Closed Group Actuarial Cost Method, Actuarial Present Values associated with future entrants are not considered.

Pay-As-You-Go

A method of financing a retirement plan under which the contributions to the plan are generally made at about the same time and in about the same amount as benefit payments and expenses becoming due.

Projected Benefits

Those retirement plan benefit amounts which are expected to be paid at various future times under a particular set of Actuarial Assumptions, taking into account such items as the effect of advancement in age and past and anticipated future compensation and service credits. That portion of an individual's Projected Benefit allocated to service to date, determined in accordance with the terms of a retirement plan and based on future compensation as projected to retirement, is called the Credited Projected Benefit.

SSS or Pag-IBIG Benefits

Mandated benefits from the two public retirement plans: Social Security System and the Home Development Mutual Fund, respectively.

Terminal Funding

A method of funding a retirement plan under which the entire Actuarial Present Value of benefits for each individual is contributed to the plan's fund at the time of withdrawal, retirement or benefit commencement.

Unfunded Actuarial Accrued Liability, or Unfunded Actuarial Reserve

The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets.

Note: This value may be negative in which case it may be expressed as a negative Unfunded Actuarial Accrued Liability, the excess of the Actuarial Value of Assets over the Actuarial Accrued Liability, or the Funding Excess.

Unfunded Frozen Actuarial Accrued Liability or Unfunded Frozen Actuarial Liability

An Unfunded Actuarial Accrued Liability which is not adjusted ("frozen") from one Actuarial Valuation to the next to reflect Actuarial Gains (Losses) under certain Actuarial Cost Methods. Generally, this amount is adjusted by any increments or decrements in Actuarial Accrued Liability due to changes in retirement plan benefits or Actuarial Assumptions subsequent to the date it is frozen. Adjustments are made from one Actuarial Valuation to the next to reflect the addition of interest and deduction of Amortization Payments.

Appendix II – ACTUARIAL COST METHODS

Unit Credit Actuarial Cost Method

A method under which the benefits (projected or unprojected) of each individual included in an Actuarial Valuation are allocated by a consistent formula to valuation years. The Actuarial Present Value of benefits allocated to a valuation year is called the Normal Cost. The Actuarial Present Value of benefits allocated to all periods prior to a valuation year is called the Actuarial Accrued Liability.

Note 1: The description of this method should state the procedures used, including:
- *a. How benefits are allocated to specific time periods;*
- *b. The procedures used to project benefits, if applicable; and,*
- *c. A description of any other method used to value a portion of the retirement plan's benefits.*

Note 2: Under this method, the Actuarial Gains (Losses), as they occur, generally reduce (increase) the Unfunded Actuarial Accrued Liability.

Entry Age Actuarial Cost Method or Entry Age Normal Actuarial Cost Method

A method under which the Actuarial Present Value of the Projected Benefits of each individual included in an Actuarial Valuation is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit age(s). The portion of this Actuarial Present Value allocated to a valuation year is called the Normal Cost. The portion of this Actuarial Present Value not provided for at a valuation date by the Actuarial Present Value of future Normal Costs is called the Actuarial Accrued Liability.

Note 1: The description of this method should state the procedures used, including:
- *a. Whether the allocation is based on earnings or service;*
- *b. Where aggregation is used in the calculation process;*
- *c. How entry age is established;*
- *d. What procedures are used when different benefit formulas apply to various periods of service; and,*
- *e. A description of any other method used to value a portion of the retirement plan's benefits.*

Note 2: Under this method, the Actuarial Gains (Losses), as they occur, reduce (increase) the Unfunded Actuarial Accrued Liability.

Attained Age Actuarial Cost Method

A method under which the excess of the Actuarial Present Value of Projected Benefits over the Actuarial Accrued Liability in respect of each individual included in an Actuarial Valuation is allocated on a level basis over the earnings or service of the individual between the valuation date and assumed exit. The portion of this Actuarial Present Value which is allocated to a valuation year is called the Normal Cost. The Actuarial Accrued Liability is determined using the Unit Credit Actuarial Cost Method.

Note 1: The description of this method should state the procedures used, including:
- *a. Whether the allocation is based on earnings or service;*
- *b. Where aggregation is used in the calculation process; and,*

c. A description of any other method used to value a portion of the retirement plan's benefits.

Note 2: Under this method, the Actuarial Gains (Losses), as they occur, reduce (increase) the Unfunded Actuarial Accrued Liability.

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Note 3: The differences which regularly arise between the Normal Cost under this method and the Normal Cost under the Unit Credit Actuarial Cost Method will affect the determination of future Actuarial Gains (Losses).

Aggregate Actuarial Cost Method

A method under which the excess of the Actuarial Present Value of Projected Benefits of the group included in an Actuarial Valuation over the Actuarial Value of Assets is allocated on a level basis over the earnings or service of the group between the valuation date and assumed exit. This allocation is performed for the group as a whole, not as a sum of individual allocations. That portion of the Actuarial Present Value allocated to a valuation year is called the Normal Cost. The Actuarial Accrued Liability is equal to the Actuarial Value of Assets.

Note 1: The description of this method should state the procedures used, including:
- *a. Whether the allocation is based on earnings or service;*
- *b. How aggregation is used in the calculation process; and,*
- *c. A description of any other method used to value a portion of the retirement plan's benefits.*

Note 2: Under this method, the Actuarial Gains (Losses), as they occur, reduce (increase) future Normal Costs.

Frozen Entry Age Actuarial Cost Method

A method under which the excess of the Actuarial Present Value of Projected Benefits of the group included in an Actuarial Valuation, over the sum of the Actuarial Value of Assets plus the Unfunded Frozen Actuarial Accrued Liability, is allocated on a level basis over the earnings or service of the group between the valuation date and assumed exit. This allocation is performed for the group as a whole, not as a sum of individual allocations. The Frozen Actuarial Accrued Liability is determined using the Entry Age Actuarial Cost Method. The portion of this Actuarial Present Value allocated to a valuation year is called the Normal Cost.

Note 1: The description of this method should state the procedures used, including:
- *a. Whether the allocation is based on earnings or service;*
- *b. How aggregation is used in the calculation process; and,*
- *c. A description of any other method used to value a portion of the retirement plan's benefits.*

Note 2: Under this method, the Actuarial Gains (Losses), as they occur, reduce (increase) future Normal Costs.

Frozen Attained Age Actuarial Cost Method

A method under which the excess of the Actuarial Present Value of Projected Benefits of the group included in an Actuarial Valuation, over the sum of the Actuarial Value of Assets plus the Unfunded Frozen Actuarial Accrued Liability, is allocated on a level basis over the earnings or service of the group between the valuation date and assumed exit. This allocation is performed for the group as a whole, not as a sum of individual allocations. The Unfunded Frozen Actuarial Accrued Liability is determined using the Unit Credit Actuarial Cost Method. The portion of this Actuarial Present Value allocated to a valuation year is called the Normal Cost.

Note 1: The description of this method should state the procedures used, including:
a. Whether the allocation is based on earnings or service;
b. How aggregation is used in the calculation process; and
c. A description of any other method used to value a portion of the retirement plan's benefits.

Note 2: Under this method, the Actuarial Gains (Losses), as they occur, reduce (increase) future Normal Costs.

Individual Level Actuarial Cost Method or Individual Level Premium Actuarial Cost Method

A method under which the Actuarial Present Value of each increment of an individual's Projected Benefits is allocated on a level basis over the future earnings or service of the individual between the age at which such increment is first recognized and the exit age(s). The portion of this Actuarial Present Value allocated to a valuation year is called the Normal Cost. Each individual's portion of the Actuarial Accrued Liability should be determined on a consistent basis, usually as the retrospective accumulation of the individual's prior Actuarial Accrued Liability and prior Normal Cost, using the valuation Actuarial Assumptions.

Note 1: The description of this method should state the procedures used, including:
a. Whether the allocation is based on earnings or service; and
b. A description of any other method used to value a portion of the retirement plan's benefits.

Note 2: Under this method, Actuarial Gains (Losses), as they occur, result in amortization credits (debits) which offset (supplement) Normal Cost. Increases (decreases) in Projected Benefits from one valuation date to the next usually produce Normal Cost increments (decrements) rather than Actuarial Losses (Gains).

Individual Spread Gain Actuarial Cost Method or Individual Aggregate Actuarial Cost Method

A method under which the Actuarial Present Value of each increment of an individual's Projected Benefits is allocated on a level basis over the future earnings or service of the individual between the age at which such increment is first recognized and the exit age(s). The portion of this Actuarial

Present Value allocated to a valuation year is called the Normal Cost. The Actuarial Value of Assets is deemed to be assigned to individuals on a reasonable and consistent basis; for example, each individual's share may be the accumulation of his or her prior Normal Costs and any prior Actuarial Gains (Losses) allocated to the individual. Actuarial Gains (Losses) are allocated to individuals in proportion to the assigned Actuarial Value of Assets, or on any other reasonable and consistent basis. The Actuarial Accrued Liability for an individual equals the assigned portion of the Actuarial Value of Assets.

Note 1: The description of this method should state the procedures used, including:
a. Whether the allocation is based on earnings or service; and
b. A description of any other method used to value a portion of the retirement plan's benefits.

Note 2: Under this method, the Actuarial Gains (Losses), as they occur, reduce *(increase) future Normal Costs.*

Note 3: This method has the effect of applying the Aggregate Actuarial Cost Method separately for each individual

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Projection Actuarial Cost Method or Forecast Actuarial Cost Method

A method under which the excess of the Actuarial Present Value of the sum of Projected Benefit Payments for a specified period plus a funding objective as of the end of the period over the Actuarial Value of Assets is allocated on a level basis over the earnings or service of the group during the specified period, including earnings or service for any future entrants assumed. The allocation is performed for the group as a whole, not as a sum of individual allocations. The portion of this Actuarial Present Value allocated to a valuation year is called the "Annual Cost Allocation."

Note 1: The description of this method should:

a.Explain the funding objective, and describe any anticipated benefit increases which have been taken into account;

b.Specify the period involved, and any scheduled changes to that period for future valuations;

c.State the procedure used to allocate the excess and whether the allocation is based on earnings or service; and,

d.State the Actuarial Cost Method to be used to determine future allocations when the end of the specified period is reached.

Note 2: The funding objective will usually be expressed as the Actuarial Accrued Liability as projected to exist under another Actuarial Cost Method at the end of the specified period.

Note 3: Under this method, Actuarial Gains (Losses), as they occur, reduce (increase) the Annual Cost Allocation.

Note 4: Only a Projection Actuarial Cost Method with an Open Group assumption should be so labeled; if an Open Group assumption is used with any other Actuarial Cost Method, the method should be named and the Open Group assumption described.

RECOMMENDATIONS FOR VALUATION OF RETIREMENT PLANS

(Adopted November 22, 1991)

I. INTRODUCTION

1. Scope. These recommendations set forth guidelines for members who perform actuarial valuations of defined benefit retirement plans covering persons in the Philippines.

2. Approximations. Approximations may be resorted to in cases where it may be advisable to do so as determined by the actuary. However, the use of approximations should not, in the actuary's judgment, materially affect the results of the valuation.

3. Materiality. Materiality should be determined in relation to each normal user of the valuation report. A difference is material if knowledge or ignorance of such difference would influence the judgment of the user regarding the actuarial status of the retirement plan, with due regard given to the purpose or the intended use of the calculations.

4. Documentation. The actuary should at all times be prepared to support the procedures he/she followed in the valuation process by means of adequate written records.

5. Disclosure. There must be adequate disclosure in a valuation report. Adequate disclosure means that all material and relevant facts concerning the actuarial valuation should be communicated to the users of the valuation report.

II. DATA AND OTHER INFORMATION

1. Types of Data. The actuary should obtain at least the following data/information to be able to perform the basic actuarial calculations:

   (a) plan participant data
   (b) retirement fund information
   (c) retirement plan provisions and pertinent CBA provisions, company policies and practices
   (d) copy of the last valuation report, if available

2. Sources of Data and Check Procedures. The actuary will generally rely on the plan administrator or some other officer of the plan sponsor for the necessary data who, in turn, may refer him/her to qualified third parties. The actuary should establish suitable check procedures to test the validity and verify the reasonableness of the data. If the actuary is not satisfied with the validity and reasonableness of the information, further inquiry should be made until he/she is so satisfied.

3. Insufficient Data. The actuary should not perform an actuarial calculation if, in his judgment, the information available is substantially less than complete and cannot reasonably be approximated, i.e., there is sufficient uncertainty about the characteristics of the unknown information that would render the results of the calculations inadequate for the intended purpose.

4. Disclosure. The actuarial valuation report should mention the date as of which the data was compiled, the sources of the data, and any assumptions made with respect to unavailable information. A summary of statistics regarding plan participants should also be included in the report.

III. ASSET VALUATION

1. Significance. Asset valuation is an integral part of the actuarial cost calculation. The valuation of assets and the valuation of liabilities are interdependent and one cannot be considered in isolation from the other.

2. Reliance on Third Parties. The actuary will generally rely on the custodian of the assets of the retirement fund or some other third party for information regarding fund assets. Although the actuary will not be solely responsible for the asset values, he/she should be satisfied with the validity and reasonableness of the information before such can be used in the actuarial report.

3. Selection of Methods. Since fund assets will be used to support eventual cash flows, their value should reflect realizable amounts in the future. In general, the actuarial value of assets used in the valuation should bear a reasonable relationship to market value. In valuing the fund's assets, the following methods may be used:

   (a) Market value;

   (b) A method which recognizes the long-term value of the assets in the context of the economic assumptions selected. This method may require smoothing out the effects of short term volatility in market value;

   (c) Amortized value for bonds and other debt instruments; and

   (d) A method which may involve the direct discounting of the expected investment income from all or some of the assets. The discount rate used should be consistent with the investment return assumption used in determining actuarial present values.

4. Disclosure. The asset valuation method(s) used should be clearly stated in the valuation report. A comparison of the book and market values of assets, if available, should also be shown. Any changes made to the asset valuation method(s) since the last valuation and the effect of such changes should also be disclosed.

IV. ACTUARIAL ASSUMPTIONS

1. Appropriateness. The actuarial assumptions should reflect the actuary's judgment of future events affecting the retirement program. The actuarial assumptions should recognize the actual experience of the covered group as well as reflect expected long term trends without giving undue emphasis to recent past experience.

2. Interrelationships. Preferably, actuarial assumption should be independently reasonable. The

actuary should be satisfied that the assumptions used are consistent and reasonable in the aggregate. However, the actuary may choose to use one or more assumptions which he/she does not consider independently reasonable as long as compensating adjustments are made in related assumptions. In such case, the results of the valuation should not materially differ from one where independently reasonable assumptions have been used.

3. Selection of Assumptions and Factors. The actuary should make an assumption about every contingency which materially affects the valuation results. A conscious decision should be made to ignore a given contingency where it is appropriate to do so. Some contingencies which the actuary should consider in making assumptions are:

   (a) investment return
   (b) inflation
   (c) salary increases
   (d) government-provided benefits
   (e) post-retirement benefit adjustments
   (f) incidence of retirement
   (g) mortality
   (h) disability
   (i) voluntary termination
   (j) involuntary termination
   (k) family composition
   (l) administrative expenses
   (m) modes of benefit payment

4. Disclosure. The actuarial assumptions used should be described in the valuation report. Assumptions which in the actuary's judgment could materially affect the valuation but were not made should be disclosed. Finally, the report should also disclose the changes in the assumptions since the previous valuation and should indicate the effect of the changes.

V. ACTUARIAL COST METHODS

1. Selection of Method. The purpose of valuation should be considered in the choice of the actuarial cost method. Calculations may be performed for a number of purposes, among them:

   (a) funding of the plan in order to accumulate sufficient assets to provide for eventual benefit payments;

   (b) accounting for the costs of the plan to properly allocate costs to specific time period; and

   (c) allocation of plan assets in case of plan termination, company merger or spin-off.

2. Actuarial Cost Methods for Funding. The main purpose of funding is to provide security of the benefit rights of the plan participants. The actuary should always bear this purpose in mind as well as the plan sponsor's budgetary constraints in considering the actuarial method and in formulating recommendations on the level of funding. For example, the actuary should consider projecting salaries in the case of final-pay or final-average-pay plans.

If the actual level of funding exceeds or falls short of the desired level, the actuary should recommend an appropriate period for the amortization of such excess or shortfall.

The actuary should explain to the plan sponsor the effect of the selected method on the security of benefits and on the amount of current and future contributions.

3. Actuarial Valuation for Accounting Purposes. The actuary should use an actuarial cost method which is consistent with the specified accounting objective. The actuarial cost method should provide for a reasonable and consistent allocation of costs between years of operations of the plan sponsor.

4. Actuarial Valuation for Purposes of Allocating Assets. Allocation of plan assets may be needed in case of plan wind-ups, plan reorganization, or sale, purchase, or reorganization of the plan sponsor. The actuary should consider the purpose of allocating a plan's assets when choosing an actuarial cost method.

   Factors which the actuary should consider in formulating his/her recommendations include:

   (a) the provisions of the retirement plan;
   (b) the desires of the plan sponsor;
   (c) the equity among various employee groups; and
   (d) the agreement between the parties concerned.

5. Disclosure. The actuary should include in the valuation report:

   (a) a clear and concise description of the actuarial cost method;
   (b) changes in the actuarial cost method since the last valuation; and
   (c) the effect of the changes.

VI. MARGINS

1. Reasons for Margins. Margins may be imputed in the actuarial valuation of retirement plans for the following reasons:

   (a) insufficiency/unavailability of data;
   (b) unreliability of data;
   (c) use of approximations;
   (d) anticipated fluctuations in assets and liabilities;
   (e) uncertainty in the assumptions; and
   (f) anticipated benefit improvements.

   It must however be understood by the actuary that margins are meant to be temporary and that maximum effort should be exerted to obviate the need for margins in future valuations.

2. Disclosure. The actuary should identify in the valuation report the margins imputed in the calculations, their purpose and any changes made since the last valuation.

VII. REPORTING REQUIREMENTS

1. General Requirements. The actuary should prepare an actuarial valuation report containing sufficient information so that it will be clearly understood and properly interpreted by its intended user. The report should be so written as to permit another actuary to form an objective appraisal of the valuation.

2. Specific Requirements. In addition to the disclosure items set out in the preceding portions of these Recommendations, every actuarial valuation report should contain:

   (a) the name, signature and professional affiliation of the actuary responsible for its content;

   (b) the name of the person or firm retaining the actuary for the report;

   (c) the purpose which the report is intended to serve;

   (d) an outline of the benefits being valued and of any benefits not considered in the actuarial calculations;

   (e) the valuation date or the effective date of the calculations;

   (f) a statement of the findings, conclusions, or recommendations necessary to satisfy the purpose of the valuation;

   (g) a statement of opinion by the actuary regarding:

      i. the sufficiency and reliability of the data
      ii the adequacy and appropriateness of assumptions
      iii. adherence to sound actuarial principles in the choice of methods for the valuation of assets and liabilities

   (h) a statement by the actuary that the report has been prepared and opinions given in accordance with generally accepted actuarial principles. (This statement can only be given if the actuary has followed the principles set out in these Recommendations);

   (i) a disclosure of deviations from these Recommendations, if any, in the preparation of the material presented in the actuarial valuation report; and

   (j) a disclosure of any facts which, if not disclosed, might reasonably be expected to lead to an incomplete understanding of the report.

COMMUNICATIONS RELATED TO STATEMENT OF FINANCIAL ACCOUNTING STANDARDS NO. 24 RETIREMENT BENEFIT COSTS

(Adopted November 11, 1998)

1. Background

The Accounting Standards Council has prescribed the use of Statement of Financial Accounting Standards No. 24 (SFAS 24) in accounting for the costs of providing retirement benefits for employees of an enterprise, in the financial statements of the enterprise. Much of the information required will have to be furnished by actuaries, generally obtainable from the various Actuarial Valuation Method employed by Actuaries. Some of these methods are described in Appendix A of SFAS 24.

2. Purpose

To establish disclosure standards for actuarial communications on retirement benefit plan valuation which may be used in reporting the costs of retirement benefits under SFAS 24, as well as for the other reports or opinions required from the Actuary in relation to retirement plans.

3. Disclosure

An actuarial communication for purposes of SFAS 24 must be identified as such. The results of the calculations prepared for other purposes, such as funding, plan reporting, government requirements, plan terminations, valuation of company liabilities, etc., are likely to be significantly different; the Actuary should disclose the facts.

4. Forms of Disclosure

Following are ways in which disclosure may be achieved:

4.1 A formal disclosure may be included in the SFAS 24 valuation report. Suggested wording is as follows:

> "Actuarial computation under Statement of Financial Accounting Standards No. 24 (SFAS 24) are for purposes of fulfilling employer accounting requirements. The calculations reported herein have been made on a basis consistent with our understanding of SFAS 24. Determinations for purposes other than meeting employer financial accounting requirements may be significantly different from the results reported herein. Accordingly, additional determinations are needed for other purposes, such as judging benefit security at termination or adequacy of funding for an ongoing plan."

4.2 If a multi-purpose valuation is made, the purpose of each valuation may be stated directly in the valuation results.

4.3 The purpose of valuation may be included in the Objective section of the valuation report.

4.4 The disclosure statement may be included in the Actuarial Certification section.

GUIDELINES TO ACTUARIAL PRACTICE IN PRE-NEED
(Adopted October, 2000)

These Guidelines replaced the following documents:
(i) Guidelines to Actuarial Practice in Pre-Need (July 1994)
(ii) Addendum to Sec. VII of the Guidelines (Feb. 1999)
(iii) Minimum Standards of Valuation of Pre-Need Plans (Nov. 1993, amended Aug. 1997)

I. DESCRIPTION OF PRE-NEED PLANS AND DEFINITION OF TERMS

1. Pre-need plans fall under two general classifications: contingent benefit plans and scheduled benefit plans.

   (a) **Contingent benefit** plans refer to such plans where availment of benefitsis contingent upon the occurrence of a contingency, like the death of,or the decision of the planholder to utilize the benefit under his planfor himself or another person of his choice. Examples of these are funeral plans, memorial plans, mortuary plans, interment plans, cremation plans, etc..

   (b) **Scheduled benefit plans** refer to plans where the date of availment of the benefit can be set at inception. These include pension plans, educational plans, travel plans and other similar plans.

2. Pre-need plans can either be fixed value plans or actual cost plans

   (a) **Fixed value plans** are plans where the amount of the benefit is fixed at the time the plan is purchased.

   (b) **Actual cost or traditional plans** are plans where the amount of the benefit is dependent on the cost of such benefit or service at the time of availment.

3. Consideration is the price paid for the purchase of a pre-need plan. Considerations under a plan are paid either in lump sum (or single payment), or in multiple sums (or installment payments).

   (a) **Net consideration** is the consideration for the benefit costs taking into account interest rates and applicable contingency factors.

   (b) **Gross consideration** is the net consideration plus loadings for expenses and profit.

   (c) **Expenses** shall include all expenses for marketing, administration and taxes.

4. **Benefit costs** are costs of actual benefit payments including costs of ancillary benefits.

5. **Ancillary benefits** are benefits promised by the pre-need company other than the main benefit.

6. **In-force plans** are plans for which the pre-need company continues to have liabilities for delivery of benefits or services. These include:

   i. plans whose considerations are still payable
   ii. paid-up plans which are not yet paying out benefits
   iii. paid-up plans which are paying out benefits but have not delivered the full benefits

7. **Lapsed plans** are plans which are delinquent in payment and the delinquency extends beyond the grace period.

8. **Cancelled plans** are plans which have remained delinquent for more than the allowed period of reinstatement counted from the start of delinquency.

9. **Paid-up plans** are plans where the considerations have been fully paid.

10. **Fully-availed plans** are plans where guaranteed services or benefits have been fully delivered.

11. **Availment rate** is the ratio of the plans in force at the beginning of the period availing of the main benefit within the given period to the in-force plans at the beginning of that same period. It may be based on the number of plans or amount of benefit. It is used in the formulations for discounting contingent benefit plans.

12. **Withdrawal rate** is the ratio of the number or amount of plans with expected considerations within a given period that discontinue payment of such considerations during the period to the number or amount of such plans with expected considerations at the beginning of the period.

    For paid-up plans, it is the ratio of the number or amount of unavailed or partially availed plans at the beginning of a period which are terminated at the option of the planholder before the end of the period, to the number or amount of such plans at the beginning of the period.

    Note: A withdrawal results in the termination of the contract and may arise from a lapse or surrender. The withdrawal rate is the sum total of the lapse rate and the surrender rate.

13. **Surrender** refers to the termination of a contract at the option of the planholder in exchange for its termination value at surrender date.

14. **Termination value** is the amount the planholder should be paid upon lapse or surrender prior to availment of full benefits.

15. **Transferability** refers to the provision in the pre-need contract which allows the planholder to transfer his rights to the benefits to another.

II. FORMULATIONS FOR PRESENT AND ACCUMULATED VALUES

1. Actuarial formulations for calculating present values or accumulated values of benefits

or considerations should be based on the fundamental relationships between benefits and expenses, and considerations. At any time formulations are done, the rate or factors used should take into account the updated values for such factors or rates.

2. At the inception of contract, the present value of gross considerations should at least equal the present value of expected benefits and expenses. Assumptions used to establish this relationship should be reasonably applicable and attainable.

III. ASSUMPTIONS REGARDING INTEREST, INFLATION, EXPENSES, WITHDRAWAL AND OTHER CONTINGENCIES

1. Assumptions and methods must be selected and applied with integrity, informed judgment and perspective in relation to the purpose for which the results are intended. Actuarial assumptions should be appropriate to the specific circumstances of the company. They should be based on experience or anticipated experience which is reasonably applicable to the specific business, considering the characteristics of that business and the trends which may reasonably be expected in the future.

2. The interest assumption is the series of yield rates assumed on the funds to be invested over the lifetime of the contracts involved.

   (a) The yield rate includes dividends, interests and rental income and is net of all investment taxes and expenses.

   Any other investment income or losses e.g. capital gain/losses may be included provided there is sufficient justification.

   (b) Factors which may influence interest rate assumptions include the types of allowable investments, cash flow patterns, company investment policies, current trends in company's investment yields, trends in other companies' investment yield if the company's own experience is limited, inflation trends and government policies. The interest assumption used for pricing should be that which is sustainable over the life of the plan, while valuation interest assumption should be that which, at the time of valuation, is justifiably attainable.

   (c) Forecast of investment yield rates should take into account the relation of these rates to the contract durations and contract exposures to withdrawals and/or availments.

   (d) It is recognized that the probability of deviation of actual from assumed interest rate on funds invested in the years immediately after issue is less than those on funds invested many years after issue. For this reason, the provision for adverse deviation should generally be greater for later durations than for earlier durations.

3. All expenses associated with acquiring and maintaining the business must be recognized in the determination of gross considerations, as well as in the annual valuation of liabilities of the company.

   (a) When testing adequacy of gross considerations, all expenses associated with acquiring and maintaining the business should be considered, including those expenses which are payable after all considerations are paid. These should include acquisition costs such as commissions and overrides, issue costs and the like, licensing fees, registration fees, general administrative and other maintenance expenses, including expenses for termination and/or claims servicing, and taxes. If insurance coverages are provided, whether during or after the period for which considerations are payable, premiums for such coverages should be considered.

   (b) As much as possible, actual expense studies of the company concerned should significantly affect the expense assumption, modified only to reflect expected highly probable trends in the business; e.g., effect on expenses of increased volume of business and the effect of inflation on unit costs.

   (c) Judgment must be exercised as to the applicability of current expense rates to future years. Expense assumptions should reflect medium or long term trends relative to the expected duration of the contracts. The underlying assumption for future inflation should be consistent with that considered in selecting the interest assumption.

4. Inflation is the economic condition associated with rising price levels. It should be emphasized that inflation in benefit cost is specific for each product; for instance, it might be 7 ½ % for mortuary plans, but 22% for educational plans.

   (a) In pre-need contracts, inflation affects both the determination of gross considerations and the cost of benefits of actual cost plans.

   (b) Inflation affects directly the following actuarial assumptions:

      i. Investment yield rates – The investment yield rate from various categories of investments may be affected by inflation in different directions and/or degrees.

      ii. Cost of benefit of actual cost plans – a higher rate of inflation increases the cost of the benefits of actual cost plans.

      iii. Expenses – higher inflation rates will increase the expenses of acquiring and maintaining the business and delivering the promised benefits.

   (c) The actuarial assumptions which may be indirectly affected by inflation include rates of withdrawals, earlier availments, etc.

   (d) The effects of inflation may be recognized in actuarial assumptions either implicitly or explicitly, except for actual cost plans where the effects of inflation must be considered explicitly.

(e) It is recognized that actuaries may have differing opinions as to the impact of a given expected rate of inflation upon each of the actuarial assumptions.

5. Withdrawal rate. It should be noted that the withdrawal of a planholder is entirely at the option of the planholder. Thus, the effect of the withdrawal rate on all other factors must always be taken into account.

(a) The company's own experience should be used as a guide to the expected withdrawal rates in the future.

(b) Factors to be considered in the determination of withdrawal rates include type of plan, duration, amount of consideration, amount of benefit, inflation, marketing techniques, and economic outlook.

(c) Care should be taken when providing margins for deviations in these rates and the effects of such deviations should be duly tested and provided for under different circumstances.

6. Availment rate assumptions should consider transferability of the plan

(a) As much as possible, the company's own experience should be used in the assumption for availment rates.

(b) Availment rates for transferable benefits should include not only the rate of the contingency but also the rate at which the plan is availed of due to the transfer.

(c) For memorial plans, the availment rate to be used in pricing should be graduated to equal one (1) not later than the end of the 20^{th} year. The graduation of the availment rates is left to the discretion of the actuary.

IV. DETERMINATION OF ACTUARIAL RESERVE LIABILITIES

1. Under a given set of assumptions at inception, the prospective reserve liability is equal to the retrospective reserve liability for all durations. At some later time, changes arising from the combined effects of updated assumptions may change this relationship.

2. The actuarial reserve liability must at all times be determined on a prospective basis and is equal to the excess of the present value of all future benefits and benefit costs over the present value of the contributions to reserves. Computations shall be done on an individual basis; otherwise, the method used should be fully disclosed. All assumptions used in the valuation should be updated to reflect the most likely trends as indicated in Section III hereof.

3. The contributions to reserves indicated in Paragraph 2 of this Section are amounts such that at inception, the present value of these contributions is equal to the present value of the benefits and benefit costs, where the nature of the benefits (whether fixed value or actual cost) is taken into account.

4. The period within which contribution to reserves is assumed to be made should not exceed the period for which considerations are to be paid. For paid-up plans, contributions to reserves is zero.

5. Reserves on contracts should never be less than their corresponding termination values.

6. Reserves shall be maintained on plans which may not be currently in-force, but which are in their reinstatable period.

V. DETERMINATION OF TERMINATION VALUES

1. In the determination of termination values for pre-need plans, the equity of the planholder must be taken into account without prejudice to the right of the plan issuer to collect what is due it for the discontinuance of the contract, at the option of the planholder, prior to the contracted time of delivery of the benefits.

2. Termination values represent the equitable share of the planholder in the gross considerations he has paid to the issuer, as well as the expenses already incurred by the issuer in the acquisition and maintenance of the contract prior to termination. Although the SEC rules and regulations require minimum termination value rates expressed as percentages of the gross considerations, the actuary shall consider such rates as minimum only and adopt higher rates should these be justified by reasons of equity.

VI. RESPONSIBILITIES OF THE ACTUARY WITH RESPECT TO TRUST FUNDS

1. With respect to trust funds, the actuary shall compare the amount of reserves determined after an actuarial valuation, to the amount of the trust fund. The actuary shall make a statement of comparison following the minimum requirements of the Valuation Certification Form issued by the regulator.

2. The actuary shall make specific recommendations that the rates of contributions to the trust fund for each plan shall not be less than the contributions to reserves as defined in Section IV – Determination of Actuarial Reserves Liabilities. Furthermore, the rates of contributions shall not be less than the minimum rates of deposits required in the SEC rules and regulations.

3. With respect to financial statements, the actuary shall make the necessary statement of opinion that the actuarial reserves must be reflected as liabilities in the Balance Sheet.

VII. STATEMENT OF ACTUARIAL OPINION FOR PRE-NEED COMPANY

1. The Statement of Opinion should be based upon "commonly accepted actuarial standards" and "sound actuarial principles" which arise from using and adopting concepts in actuarial literature. It should clearly indicate the bases for such opinion. The actuary's judgment in developing standards for the actuarial tests and calculations must take into account the specific contract characteristics.

2. In certifying to the adequacy of the pricing of a pre-need product, the actuary must see to it that the assumptions used in such pricing have been adequately and effectively communicated to the company, including the possible effects of adverse deviations from these assumptions.

3. In certifying to the actuarial reserve liabilities of a pre-need company, the actuary shall consider the aggregate reserve for the pre-need contracts, as well as all liabilities arising from benefits the delivery of which might have been contracted out by the pre-need company. Care must be taken to adequately disclose all pertinent and material information to minimize the possibility of misinterpretation or misunderstanding by those relying on the actuary's work.

4. The Statement of Opinion shall include:

   (a) the actuary's name and his relationship with the company
   (b) the subject/s on which the opinion is being made, describing the scope of the actuary's work
   (c) a statement expressing the actuary's opinion on the subject and the appropriateness of the assumptions used
   (d) A disclosure of any information which, if not disclosed, might reasonably be expected to lead to an incomplete understanding of the opinion.

5. The Statement of Opinion on pricing shall include, in addition to Paragraph 4, above: an opinion on the adequacy of the considerations and benefit cash flows arising from the contracts. Projections of considerations and benefit cash flows under various assumptions as to future interest rates considering the contractual obligations and characteristics of the company's contracts should be made and considered in making an opinion.

6. The Statement of Opinion on actuarial reserve liabilities shall include, in addition to Paragraph 4, above:

   (a) A statement regarding the data or records upon which the actuary has based his valuation. If the actuary has relied on records supplied by an officer of the company or the independent auditor, he/she should make a statement to that effect, after having conducted a review and the necessary tests.

   (b) Actuarial assumptions used in calculating the actuarial liabilities, including but not limited to assumptions on interest or discount rates, rates of inflation, expenses, availment rates, and other rates of decrement.

   (c) Actuarial methods used in calculating the actuarial liabilities; if there are changes in actuarial methods and assumptions from those previously employed, the change should be stated in the statement.

   (d) A statement as to whether the reserves and other actuarial items

      i. are computed in accordance with commonly accepted actuarial standards consistently applied, and are fairly stated in accordance with sound actuarial principles;

ii. are based on actuarial assumptions which produce reserves at least as great as those called for in any contract provision as to reserve basis and method, and are in accordance with all other contract provisions;

iii. meet the requirements of the rules and regulations of the regulator as they pertain to actuarial matters;

iv. include sufficient provisions for all actuarial reserves and related items which ought to be established, as well as all unmatured obligations of the company guaranteed under the terms of its contracts, including items that are computed by means of a long-term discontinuing of future payments, which are dependent upon the occurrence of events inthe future, such as for example, reserves for optional modes of settlement at maturity;

v. are computed on the basis of assumptions consistent with those used in computing the corresponding items in the preceding yearend; and if not, the change should be mentioned, and the reason for such change given;

Attached is a sample VALUATION CERTIFICATION, which is a revised version of EXHIBIT E OF SEC-BED MEMO CIRCULAR NO. 06, Revised Series of 1994.

This sample certification presents the minimum basic information which should appear in the certification. The actuary should also include all other information relevant to the matter being certified.

7. Although the valuation bases of invested assets and their yield are matters to be considered in reserve valuation assumptions, the actuary is not expected to express an opinion with regard to the general assets of the company. The regulations spell out the valuation bases for assets in considerable detail, or refer to common practices of financial institutions which are acceptable to the regulator. The actuary can rely on the valuation of assets in accordance with those procedures, and the resulting yield, in determining the valuation interest assumptions. In any case the assumed investment return should be consistent and compatible with the investment results and the quality of the assets of the trust fund.

8. An actuary must be prepared to justify the use of any procedures that depart materially from those set forth in these Guidelines and must include in any actuarial communication disclosing the results of the procedures, an appropriate statement with respect to the nature, rationale, and effect of such departures.

VIII. MINIMUM CONTENTS OF AN ACTUARIAL REPORT FOR PRICING

1. Statement of Opinion

2. The contract provisions on the benefits promised by the plan and the period for which the considerations are payable;

3. The actuarial assumptions used in the pricing which shall include, whenever applicable, interest/discount rates, inflation rates, withdrawal rates, availment rates, mortality or

morbidity rates, expenses, and profit targets;

4. Sample viability analysis showing results each year for all years from inception to the end of the benefit payment period of the plan.

IX. MINIMUM CONTENTS OF A VALUATION REPORT

1. Statement of Opinion (See Section VII)

2. A schedule showing the following information, for the current and prior years:

   (a) number and aggregate face value of in-force file
   (b) reserves and aggregate face value of paying plans
   (c) reserves and aggregate face value of paid-up plans (availing/not yet availing)
   (d) reserves and aggregate face value of lapsed plans w/in its reinstatable period.
   (e) reserves for insurance premium that are chargeable to the trust fund beyond the premium-paying period.
   (f) assets of the trust fund both at cost and at market value

3. A schedule showing the experience of the company for the last five years on:

   (a) the net investment rate of return on the trust fund assets, and
   (b) the rate of increase/decrease in benefit payments.

X. RELATIONSHIP WITH AUDITOR

1. When the actuary's work relates to financial statements subject to audit, the actuary should disclose to the auditor the actuarial assumptions and methods used. If approximations are used, the results should not materially differ from results using more precise methods.

2. An actuary who is responsible for any part of the financial statements which are subject to audit must fully disclose to the auditor his relationship with the company. Likewise, an actuarial opinion that is made part of the published financial statements should state clearly the relationship between the company and the actuary.

3. Should the auditor be unable to form an opinion on the company financial statements on the basis of the information furnished by the company actuary, and the auditor consults with another actuary, the company actuary should make all related materials available for the other actuary's review, and be available for further explanation should this be required.

4. The actuary should disclose his relationship with the auditor, if any.

VALUATION CERTIFICATION

Please be informed that I have undertaken the actuarial valuation of the pre-need plans of ______________as of______________. I have relied on data submitted by_____________, and have conducted tests necessary to satisfy myself as to the reasonableness and integrity of suchdata.*

The actuarial assumptions used in this actuarial valuation are in my opinion, reasonable and appropriate for the plans included in this valuation.

The actuarial reserve liabilities for all benefits and guarantees therein are valued in accordance with the assumptions, and all insurance benefits included in the plan agreement are adequately covered under a separate insurance contract.

I hereby certify that the actuarial formulations used in this actuarial valuation are in accordance with generally accepted actuarial principles and practices, and also with the existing laws, pertinent rules and regulations of the SEC as they pertain to actuarial matters. The reserve liabilities aggregating to ___________________ in this actuarial valuation are in accordance with the above actuarial formulations and assumptions.

Based on the Trustees' Certifications, the Trust Fund Equity has a net balance of ______________________ as of__________________.

Case A: If Trust Fund is sufficient:

The Trust Fund equity is sufficient to cover the actuarial reserve liabilities.

Case B: if Trust Fund is deficient:

The deficiency from the actuarially valued reserve liabilities amounting to________should be in the Trust Fund within the time limit prescribed by the SEC regulations.

* Any missing or unreported data/information as discovered by the Valuation Actuary and its pertinent financial impact shall be disclosed by the Valuation Actuary and included in this Certification.

ANNEX B

Past ASP Presidents

PAST ASP PRESIDENTS

1954-1955	Emeterio Roa, Sr. +	1989	Leonardo B. J. Tan +
1956	Luis R. Salvosa +	1990	Ines G. Belleza +
1957-1958	Exequiel S. Sevilla +	1991	Evelyn T. Carada
1959	Manuel O. Hizon +	1992	Evangeline C. Escobillo +
1960	Alexander T. Brooks +	1993	Jaime M. Santiago
1961	Antonio W. Diokno +	1994	Edna G. Ledesma
1962	Emeterio C. Roa Jr. +	1995	Aida C. Josef
1963	Agustin C. Mercado	1996	Reynaldo C. Centeno
1964	Federico C. Roa, Sr. +	1997	Coralyn G. Del Rosario
1965	Robert L. Bergstresser +	1998	Mona Lisa B. de la Cruz
1966	Andronico D. Castillo	1999	Ma. Elisa A. Franco
1967	Isagani G. de Castro +	2000	Ma. Sharon B. Maranan
1968	David L. Francisco	2001	Henry Joseph M. Hererra
1969	Feliberto B. Cavosora	2002	Conrado S. de la Cruz
1970	Conrado C. Roa +	2003	Maria Victoria C. Lim
1971	Tala P. Lazatin +	2004	Elizabeth A. Reyes
1972	Enrique M. Zalamea Jr.	2005	Lope Jose U. Garde
1973	Adriano B. Batara +	2006	Lucia Chona S. Ventura
1974	Peter R. Sen +	2007	Maria Elena B. Herrera
1975	Justino Padiernos	2008	Maria Edita C. Elicano
1976	Artemio V. Mendoza +	2009	Marissa D. Martin
1977	Mariano M. Mercado, Jr.	2010	Rina Isabel A. Velasquez
1978	Mabini L. Juan +	2011	Joanne S. dela Cruz
1979	Martha R. Horrigan +	2012	Peter Godfrey C. Darvin
1980	Noe Y. Nebrida +	2013	Romeo G. Carabeo
1981	Alfonso P. Garcia Jr.	2014	Sachiko A. Pang
1982	Daniel M. Mercado Jr. +	2015	Romeo H. Abada
1983	Panfilo P. dela Paz	2016	Katerina V. Suarez
1984	Ernesto E. Reyes	2017	Froilan Emilio S. Racela
1985	Dolores T. Gicaro+	2018	Jesselyn V. Ocampo
1986	Reynaldo T. Gatcheco, Jr.	2019	Dulce N. Aguilar
1987	Milagros D. Fanega +	2020	Tisha T. Darvin
1988	Azucena R. Reyes +	2021	Joel C. Perlado

+deceased