

Actuarial Society of the Philippines Standards of Actuarial Practice in Relation to PAS 19 Employee Benefits

(Adopted 24 October 2017)

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INTRODUCTION

This Standard of Actuarial Practice provides guidance to <u>actuaries</u> when performing <u>actuarial services</u> in connection with Philippine Accounting Standard 19 (<u>PAS 19</u>) Employee Benefits. PAS 19 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 (Employee Benefits), 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 <u>reporting entity</u> is responsible for all the information reported in its <u>PFRS</u> financial statements, including information reported in accordance with <u>PAS_19</u>. This means the <u>reporting entity</u> 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 <u>actuary</u> may advise on a range of issues arising from the application of <u>PAS 19</u>, 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 <u>PAS 19</u> within and across jurisdictions;
- Increase reporting entities' and their auditors' confidence in <u>actuaries</u>' contributions to reporting of <u>employee benefits</u> in accordance with <u>PAS 19</u>. 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 International Accounting Standards Board (IASB) in achieving high-quality, transparent, and comparable 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 <u>actuaries</u> when performing <u>actuarial services</u> in connection with <u>PAS 19</u>. Their purpose is to increase <u>intended users</u>' confidence that:

- <u>Actuarial services</u> are carried out professionally and with due care, consistently with <u>PAS 19</u>, 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 <u>actuary</u>'s <u>report</u>.

1.2. Scope

These Standards provide guidance to <u>actuaries</u> when providing <u>actuarial services</u> for a <u>reporting entity</u>'s preparation of an actual or pro-forma <u>PFRS</u> financial statement for any type of employee benefit the <u>reporting entity</u> determines to be covered by <u>PAS 19</u>. <u>Actuaries</u> providing <u>actuarial services</u> in connection with <u>PAS 19</u> that are outside of this scope (for example, an <u>actuary</u> advising an auditor or advising a potential buyer regarding an acquisition) should consider the guidance in these Standards to the extent relevant to the assignment.

1.3. Compliance

An <u>actuary</u> 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 the work that conflict with these Standards; or
- 1.3.3. Departs from the guidance in these Standards and provides, in any <u>report</u>, 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 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.
- 1.4.3. Any judgment required by these Standards (including implicit judgment) is intended to be the 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., <u>actuary</u>). These Standards also use terms defined in <u>PAS 19</u>, in which case they have the same meaning.

1.6. Cross References

These Standards refer to the content of <u>PAS 19</u>, including any interpretations from the International Financial 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 <u>PAS 19</u> is subsequently amended, restated, revoked, or replaced after September 2014, the <u>actuary</u> 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 <u>actuary</u> should have or obtain sufficient knowledge and understanding of <u>PAS 19</u>, PFRSs that are interpretations of <u>PAS 19</u>, relevant paragraphs of other <u>PFRS</u>s to which <u>PAS 19</u> specifically refers, and the reporting entity's relevant <u>accounting policies</u>, if any. If the <u>actuary</u>:

- a. Is uncertain whether another PFRS is relevant to the actuarial services; or
- b. Discovers that a specific component of the <u>actuarial services</u> may be subject to alternative interpretations of <u>PAS 19</u>, a <u>PFRS</u> that is an interpretation of <u>PAS 19</u>, a relevant paragraph of another <u>PFRS</u> to which <u>PAS 19</u> specifically refers, or relevant <u>accounting policies</u>,

the <u>actuary</u> should seek guidance from the <u>principal</u>, and treat the guidance as information (see 2.2).

2.2 Reliance on Others

The <u>actuary</u> 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 <u>actuary</u> may select the party and information on which to rely, or may be given the information by the principal.

The <u>actuary</u> may take responsibility for such information, or the <u>actuary</u> may state that reliance has 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 <u>actuary</u> and the other party regarding any facts known to the <u>actuary</u> 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 <u>actuary</u> uses information prepared by another party without disclaiming responsibility for that information, the <u>actuary</u>:
 - a. Should determine that the use of that information conforms to accepted actuarial practice in the jurisdiction(s) of the <u>actuary</u>'s services;
 - b. Should establish appropriate procedures for the management and review of the information that the <u>actuary</u> intends to use; and
 - c. Does not need to disclose the source of the information.
- 2.2.3. If the <u>actuary</u> states reliance on the information prepared by another party and disclaims responsibility for it, the <u>actuary</u> should:

- a. Disclose that fact (including identifying the other party) in any <u>report</u> 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 <u>actuary</u> took to determine whether it was appropriate to rely on the information.
- 2.2.4. If the information was prepared by the other party under a different jurisdiction, the <u>actuary</u> should consider any differences in the <u>law</u> or accepted actuarial practice between the two jurisdictions and how that might affect the <u>actuary</u>'s use of the information.

2.3. Materiality

In case of omissions, understatements, or overstatements, the <u>actuary</u> should assess whether or not the effect is material. The threshold of materiality under which the work is being conducted should be determined by the <u>actuary</u> unless it is imposed by another party such as an auditor or the <u>principal</u>.

- 2.3.1. When determining the threshold of materiality, the <u>actuary</u> should:
 - a. Assess materiality from the point of view of the <u>intended user(s)</u>, recognizing the purpose of the <u>actuarial services</u>; thus, an omission, understatement, or overstatement is material if the <u>actuary</u> expects it to affect significantly either the <u>intended user</u>'s decision-making or the <u>intended user</u>'s reasonable expectations;
 - b. Consider the <u>actuarial services</u> and the <u>reporting entity</u> that is the subject of those <u>actuarial</u> services; and
 - c. Consult with the <u>principal</u> if necessary.
- 2.3.2. The <u>actuary</u> should understand the distinction between materiality with respect to the <u>actuarial</u> <u>services</u>, the preparation of <u>PFRS</u> financial statements, and the auditing of those financial statements.
 - a. When appropriate for the work, the <u>actuary</u> should seek guidance from the <u>principal</u> or <u>reporting entity</u> regarding materiality with respect to the preparation of <u>PFRS</u> financial statements and take that guidance into account when performing the actuarial services.
 - b. The <u>actuary</u>'s threshold of materiality with respect to the <u>actuarial services</u> should not be greater than the <u>reporting entity</u>'s threshold of materiality with respect to the preparation of <u>PFRS</u> financial statements, if it is known. The <u>principal</u> or <u>reporting entity</u> (not the user of the <u>PFRS</u> financial statements) is the <u>intended user</u> of the <u>actuarial services</u> when assessing materiality with respect to the <u>actuarial services</u>.
 - c. In all following paragraphs of these Standards, any use of "material", "materially", or "materiality" is with respect to the <u>actuarial services</u>.

2.4. Proportionality

In applying reasonable judgment (see 1.4, in particular 1.4.2), the <u>actuary</u> should take materiality into account. The degree of refinement in specific assumptions or methods recommended by the <u>actuary</u> should be consistent with the impact on the <u>actuarial services</u>. Examples include, all of which are subject to the <u>actuary</u>'s <u>professional judgment</u>:

- a. The <u>actuary</u> may use simplified approaches to recommending assumptions when those assumptions will not materially affect the results or are proportionate for the <u>actuarial services</u>. 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 the liabilities. 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 <u>measurement date</u>, the <u>actuary</u> may appropriately adjust results using data collected at a different date when doing so will not materially affect the results.
- c. The <u>actuary</u> 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 <u>measurement date</u> when those assumptions are reasonable for <u>PAS 19</u> purposes at the current measurement date.
- d. The <u>actuary</u> may apply simplified methods to attribute benefits to periods of service when doing so will not materially affect the results.

2.5. Constructive Obligations

The <u>actuary</u> may rely on representations made by the <u>principal</u> regarding the existence and nature of any <u>constructive obligations</u> arising from the <u>reporting entity</u>'s employee benefit practices or policies (see 2.2.).

If it becomes apparent to the <u>actuary</u> in the course of performing the <u>actuarial services</u> that significant uncertainties exist regarding such representations, the <u>actuary</u> should seek clarification from the <u>principal</u>. If the uncertainty is not resolved to the <u>actuary</u>'s satisfaction, particularly when the uncertainty is caused by data deficiencies, the <u>actuary</u> 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 <u>actuary</u> cannot find a satisfactory way to resolve the deficiencies, then the actuary should consider whether to:

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

This guidance does not impose additional duties on the <u>actuary</u> beyond the scope of the <u>actuarial</u> <u>services</u> to search for or analyze <u>constructive obligations</u> that go beyond formal plans or agreements.

2.6. Categorization of Employee Benefit Plan

The <u>reporting entity</u> is responsible for determining the categorization of its employee benefit plans under <u>PAS_19</u> as short-term, defined benefit post-employment, defined contribution post-employment, termination, or other long-term.

- 2.6.1. The <u>actuary</u> may advise the <u>principal</u> regarding the categorization of an employee benefit plan. When providing such advice, the <u>actuary</u> should exercise <u>professional judgment</u> when an 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 <u>actuary</u> is uncertain as to the <u>reporting entity</u>'s categorization of an employee benefit plan, the <u>actuary</u> should seek guidance from the <u>principal</u>, and disclose this in the report
- 2.6.3. The <u>actuary</u> should treat the <u>reporting entity</u>'s categorization of its employee benefit plans as 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 $\underline{\text{actuary}}$ (2.8);
 - b. Prescribed by the principal or another party (2.9); or
 - c. Mandated by law (2.10).
- 2.7.2. Where the <u>report</u> is silent about who set an assumption or methodology, the <u>actuary</u> who authored the <u>report</u> will be assumed to have taken responsibility for such assumption or methodology.

2.8. Assumptions and Methodology Set by Actuary

Where the <u>actuary</u> sets the assumptions and methodology, or the <u>principal</u> or another party sets an assumption or methodology that the <u>actuary</u> is willing to support:

2.8.1. Selection of Assumptions and Methodology – The actuary should select the assumptions and methodology that are appropriate for the work. The actuary should consider the needs of 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 and the assignment, as well as relevant industry and professional practices. The actuary should

- consider 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 <u>actuary</u> should consider the appropriateness of the assumptions underlying each component of the methodology used. Assumptions generally involve significant <u>professional judgment</u> 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 <u>actuary</u> 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 <u>actuary</u> should consider the effect of any discontinuities in experience on assumptions or methodology. Discontinuities could result from:
 - a. Internal circumstances regarding the <u>reporting entity</u> such as changes in the reporting entity's human resource policies or retirement benefit design; or
 - b. External circumstances impacting the <u>reporting entity</u> such as changes in the legal, economic, legislative, regulatory, supervisory, demographic, technological, and social environments.
- 2.8.5. **Individual Assumptions and Aggregate Assumptions** The <u>actuary</u> 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 <u>actuary</u> should make appropriate adjustments to achieve a reasonable assumption set and final result.
- 2.8.6. **Internal Consistency of Assumptions** The <u>actuary</u> should determine if the assumptions used for different components of the work are materially consistent, and that any significant interdependencies are modelled appropriately. The <u>actuary</u> should disclose any material inconsistency in the <u>report</u>.
- 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 <u>principal</u> or another party:

- 2.9.1. If the <u>actuary</u> is willing to support the prescribed assumption or methodology (following paragraph 2.8 as applicable), the <u>actuary</u> 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 <u>actuarial</u> <u>services</u>, the <u>actuary</u> should disclose in the <u>report</u> 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 <u>actuary</u>, set the assumption or methodology; or
 - b. The <u>actuary</u> has been unable to judge the appropriateness of the prescribed assumption or methodology without performing a substantial amount of additional work beyond the scope of the assignment, or the <u>actuary</u> was not qualified to judge the appropriateness of the assumption, the <u>actuary</u> should disclose in the <u>report</u> that fact, the party who prescribed the assumption or methodology, and the reason why this party, rather than the <u>actuary</u>, set the assumption or methodology.
- 2.9.3. When the <u>principal</u> requests an additional calculation using an assumption set which the <u>actuary</u> does not judge to be reasonable for the purpose of the <u>actuarial services</u>, the <u>actuary</u> may provide the <u>principal</u> with the results based on such assumptions. If those results are communicated to any party other than the <u>principal</u>, the <u>actuary</u> should disclose the source of those assumptions and the <u>actuary</u>'s <u>opinion</u> of their appropriateness.

2.10. Assumptions and Methodology Mandated by Law

When an assumption or methodology is mandated by <u>law</u>, the <u>actuary</u> should disclose in the <u>report</u> that the assumption or methodology was mandated by <u>law</u> and that the <u>report</u> should not be used for other purposes where the assumptions and methodology used are not appropriate (unless appropriately adjusted).

2.11. Actuarial Assumptions

The <u>reporting entity</u> is responsible for selecting assumptions that are unbiased, mutually compatible, and represent the <u>reporting entity</u>'s best estimates of the variables that will determine the ultimate costs of its <u>employee benefits</u>. The <u>actuary</u> may advise the <u>principal</u> regarding the selection or reasonableness of some or all of the assumptions to be used in the <u>actuarial services</u>. In doing so, the <u>actuary</u> should be guided by paragraphs 2.7. to 2.10., taking into account <u>PAS 19</u>'s requirements regarding assumptions used to measure defined benefit post-employment plans, termination benefits, or other long-term benefits. In particular, when using prescribed assumptions, the <u>actuary</u> should be guided by paragraph 2.9. Assumptions and Methodology Prescribed.

- 2.11.1. **General Approach for Selecting Assumptions** When advising the <u>principal</u> on the selection or reasonableness of actuarial assumptions, the actuary should:
 - a. Identify the types of assumptions needed to perform the <u>actuarial services</u>.
 - b. Evaluate information relevant to each type of assumption:
 - i. With respect to financial assumptions, the <u>actuary</u> should review market-implied expectations and other information at the <u>measurement date</u>. 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 <u>actuary</u> may also consider the <u>reporting entity</u>'s expectations regarding assumptions where the reporting entity can influence future experience.

- ii. With respect to demographic assumptions, the <u>actuary</u> should review information that, in the <u>actuary</u>'s <u>professional judgment</u>, is relevant to the population covered by the <u>reporting entity</u>'s <u>employee benefits</u>. With respect to reviewing the experience of the covered population, this guidance does not impose additional duties on the <u>actuary</u> beyond the scope of the <u>actuarial services</u>. Examples of such information that may be reviewed by the <u>actuary</u> 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 <u>actuary</u> that may affect future experience such as
 the economic conditions of the geographic area or industry, availability of
 alternative employment, and the <u>reporting entity</u>'s human resource policies or
 practices.

The <u>actuary</u> may also consider the <u>reporting entity</u>'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 <u>actuarial services</u> might also vary by calendar year, employment type, location, or other factors).
- d. Recommend assumptions that in the <u>actuary</u>'s <u>opinion</u> are unbiased, mutually compatible, and, if adopted by the <u>reporting entity</u>, would be appropriate to represent the <u>reporting entity</u>'s best estimate.

- 2.11.2. **Mortality Assumption** When advising the <u>principal</u> on the selection or reasonableness of the mortality assumption, the <u>actuary</u> should reflect expected changes in plan members' future mortality rates when material and proportionate to the <u>actuarial services</u>. Examples of 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 <u>principal</u> on the selection or reasonableness of the discount rate assumption, the <u>actuary</u> should take into account <u>PAS 19</u>'s requirement that the discount rate reflect market yields at the <u>measurement date</u> 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 <u>actuary</u> may use a variety of approaches to identify a discount rate assumption that satisfies this requirement, including the following:
 - a. **Full Yield Curve** The <u>actuary</u> may recommend a full spot-rate yield curve for discounting projected benefit cash flows. The <u>actuary</u> may develop an appropriate yield curve from bond yield data at the <u>measurement date</u>. Alternatively, the <u>actuary</u> may apply a third party's yield curve, which the <u>actuary</u> has determined is appropriate for the purpose of selecting a <u>PAS 19</u> discount rate (or has adjusted so as to make it appropriate). When applying a third party's yield curve, the <u>actuary</u> 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 <u>actuary</u> should consider the characteristics of the bond universe used to create the yield curve, including currency and, for corporate bonds, quality. The <u>actuary</u> should also consider whether adjustments are needed to deal with "outliers"—bonds with substantially 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 <u>actuary</u> using this approach may also determine a single weighted-average discount rate based on the yield curve (as described in 2.11.3.b.) for the <u>reporting entity</u>'s use in the PFRS financial statement disclosures.

- b. Single Weighted-Average Discount Rate Based on Yield Curve The <u>actuary</u> may recommend a single weighted-average discount rate assumption determined by:
 - i. Projecting cash flows on and after the <u>measurement date</u> of benefits attributed to employee service up to the <u>measurement date</u>;

- 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 <u>actuary</u> may recommend a single weighted-average discount rate assumption determined by:
 - i. Projecting cash flows on and after the <u>measurement date</u> of benefits attributed to employee service up to the <u>measurement date</u>;
 - ii. Applying a bond model to identify a portfolio of bonds—appropriately selected from 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 the <u>actuary</u> considers the bond market data unreliable or such data do not exist, the <u>actuary</u> 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 <u>actuary</u> has determined is appropriate (or has adjusted so as to make it appropriate) for the purpose of selecting a <u>PAS 19</u> discount rate for measuring the cash flows, the <u>actuary</u> should be guided by paragraph 2.2.

- d. **Alternative Approaches** The <u>actuary</u> may use alternative approaches to those described above. When doing so, the <u>actuary</u> 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 <u>measurement date</u> and their shape (that is, whether the cash flows over time are smooth or lumpy). Subject to materiality (see 2.3.) and proportionality (see 2.4.), examples of alternative approaches include, but are not limited to:
 - i. The <u>actuary</u> may recommend a single discount rate that, in the <u>actuary</u>'s <u>professional judgment</u>, approximates the weighted-average rate that would be determined under one of the preceding approaches.
 - ii. The <u>actuary</u> may apply a market index or other reference rate, with adjustments if appropriate. The <u>actuary</u> 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 <u>PAS 19</u> 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 reference rate, the <u>actuary</u> 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 the re-investment method, as stated in PIC Q&A 2008-01. In case there is a need to determine discount 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 <u>actuary</u> is advising the <u>principal</u> on the selection or reasonableness of a general price inflation assumption, the <u>actuary</u> should review market-implied expectations and other information at the <u>measurement date</u>. 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 <u>actuary</u> is advising the <u>principal</u> on the selection or reasonableness of medical cost assumptions, the <u>actuary</u> should consider estimated future changes in the cost of medical services, which may differ significantly from general price inflation. When material and proportionate to the <u>actuarial services</u>, the <u>actuary</u> should consider separate assumptions for major cost components such as hospital services, drugs, medical devices, other medical services, and administrative expenses. The <u>actuary</u> also should consider different assumptions for different future time periods.
- 2.11.6. Other Assumptions Regarding Future Benefit Amounts For some types of employee benefits, future benefit amounts under the plan may reflect factors other than general price inflation 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 a consistent process from year to year to develop recommended assumptions for a particular reporting 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 change and its general effect in the report.

2.12. Plan Assets

When the <u>actuarial services</u> take plan assets into account, the <u>actuary</u> should be guided by the following:

- 2.12.1. **Asset Values Supplied by Others** The <u>actuary</u> may rely on asset values prepared by a third party (such as a trustee or investment manager) and, when doing so, should be guided by paragraph 2.2.
- 2.12.2. Qualifying Insurance Policies The <u>actuary</u> should distinguish between qualifying insurance policies and other sources of reimbursement for expenditures required to settle a defined benefit obligation. When plan assets include qualifying insurance policies, the <u>actuary</u> should appropriately reflect those policies in the calculation of the deficit or surplus. For example, the <u>actuary</u> should appropriately differentiate between the <u>reporting entity</u>'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 benefit levels are linked to the return on plan assets (see paragraph 2.11.6.) or depend on whether there is a surplus), the <u>actuary</u> should value the <u>employee benefits</u> 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 <u>reporting entity</u> in the form of refunds from the plan or reductions in future contributions to the plan. <u>PAS 19</u> requires a <u>reporting entity</u> 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 <u>actuary</u> should seek guidance from the <u>principal</u> whether or not there should be an asset ceiling and 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 funding requirements.

2.14. Attribution of Benefits to Service Periods

When advising the <u>principal</u> on the attribution of plan benefits to service periods, the <u>actuary</u> should exercise <u>professional judgment</u> to address plan designs whose treatment is not fully specified in <u>PAS</u> <u>19</u>.

SECTION 3. COMMUNICATION

3.1. General Principles

Any <u>communication</u> should be appropriate to the particular circumstances and take the skills, understanding, levels of relevant technical expertise, and needs of the <u>intended user</u> into consideration to allow the <u>intended user</u> to understand the implications of the <u>actuary</u>'s <u>communication</u>.

- 3.1.1. **Form and Content** The <u>actuary</u> should determine the form, structure, style, level of detail, and content of each <u>communication</u> to be appropriate to the particular circumstances, taking into account the <u>intended users</u>.
- 3.1.2. Clarity The <u>actuary</u> should word each <u>communication</u> to be clear and use language appropriate to the particular circumstances, taking into account the intended users.
- 3.1.3. **Timing of Communication** The <u>actuary</u> should issue each <u>communication</u> within a reasonable time period. The timing of the <u>communication</u> should reflect any arrangements that have been made with the <u>principal</u>. The <u>actuary</u> should consider the needs of the <u>intended users</u> in setting the timing.
- 3.1.4. **Identification of the Actuary** A <u>communication</u> shall clearly identify the issuing <u>actuary</u>. When two or more individuals jointly issue a <u>communication</u>, at least some of which is actuarial in nature, the <u>communication</u> shall identify all responsible <u>actuaries</u>, unless the <u>actuaries</u> judge it inappropriate to do so. The name of an organization with which each <u>actuary</u> is affiliated also should be included in the <u>communication</u>, but the <u>actuary</u>'s responsibilities are not affected by such identification. Unless the <u>actuary</u> judges it inappropriate, any <u>communication</u> 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 <u>actuary</u> should complete a <u>report</u> unless any <u>intended users</u> will otherwise be adequately informed about the results of <u>actuarial services</u> (including access to the supporting information which is necessary to understand these results). The <u>actuary</u> should present all information with sufficient detail that another <u>actuary</u> qualified in the same practice area could make an objective appraisal of the reasonableness of the <u>actuary</u>'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 <u>report</u>, the <u>actuary</u> 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 <u>actuary</u> disclaims responsibility;
 - c. Any reliance on the <u>principal</u>'s representations regarding <u>constructive obligations</u> (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 <u>report</u> contains the results of an additional calculation using an assumption set requested by the <u>principal</u> which the <u>actuary</u> does not judge to be reasonable for the purpose of the assignment;
 - h. Assumptions and methodology that have been prescribed by another party;
 - i. Assumptions and methodology that are mandated by <u>law</u>
 - 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 <u>actuary</u> is issuing the <u>report</u>, and the <u>actuary</u>'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 should communicate 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 <u>report</u> 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 <u>reporting entity</u>'s accounting policy. The <u>actuary</u> should follow the guidance of these Standards to the extent reasonably possible within 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 that may 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, *Financial Instruments*: "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 give rise to a constructive obligation where the [reporting] entity has no realistic alternative but to pay employee 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 date and 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 Interpretations from 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 an intended 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 the entity."

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 results of these actuarial services is delivered.