CARIBBEAN ACTUARIAL ASSOCIATION

Caribbean Actuarial Association
Standard of Practice

APS 1: Pension Schemes – Actuarial Valuation Reports

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APS 1:	Pension Schemes – Actuarial Valuation Reports
Version 2:	Approved: December 6, 2019
Purpose	This Actuarial Practice Standard sets out required standards of practice for all actuaries of the Caribbean Actuarial Association giving advice on the valuation of retirement benefit schemes in operation in the Caribbean.
Target Audience:	Actuaries responsible for preparing a formal actuarial valuation report on the funding of a retirement benefit scheme, either when the scheme is being established or at intervals thereafter when an actuarial valuation is to be prepared. It applies to all formal actuarial valuation reports which are required by the Trust Deed and Rules of the scheme (or other legal document) or by legislation or are specifically requested by the actuary's client.
Compliance:	**Compliance with APS0 is a prerequisite to compliance with this APS.**

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Section 1. General

1.1. Purpose

1.1.1. This Actuarial Practice Standard ("APS") provides guidance to actuaries of the Caribbean Actuarial Association ("CAA") performing actuarial services to give 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 are complete; and
- The assumptions and methodology (including, but not limited to, models and modelling techniques) used are disclosed appropriately.

1.1.2. This APS also applies to all members of the CAA and should be read accordingly**.**

1.2. Scope

1.2.1. This APS is the required standard of practice for all actuaries giving advice on the valuation of retirement benefit schemes in operation in the Caribbean.

1.2.2. This APS sets out, inter alia, the minimum information that should be contained in a report on an actuarial valuation of a retirement benefit scheme.

1.2.3. This APS aims to ensure that reports contain sufficient information to enable the current funding level of a scheme to be understood and also, to enable the expected future course of a scheme's contribution rates and solvency level to be understood.

1.2.4. This guidance does not in itself seek to restrict the actuary's freedom of judgment in choosing a method of valuation and the underlying assumptions but rather, seeks to ensure that sufficient explanation is given of the methods and assumptions used.

1.3. Compliance

1.3.1. Compliance with APS0 is a prerequisite to compliance with this APS.

1.3.2. References in APS0 to "this APS" should be interpreted as applying equally to this APS, where appropriate.

1.4. Applicability

1.4.1. This APS applies to any actuary responsible for preparing a formal actuarial valuation report on the funding of a retirement benefit scheme, either when the scheme is being established or at intervals thereafter when an actuarial valuation is to be prepared. It applies to all formal actuarial valuation reports which are required by the Trust Deed and Rules of the scheme (or other legal document) or by legislation, or are specifically requested by the actuary's client.

1.4.2. This APS continues to apply while a scheme is run as a closed fund. Where an event occurs which under a scheme's Trust Deed and Rules triggers a discontinuance procedure, the actuary should consider whether it would be appropriate to advise the client that an actuarial valuation should be carried out.

1.4.3. This APS does not apply to a scheme that has commenced winding up.

1.4.4. This APS does not apply to defined contribution schemes.

1.4.5. This APS does not apply to calculations of pension expense or income for an employer's financial statements or to an actuarial valuation report on the funding of a social security scheme.

1.5. Reasonable Judgment

1.5.1. The actuary should exercise reasonable judgment in applying this APS.

1.6. Language

1.6.1. In this APS, the following words and phrases are defined here:

a. "Defined contribution scheme" is a pension scheme in which:

i. The employer pays a fixed contribution into the scheme and has no legal or constructive obligation to pay further contributions into the scheme in relation to past periods of service;

ii. The total investment earnings on the assets backing the scheme members' accounts are credited to their accounts by means of unitization or otherwise;

iii. Each scheme member's benefit is based solely on the value of his / her account which is made up of contributions paid by and / or on behalf of the scheme member plus investment earnings as well as any other components which may arise from forfeitures or transfer payments; and

iv. On retirement, where total cash payments are not made, the risk of paying the pension is transferred to an insurance company by purchasing annuities or transferred to an approved retirement arrangement.

b. "Funding level" means the ratio of the value placed upon the assets to the value of the accrued liabilities at the valuation date on an ongoing basis.

c. "Solvency level" means the ratio of the market value of the assets (or the adjusted market value) to the value of the accrued liabilities at the valuation date on a discontinuance basis.

1.7. Cross-References – When this APS refers to the content of another document, the reference relates to the referenced document as it is effective on the adoption date as shown on the cover page of this APS. The referenced document may be amended, restated, revoked, or replaced after the adoption date. In such a case, the actuary should consider the extent the modification is applicable and appropriate to the guidance in this APS.

1.8. Effective Date – This APS was approved at a General Meeting of the Members on December 6, 2019 and is effective for actuarial services performed on or after December 6, 2019.

Section 2. Appropriate Practices

2.1. Reliance on Others

2.1.1. If the actuary has relied on information or opinions provided by others, the actuary should carry out appropriate investigations to assess the accuracy and reasonableness of the data being used.

2.2. Materiality

2.2.1. All data, models, methods and assumptions that could have a material impact on the results should be considered when the work is being performed.

2.3. Data Quality

2.3.1. <u>Sufficient and Reliable Data</u>

If the actuary has any reservations as to the reliability of the data, such explanation or qualification, as appropriate, should be given. In particular, if audited accounts as of the date of valuation are not available, this fact should be stated in the report.

2.4. Assumptions and Methodology Set by Actuary

2.4.1. <u>Selection of Assumptions and Methodology</u>

a. The report should contain a summary of the demographic and economic assumptions made, explicitly or implicitly, including what allowance has been made for future expenses, in valuing both the liabilities and the assets.

b. A statement should be made as to the extent to which there have been changes to the assumptions used since the previous report.

c. The report should include a statement of opinion by the actuary on the prudence and appropriateness of the assumptions used.

d. The attention of the client should be directed to those assumptions to which the valuation results are particularly sensitive, such as discount rates and future rates of mortality. The actuary should describe or illustrate how the results of Sections 2.4.4 and 2.4.6 below will differ if the assumptions are not borne out so that the client may understand the sensitivity of the results to the assumptions chosen. Various approaches to illustrating sensitivity are possible, depending on the circumstances of the scheme. In some circumstances, it will be appropriate to identify events that may give rise to significant additional funding.

e. The report should explain the method employed in deriving the contribution rates in paragraph Section 2.4.6.i below. Where appropriate, the report should state whether and in what way future entrants have been taken into account in the valuation. A note should be made of any changes in the method set out in the previous report.

f. The description of the funding method in Section 2.4.1.e above, when taken with the assumptions summarized in Section 2.4.1.a should be sufficiently detailed so that it would not result in another actuary producing valuation results which the original actuary considers to be materially different from the results in the report.

g. If the scheme has a statement of investment policy, the actuary should state whether, in his / her opinion, it is appropriate or not. In particular, the actuary should comment on any notable or particular risks in the investment strategy of a scheme relative to the nature and expected future incidence of the liabilities. Where relevant, attention should be drawn to such aspects as concentration of assets, levels of self-investment and mismatching. The actuary is not required to give investment advice.

2.4.2. <u>Inter-valuation Period</u>

The report should include a statement of:

i. The rates of contributions due and paid during the inter-valuation period;

ii. A commentary on any material development in the scheme during that period; and

iii. A commentary on any significant changes in experience from the assumptions made at the previous valuation.

2.4.3. <u>Funding Objectives</u>

In the case of a defined benefit scheme, or otherwise where appropriate:

i. The report should explain the funding objectives and the funding methods being employed to achieve those objectives.

ii. A statement should be made as to the extent to which there have been changes in the objectives or the method since the last report of a similar nature.

iii. Implications in terms of stability of contribution rates and of future funding levels should be explained.

2.4.4. <u>Current Funding Level: Ongoing Assumption</u>

For an ongoing scheme, the report should include a statement as to the funding position on the assumption that both the scheme and the employer are going concerns and that the employer continues to support the scheme. The statement should include, where relevant, a comparison between assets and accrued liabilities, the latter with pensionable salaries projected, where appropriate, to the assumed end of the pensionable service, if this is not otherwise conveyed, by the comments on the funding objectives and the contribution rate.

2.4.5. Current Funding Level: Winding-up (or Discontinuance Basis)

i. The report should provide an estimate of the proportion of the accrued rights and entitlements that would have been covered by the assets of the scheme at the valuation date. This estimate should be on the basis set out in Sections 2.4.5.iii to 2.4.5.vi below.

ii. Where the estimated proportion in Section 2.4.5.i is less than 100%, the actuary should quantify approximately (on this basis) the impact of the applicable priority order on different categories of benefit, had the scheme been wound up on the valuation date.

iii. For the purpose of the estimate under Section 2.4.5.i, the assets of the scheme should be taken at not more than market value and the accrued rights and entitlements should be valued as described in Sections 2.4.5.iv to 2.4.5.vi below.

iv. The actuary should estimate the value of accrued rights and entitlements as the cost of buying out the benefits at the valuation date with a suitable insurance company using the methodology and assumptions likely to be adopted by insurance companies for determining buy-out costs. The actuary should explain the method used and disclose each assumption that he / she considers material to the final result.

v. The actuary should include a realistic allowance for the expenses of wind-up. This allowance for expenses should be disclosed.

vi. The report should note that the estimate under Section 2.4.5.i is a guide, that market changes both in interest rates and in demand and supply for this type of business mean that no one estimate can be relied on, and that ultimately, the actual true position can only be established by completing a buy-out. (The exception to this is where the benefits are being bought out and the figures are based on a guaranteed quotation.)

vii. Where the previous valuation contained an estimate of solvency, the actuary should include the figures from the previous valuation in the report and give an explanation of the difference between the surplus or deficit on the solvency basis at this valuation and that at the previous valuation.

viii. The actuary should comment on the effect that the contributions referred to in Section 2.4.6.i are expected to have on the proportion of accrued rights and entitlements that will be covered by the assets in each priority class (if appropriate.) This analysis should cover at least the three years following the valuation date and should, in particular, include an estimate of the coverage at the next valuation. The degree of detail and the extent to which the effects are quantified are for the actuary to judge, in accordance with his or her view as to the materiality of this information and to the understanding of the risks to members' wind-up benefits associated with the expected pattern of contributions. The actuary should also comment where he or she considers it likely that the coverage for any priority class will vary materially during the period between this valuation and the next. The actuary should state the assumptions used in making the assessments in this section.

ix. If the contributions in Section 2.4.6.i are not expected at least to maintain the solvency coverage for all members, this fact should be explicitly and prominently state in the report.

2.4.6. <u>Contribution Rate</u>

i. The report should recommend appropriate contributions for the period until the next anticipated formal actuarial valuation consistent with the funding objectives. If appropriate, the actuary may recommend different contribution rates for different groups of members or different contribution rates payable for different intervals in the period to such a valuation. Alternatively, if the contribution rate is determined elsewhere, e.g., in governing documentation, so that a recommendation by the actuary is inappropriate, the report should include a comment on the adequacy of the rate.

ii. The report should address the impact of the methodology and assumptions used for the valuation on the longer term funding status of the scheme.

2.4.7. <u>Reconciliation</u>

A reconciliation of the surplus or funding level disclosed in the current valuation should be made with the position disclosed by the previous valuation and a statement included in the report either describing or quantifying the financially material items of actuarial gain or loss, including changes in the valuation method and of the valuation assumptions.

2.5. Treatment of Subsequent Events

2.5.1. The actuary should disclose in the report any material events occurring after the valuation date which could have a significant impact on the results of the valuation if these events come to light on or before the date of signing the report.

Section 3. Communication

3.1. Report

3.1.1. The items documented throughout this APS, except where otherwise indicated, are regarded as essential components which should be documented in the report. Other information may often be desirable and suitable explanations of some features may be very important.

3.1.2. The report must be in writing. Should a preliminary report be issued not including all the components listed below, in the expectation that a further and full report will be submitted, it should be clear in the preliminary report that it does not conform to this APS but that the further (full formal) report will do so.

3.1.3. The actuary is encouraged to remind the client when valuations are due and should comply with any relevant legislation over the production of the report. Generally, the completed and signed report should be in the hands of the actuary's client within one year of the effective date of the valuation or such other period as required by any applicable legislation or by the client. If the report is completed after the period specified, then the actuary should state the reason for the delay in the preparation of the report.

3.1.4. Although any report will be addressed to the actuary's client, the actuary needs to bear in mind that the advice may be made available to third parties who can reasonably be expected to rely on it, including, in particular, any relevant regulatory authority. Any limitations on the extent to which third parties can rely on the advice should be set out in the report.

3.1.5. The report should make it clear to whom it is directed by specifying the client. This will normally be the trustees of a trust-based scheme but, in some circumstances, will be the employer or both jointly. The report should state the purpose for which the valuation is done, the date of the current valuation, and, if applicable, the date of the immediately preceding valuation. The report should also name the actuary or actuaries who carried out the previous valuation.

3.1.6. The report should refer to the appropriate sections of the Trust Deed and Rules (or other legal documents) of a scheme under which the valuation is being made and, if relevant, to the legal or regulatory requirement under which the valuation is being carried out.

3.1.7. The report should include a statement of the benefits which have been valued (for example, by a summary of the terms of the scheme or by reference to appropriate documents.) Reference should be made to the extent to which allowance has been made for discretionary increases in benefits (and the recent practice in granting such increases) or discretionary benefits. If the actuary has excluded from the report assets and corresponding liabilities in respect of certain benefits, such as additional voluntary contributions and pensions secured by annuities, the report should note these exclusions.

3.1.8. The report should include a brief but clear description of the scheme membership and financial data on which the valuation is based, including a description of the assets.

3.1.9. Reference should also be made to any insurance agreements in place for the benefit of the scheme, for example, group life insurance held by trustees or annuities purchased in respect of pensions in payment or in deferment.

3.1.10. In the case of the scheme in discontinuance, there should be a statement of when benefits ceased to accrue.

3.1.11. A statement must be made in the report as to whether the valuation has been prepared in accordance with this APS current at the effective date of the valuation report.

3.1.12. There must be a statement indicating any departures from this APS. The actuary is expected to comply with this APS unless the actuary is convinced that full compliance would be inappropriate, in which case a complete explanation and justification of all departures must be given.