ACTUARIAL SOCIETY OF SOUTH AFRICA

APN 301: POST-EMPLOYMENT HEALTH CARE BENEFIT PLANS

Classification

APN 301 is an Advisory Practice Note (APN) and compliance with it is advisory. APN 301 replaces PGN 301. Where legislation or other documentation refers to PGN 301 it should be interpreted as APN 301.

Abstract

This APN lists the items that should be included in the report when undertaking an actuarial valuation of liabilities and assets in respect of a post-employment health care benefit plan.

Purpose

The purpose of this APN is to ensure that valuation reports contain adequate information for the purposes of the valuation and to maintain the professionalism of the Actuarial Society of South Africa and its members.

Legislation or Authority

Actuarial Society of South Africa Health Care Committee.

IAS19 - International Financial Reporting Standard on Employee Benefits.

Other relevant accounting statements, e.g. IAS19, FAS106 and FAS132 (USA), FRS17 (UK).

Application

Members providing actuarial advice to clients on post-employment health care benefit plans of a defined benefit nature.

Author

Actuarial Society of South Africa Health Care Committee

Status

Version 1.0	Effective from September 2000
Version 2.0	Effective from April 2005
Version 3.0	Effective from July 2012
Version 4.0	Effective from October 2018

1 DEFINITIONS

1.1 A post-employment health care benefit plan is typically an arrangement where an employer pursues a policy of either partially or totally subsidising the medical scheme contributions or claims of former employees and their dependants. Such individuals are usually referred to as medical scheme continuation members, and include members who have continued membership after retirement or death in service of the principal member.

1.1.1 The actuary will usually rely on the employer to provide the subsidy policy to be valued, and the legal obligation may not be clear. The employees' reasonable benefit expectations could depend on *inter alia* contracts of employment, correspondence regarding the subsidy policy and past practice. The actuary may need to recommend that the employer obtain a formal legal opinion in this regard.

1.1.2 The actuary should clarify exactly what is being subsidised. As an example, wellness programmes and other subsidiary products linked to the medical scheme may also be subsidised post-employment.

1.2 There is currently no legal requirement for employers to fund the associated long-term liabilities through assets set aside in separate funding vehicles (ie off balance sheet). However, enterprises are required to provide for the associated liabilities in excess of any plan assets on their balance sheets in accordance with the relevant accounting statement. The principal underlying the accounting concept is simplistically that an enterprise should have provided for an employee's post-employment benefits by the time that the employee is expected to cease employment with the employer.

1.3 The purpose of a valuation of such plans could be *inter alia* to facilitate an enterprise's accounting for employee benefits, to provide funding advice, as part of company sale negotiations, or to determine equitable compensation for employees and/or former employees in exchange for a waiver of the defined benefit promise.

1.4 The South African health care environment is a dynamic one, subject to ongoing changes in legislation. Actuaries providing advice on post-employment health care benefit plans should maintain an up-to-date knowledge of developments affecting these plans.

1.5 For the purposes of this guidance note, the term "actuary" includes student and fellow members of the Actuarial Society of South Africa.

2 SCOPE

2.1 This APN concentrates on actuarial valuations of post-employment health care benefit plans of a defined benefit nature for employer accounting purposes.

2.1.1 The actuary should apply his/her mind to the appropriateness of this APN when performing valuations of such plans for other purposes. For funding valuations, the actuary may find it useful also to refer to APN 201 on Actuarial Valuation Reports for Retirement Funds.

2.2 This APN is not intended to replace or summarise the relevant accounting statement, and should be read in conjunction with the relevant accounting statement.

2.3 This APN concentrates on comprehensive actuarial valuations based on current membership data. However, the actuary may be requested to provide an estimate of the liability without performing a valuation, e.g. as a result of cost, time or data constraints. The actuary should exercise due caution not to mislead the client or third parties as to the accuracy of such an estimate, stating explicitly in the actuary's report that such an estimate is not the equivalent of a valuation result. The actuary should state the methodology and main assumptions used in the calculation of the estimate, including the discount rate and the health care cost inflation assumption. The actuary should also state that he/she has not complied with this APN in full.

3 APPROPRIATE PRACTICES

3.1 Knowledge of Accounting Requirements

To be confident in performing the actuarial services, the actuary should have or obtain sufficient knowledge and understanding of the reporting entity's relevant accounting policies. The actuary should seek guidance from the principal when:

3.1.1 The actuary is uncertain whether another accounting standard is relevant to the actuarial services; or

3.1.2 The actuary envisions that a specific component of the actuarial services may be subject to alternative interpretations of the relevant accounting policy.

3.2 Materiality

The actuary should differentiate between materiality with respect to the actuarial services and materiality with respect to the report.

3.2.1 The actuary should be guided by SAP 901 in assessing materiality with respect to the actuarial services. The principal or reporting entity (not the user of the report) is the intended user of the actuarial services for this purpose.

3.2.2 The reporting entity is responsible for assessing materiality with respect to the report. The actuary should seek guidance from the principal or reporting entity, as appropriate for the work, regarding materiality with respect to the report and take that guidance into account when advising the principal on whether to measure an obligation, the use of refined or approximate actuarial assumptions and methods, and the level of detail for presenting results.

3.2.3 In the remainder of this APN, any use of "material" or "materiality" is with respect to the report unless stated otherwise.

3.3. Material Errors, Omissions, or Non-conformance

If, the actuary becomes aware that information used in performing the actuarial services – including information about employees and their dependents or beneficiaries, employee benefit plan provisions and operations, plan assets, the reporting entity's accounting policies, and the reporting entity's categorisation of employee benefit plans – contains material errors, omissions, or fails in another material manner to conform to the reporting entity's accounting policies, the actuary should inform the principal and seek to resolve the matter. If such a matter is discovered and not resolved in a satisfactory way before the actuary issues the report, the actuary should disclose the matter in the report. This guidance does not impose additional duties beyond the scope of the actuarial services to search for or analyse such errors, omissions, or failures to conform to accounting policies.

4. ACCOUNTING ISSUES

4.1 The actuary may be required to comply with a relevant accounting statement. Further, an enterprise's financial statements are the responsibility of the directors (or equivalent). The actuary should nevertheless ensure that the valuation report contains adequate information and comment bearing in mind that third parties may rely on the valuation report (note especially paragraphs 6.1.13 and 6.3 of this APN).

4.2 The relevant accounting statement may be open to interpretation, especially overseas accounting statements that are written in a different context.

4.2.1 As age differentiation of medical scheme contributions is precluded by law in South Africa, an implicit post-employment subsidy could arise from the employer's subsidy of in-service members' medical scheme contributions (part of which may be used to cross-subsidise older members' claims). According to a SAICA communication[1], only the employer's post-employment subsidy of medical scheme contributions should be valued for IAS19 (AC116) purposes provided that the employer's post-employment benefit obligation is defined in terms of medical scheme contributions and not claims.

4.2.2 In cases of material significance where the relevant accounting statement is considered to be open to interpretation by the actuary, the actuary should discuss alternative approaches with the client, with the recognition that the client is ultimately responsible for the results. Where the client defers this discussion to the client's auditors, the actuary should discuss alternative approaches with the auditors and form a view on the interpretation thereof.

5 VALUATION METHOD

5.1 Determining the accrued (past service) liabilities and the periodic costs of a post-employment health care benefit plan requires analogous actuarial techniques to those used in the valuation of a defined benefit retirement fund, and similar methodologies should be followed.

5.2 The liability valuation method, e.g. the Projected Unit Credit Method, and the asset valuation method are usually prescribed by the relevant accounting statement.

6 ASSUMPTIONS

6.1 The reporting entity is responsible for selecting assumptions that represent the reporting entity's best estimates of the variables that will determine the ultimate costs of its employee benefits. The actuary may advise the principal regarding the selection of some or all of the assumptions to be used in the actuarial services.

6.2 The approach to setting the actuarial assumptions is usually prescribed by the relevant accounting statement. Typically, the assumptions should be unbiased, mutually compatible and based on market expectations at the valuation date for the period over which the obligations are to be settled.

6.3 When advising the reporting entity on the selection of assumptions, the actuary may consider assumptions selected for other purposes or demographic assumptions used at a prior valuation date, if in the actuary's professional judgment, those assumptions satisfy the account standard requirements.

[1] Techtalk, March 2011, Issue 69

6.4 When advising the reporting entity on the selection of the discount rate assumption, the actuary should recommend an assumption that takes into account the accounting standard requirement that the discount rate reflect market yields at the valuation date on high quality corporate bonds or government bonds, as appropriate, where such bonds should be consistent with the currency and estimated term of the employee benefit obligation.

6.4.1 General Approach – Unless the actuary has determined that a simplified approach is appropriate (as described in paragraph 6.4.3 below), the actuary should:

6.4.1.1 Project cash flows on and after the valuation date of benefits attributed to employee service up to the valuation date;

6.4.1.2 Identify an appropriate spot-rate yield curve (as described in paragraph 6.4.2 below);

6.4.1.3 Use the spot rates to determine the present value of the liabilities at the measurement date; and

6.4.1.4 Determine a single weighted-average discount rate that produces substantially the same present value of the liabilities and other appropriate calculations (for example, net interest or service cost).

6.4.2 Appropriate Yield Curve – The actuary may develop an appropriate yield curve from bond yield data at the valuation 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 discount rate (or has adjusted so as to make it appropriate).

6.4.2.1 Corporate Bond Characteristics – When developing a yield curve – or assessing the appropriateness of (or making adjustments to) a third party's yield curve – from a bond universe that includes corporate bonds, the actuary should consider the characteristics of those bonds, including the following:

- Currency – Corporate bonds should be denominated in the same currency as the benefits are denominated.
- Quality – Corporate bonds should be of high quality. In using bond-quality data from internationally recognised credit rating agencies, the actuary should be aware of rating differences between such agencies and have (or understand the yield curve developer's) rules for dealing with such differences. The actuary should also be aware of time lags in the credit rating process. Under normal market conditions, time lags may be insignificant. Under abnormal conditions, the actuary may need to adjust the yield curve for time lags.
- Type – The cash flows of some corporate bonds are not fully predefined in timing and amount (for example, convertible or callable bonds). If such bonds are included, the actuary should understand the effect on the yield curve and make adjustments as appropriate.

- Market Depth – High quality corporate bonds should be included only if the market for such bonds is deep overall. However, the market need not be deep at every duration. A market is considered by the Bank for International Settlements, for example, to be deep and liquid when "participants can rapidly execute large-volume transactions with little impact on prices."[2]. Indicators of market depth include trading volume and bid-ask spreads (for example, wide bid-ask spreads may indicate a lack of depth).
- Outliers – Market yields on some high quality corporate bonds may be substantially different from the yields on most bonds of similar quality and duration included in the universe. The actuary should have (or understand the yield curve developer's) rules for dealing with such outliers. For example, the actuary (or yield curve developer) might exclude such bonds from the universe, or the actuary may make appropriate adjustments to account for a third party's inclusion of outliers in developing the yield curve.

6.4.2.2 Curve-fitting, Interpolation, and Extrapolation – When the actuary is constructing the yield curve from the available bond data, the actuary should apply appropriate curve-fitting, interpolation, or extrapolation techniques. The actuary may use interpolation or extrapolation techniques to estimate yields at durations where the actuary considers the appropriate bond market data unreliable or such data does not exist. Such techniques may take into account (with an appropriate spread adjustment) other market data sources such as yields on government or lower-rated corporate bonds or the swaps market. For example, at durations beyond the longest dated market bond, the actuary may use extrapolation techniques built off spot rates or forward rates, or price consistent approaches. The actuary should be mindful that the choice of extrapolation technique may have a significant impact on the measurement of the liabilities when projected benefit cash flows extend beyond the longest dated market bond. In particular, relatively small changes in the shape of the yield curve at shorter durations may be magnified when extrapolated over a long period. Similarly, when the actuary is using a third party's yield curve, the actuary should understand how that third party has constructed its yield curve.

6.4.3 Simplified Approach – The actuary may use a simplified approach to recommend a discount rate rather than following the general approach described in paragraph 6.4.1 above. The actuary should understand the data and assumptions on which the simplified approach is based and the circumstances in which it can be applied appropriately. The simplified approach should take into account both the duration of the projected benefit cash flows and their shape (that is, whether the cash flows over time are smooth or lumpy).

6.4.3.1 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 paragraph 6.4.1.4 above.

6.4.3.2 The actuary may apply a market index or other reference rate, with adjustments if appropriate. The actuary should understand the bond data and methodology used to construct the index or reference rate, and adjust the rate as appropriate for the duration and shape of the projected benefit cash flows.

[2] Committee on the Global Financial System, Publication No. 13, October 1999.

6.5 The health care cost inflation assumption should reflect all the relevant factors that may reasonably be taken into account, including price inflation, utilisation increases, affordability constraints and future changes in the current medical scheme's age profile to the extent that this is relevant.

6.5.1 The health care cost inflation assumption should be consistent with the economic assumptions underlying the discount rate.

6.5.2 The actuary should bear in mind that recent health care cost inflation levels, relative to the economic assumptions underlying the discount rate, may not be realistic or sustainable in the long term.

6.5.3 Medical scheme members may have a choice of benefit option. The actuary may need to allow for the migration of members to more comprehensive options as they get older.

6.6 The demographic assumptions regarding mortality, withdrawals and early retirement are generally of greater significance than those used in retirement fund valuations as benefits are often only paid in retirement.

6.6.1 The actuary may use a generational mortality table (that is, a matrix including separate mortality tables for each year of birth). The actuary may also use simplified mortality projection methods such as projecting the mortality rates for an appropriate period.

6.6.2 It may be appropriate to take into account higher mortality as a result of AIDS.

6.6.3 It may be necessary to allow for withdrawals in respect of continuation members, e.g. on the grounds of affordability.

6.7 The actuary may need to model initial age-specific claims per member. The actuary should consider the credibility and relevance of the available plan experience for this purpose, making adjustments where necessary for factors such as benefit changes, inflation, expenses other than claims and collateral data.

6.8 Plan assets often play a significant role in the management of an employee benefit plan. When the actuary takes plan assets into account, the actuary should be guided by the following:

6.8.1 Asset Values Supplied by Others – The actuary may rely on asset values prepared by a third party (such as an investment manager).

6.8.2 Qualifying Insurance Policies – When plan assets include qualifying insurance policies, the actuary should appropriately reflect those policies in the calculation of the obligation. For example, the actuary should appropriately differentiate between the reporting entity's employee benefit obligations and those that an insurer has assumed.

6.8.3 Asset-related Benefit Liabilities – The actuary should apply professional judgment to appropriately value employee benefits when the benefit level is affected by the value of plan assets (for example, when benefit levels are linked to the return on plan assets or depend on whether there is a surplus).

6.8.4 Asset Ceiling – When there is a surplus (that is, the fair value of plan assets exceeds the present value of the defined benefit obligation for the plan), the actuary should consider whether the asset ceiling applies. The asset ceiling applies when the surplus exceeds 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. If the asset ceiling applies – or the actuary is uncertain whether it applies – the actuary should seek guidance from the reporting entity whether to apply International Financial Reporting Interpretations Committee Interpretation number 14 (IFRIC 14).

6.9 The effort involved in measuring employee benefit obligations should be proportional to the level of accuracy established for the assignment, taking into account materiality. The actuary is not required to recommend a particular type of assumption or a more refined approach when, in the actuary's professional judgment, its use is not expected to produce materially different results. For example, using a simplified approach to set the discount rate may not produce results that are materially different from a more refined approach. In this paragraph, all references to materiality are with respect to the actuarial services (see paragraph 3.2.

6.10 If the reporting entity prescribes the assumptions to be used and, in the actuary's professional judgment, assumptions prescribed by the reporting entity fail in a material manner to conform to the accounting standard, or the reporting entity's accounting policies, the actuary should be guided by paragraph 3.3.

6.11 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 reporting entity, and should seek guidance from the reporting entity regarding what information about the change should be disclosed in the report.

7 REPORT

7.1 The valuation report should always contain the following items:

7.1.1 An opening statement regarding to whom the report is addressed, the purpose of the valuation and the dates as at which the current and immediately preceding valuation (if any) were performed.

7.1.2 A recommendation as to when the next valuation should be performed.

7.1.3 Details of any special events that occurred since the previous valuation and any allowance made for significant developments that occurred after the valuation date.

7.1.4 A summary of the benefits valued shown separately for post-employment benefits and death-in-service subsidies, including any eligibility criteria for a post-employment subsidy, the effective date of the subsidy policy and the benefit entitlements of dependants of the principal member. In addition, the actuary should highlight any ambiguity in terms of the subsidy policy or characteristics or risks that are unusual to the reporting entity's liability.

7.1.5 A summary of the medical scheme contribution tables (or the employer subsidy where this is not linked to the medical scheme contributions, or the medical scheme benefits where relevant) as well as any other supplementary benefits used in the valuation.

7.1.6 A summary of the data used in the valuation, including:

7.1.6.1 The normal retirement age of the company (where in-service member are eligible to receive a benefit).

7.1.6.2 A summary of the eligible medical scheme membership, including average subsidy amount, subsidy-weighted average age and average past service years for active members, split by number of active and continuation members.

7.1.6.3 The date at which the above membership was correct

7.1.6.4 A description of any plan assets.

7.1.7 A description of the valuation method (including a statement regarding whether the Projected Unit Credit Method was used) and a list of the assumptions used in the valuation. The actuary should provide a description of the methodology used to set the economic assumptions and note the importance of the assumptions used and indicate which the most significant assumptions are.

7.1.8 A summary of the valuation results, including:

7.1.8.1 The total accrued (past service) liability in excess of plan assets at the valuation date
7.1.8.2 The duration or maturity profile of the total liability
7.1.8.3 The periodic costs accruing in the year following the valuation date.
7.1.8.4 Where applicable, the implicit cross-subsidy liability referred to in paragraph 4.2.1 should be shown separately.

7.1.9 The impact on the valuation results of a change in the health care cost inflation assumption and of a change in any other assumption that the actuary considers to be of equal or greater importance. The actuary should not ignore the requirements of the relevant accounting standard in this regard.

7.1.10 A description of how the future liability cash flows may affect the amount, timing and uncertainty of the reporting entity's future cash flows.

7.1.11 A reconciliation of the valuation results with those of the previous valuation (if any), including an analysis of any gains and losses. The assumed accounting policy for recognising actuarial gains and losses should also be stated.

7.1.12 Disclosures about existing risk management strategies such as enterprise risk management, asset-liability matching, or longevity swaps, where these are being utilised.

7.1.13 A statement of the actuary's opinion whether or not the value placed on the accrued liability represents a reasonable best estimate thereof, stating reasons if the opinion is negative.

7.1.14 The actuary's qualifications and the capacity in which the actuary has signed the report, e.g. "as an employee of XYZ Consulting Actuaries".

7.1.15 Any additional information reasonably required from the actuary to satisfy the disclosure requirements of the relevant accounting standard.

7.1.16 Confirmation of the accounting standard being followed in terms of reporting.

7.2 The report should contain sufficient information to enable another actuary with suitable qualifications and experience to assess the reasonableness of the valuation results.

7.3 The report should be clearly qualified to the extent that the actuary has any reservations regarding the data, assumptions or subsidy policy valued.

7.4 If the actuary has signed more than one version of the report at the same valuation date, the revised report should state in broad terms the difference(s) between the revised report and any previous versions of the report at the same valuation date.

7.5 The report should state any significant departure(s) from this APN and the reasons for such departure(s).

7.6 The report should be signed by a Fellow of the Actuarial Society of South Africa.