

ACTUARIAL STANDARD OF PRACTICE PEN-12

STATEMENTS OF REASONABLE PROJECTION – OCCUPATIONAL PENSION SCHEMES AND TRUST RACs

Classification

Mandatory

MEMBERS ARE REMINDED THAT THEY MUST ALWAYS COMPLY WITH THE CODE OF PROFESSIONAL CONDUCT AND THAT ACTUARIAL STANDARDS OF PRACTICE IMPOSE ADDITIONAL REQUIREMENTS UNDER SPECIFIC CIRCUMSTANCES.

Legislation or Authority

Pensions Act, 1990

Occupational Pension Schemes (Disclosure of Information) Regulations, 2006 (S.I. No. 301 of 2006)

Trust RACs (Disclosure of Information) Regulations, 2007 (S.I. No. 182 of 2007)

Application

Members of the Society providing advice to trustees of occupational pension schemes in relation to the preparation of Statements of Reasonable Projection – DC pursuant to the Occupational Pensions Disclosure Regulations or providing advice to trustees of Trust RACs in relation to the preparation of Statements of Reasonable Projection – Trust RACs pursuant to the Trust RACs Disclosure Regulations.

The assumptions set out in this ASP are for the above purpose. If the assumptions are used for other purposes, members must exercise professional judgement as to whether they are suitable for those purposes.

Version	Effective from
1.0	01.07.2009
1.1	01.11.2010
1.2	01.03.2012
1.3	02.12.2013
1.4	01.01.2015
1.5	01.04.2016
1.6	01.10.2017
1.7	01.03.2021 (early adoption is encouraged)



Definitions

In this Actuarial Standard of Practice:

"the Act" means the Pensions Act, 1990

"ASP" means Actuarial Standard of Practice

"ASP LA-8" means the ASP titled "Life Assurance Product Information" issued by the Society

"the Occupational Pensions Disclosure Regulations" means the Occupational Pension Schemes (Disclosure of Information) Regulations, 2006

"the Trust RACs Disclosure Regulations" means the Trust RACs (Disclosure of Information) Regulations, 2007

"should normally" indicates that members of the Society to whom this ASP applies must comply with a particular requirement or prohibition, unless the circumstances are such that the requirement or prohibition is inappropriate and non-compliance is consistent with the standards of behaviour, integrity, competence and professional judgement which other members or the public might reasonably expect of a member

"the Society" means the Society of Actuaries in Ireland

"Statement of Reasonable Projection – DC" has the meaning set out in the Occupational Pensions Disclosure Regulations

"Statement of Reasonable Projection – Trust RAC" has the meaning set out in the Trust RACs Disclosure Regulations

1 Introduction

- 1.1 This ASP is issued pursuant to the Occupational Pensions Disclosure Regulations and the Trust RACs Disclosure Regulations, and constitutes the guidance note issued by the Society of Actuaries in Ireland referred to in paragraph 25(b) of Schedule D Part II of the Occupational Pensions Disclosure Regulations and in paragraph 12(b) of Schedule D of the Trust RACs Disclosure Regulations.
- 1.2 (a) Paragraph 25(b)(i) of Schedule D Part II of the Occupational Pensions
 Disclosure Regulations stipulates that a Statement of Reasonable
 Projection DC shall be prepared -

"in compliance with the guidance note issued by the Society of Actuaries in Ireland in relation to the preparation of such statements, except where, as a result of the structure of the scheme, it is not reasonably feasible for the trustees to comply with the guidance note issued by the Society of Actuaries in Ireland in respect of projections of investment growth, projections of deductions to cover expenses and



charges or projections of the cost of protection benefits, in which case, the trustees may –

- (I) adopt a different methodology in respect of those projections, provided that the trustees are satisfied that the chosen methodology provides a reasonable basis for projections of such investment growth, deductions and costs, having regard to the general purpose of the Statement of Reasonable Projection-DC and provided the assumptions underlying the chosen methodology are specified, and
- (II) adopt a different methodology, to calculate the effect of charges, from that set out in the guidance note issued by the Society of Actuaries in Ireland, provided that the trustees are satisfied that the chosen methodology provides a reasonable basis for calculating the effect of charges, having regard to the general purpose of the Statement of Reasonable Projection DC and provided the assumptions underlying the chosen methodology are specified."
- (b) If, pursuant to paragraph 25(b)(i) of Schedule D Part II of the Occupational Pensions Disclosure Regulations, a Member of the Society advises the trustees of an occupational pension scheme that, as a result of the structure of the scheme, it is not reasonably feasible to comply with certain aspects of this ASP, he or she must specify in writing to the trustees the rationale for this advice.
- (c) If a Member of the Society provides advice to the trustees of an occupational pension scheme in relation to the preparation of a Statement of Reasonable Projection DC pursuant to the Occupational Pensions Disclosure Regulations in circumstances where the trustees wish to avail of the provisions of sub-paragraphs (I) and / or (II) of paragraph 25(b)(i) of Schedule D Part II of the Occupational Pensions Disclosure Regulations, the Member must:
 - (i) apply the provisions of this ASP as far as is reasonably practicable; and
 - (ii) specify in writing to the trustees:
 - (I) the assumptions underlying the chosen methodology;
 - (II) the differences between the chosen methodology and that specified in this ASP; and
 - (III) his or her reasons for believing that the chosen methodology provides a reasonable basis for projections of investment growth, deductions and costs and / or for calculating the effect of charges, as applicable.



1.3 (a) Paragraph 12(b)(i) of Schedule D of the Trust RACs Disclosure Regulations stipulates that a Statement of Reasonable Projection – Trust RAC shall be prepared -

"in compliance with the guidance note issued by the Society of Actuaries in Ireland in relation to the preparation of such statements, except where, as a result of the structure of the trust RAC, it is not reasonably feasible for the trustees to comply with the guidance note issued by the Society of Actuaries in Ireland in respect of projections of investment growth, projections of deductions to cover expenses and charges or projections of the cost of protection benefits, in which case, the trustees may—

- (I) adopt a different methodology in respect of those projections, provided that the trustees are satisfied that the chosen methodology provides a reasonable basis for projections of such investment growth, deductions and costs, having regard to the general purpose of the Statement of Reasonable Projection

 Trust RAC and provided the assumptions underlying the chosen methodology are specified, and
- (II) adopt a different methodology, to calculate the effect of charges, from that set out in the guidance note issued by the Society of Actuaries in Ireland, provided that the trustees are satisfied that the chosen methodology provides a reasonable basis for calculating the effect of charges, having regard to the general purpose of the Statement of Reasonable Projection Trust RAC and provided the assumptions underlying the chosen methodology are specified."
- (b) If, pursuant to paragraph 12(b)(i) of Schedule D of the Trust RAC Disclosure Regulations, a Member of the Society advises the trustees of a Trust RAC that, as a result of the structure of the Trust RAC, it is not reasonably feasible to comply with certain aspects of this ASP, he or she must specify in writing to the trustees the rationale for this advice.
- (c) If a Member of the Society provides advice to the trustees of a Trust RAC in relation to the preparation of a Statement of Reasonable Projection Trust RAC pursuant to the Trust RAC Disclosure Regulations in circumstances where the trustees wish to avail of the provisions of sub-paragraphs (I) and / or (II) of paragraph 12(b)(i) of Schedule D of the Trust RAC Disclosure Regulations, the Member must:
 - (i) apply the provisions of this ASP as far as is reasonably practicable; and
 - (ii) specify in writing to the trustees:



- (I) the assumptions underlying the chosen methodology;
- (II) the differences between the chosen methodology and that specified in this ASP; and
- (III) his or her reasons for believing that the chosen methodology provides a reasonable basis for projections of investment growth, deductions and costs and / or for calculating the effect of charges, as applicable.
- 1.4 Where a Member of the Society provides advice to the trustees of an occupational pension scheme or of a Trust RAC pursuant to this ASP, such advice must include the name and qualifications of the Member of the Society providing the advice and the name of the Member's firm.

2 Scope of ASP

- 2.1 This ASP sets out the principles in accordance with which the various parameters underlying the calculation of the figures required to be provided in a Statement of Reasonable Projection DC or a Statement of Reasonable Projection Trust RAC must be determined.
- 2.2 The ASP has been prepared with the objective of providing illustrations of retirement benefits which are fair, clear and not misleading.
- 2.3 For illustrations of retirement benefits and the Effect of Charges in respect of with-profits contracts, both conventional and accumulating, provided by life assurance companies, and all other contracts where some or all of the charges may not be explicit, the charges for expenses and protection benefits must be determined in accordance with Part III of ASP LA-8.

3 Projected retirement fund

- 3.1 A projected retirement fund determined for the purposes of paragraph 13 of Schedule E of the Occupational Pensions Disclosure Regulations or for the purposes of paragraph 6 of Schedule E of the Trust RACs Disclosure Regulations must be determined as the sum of the fund value at the effective date of the statement plus projected investment growth less projected total deductions to cover expenses and charges less projected deductions for the cost of protection benefits less, if Paragraph 3.4(i)(a) applies, projected stamp duty or pension levy.
- 3.2 A projected retirement fund determined for the purposes of paragraph 25(a)(iii) of Schedule D Part II of the Occupational Pensions Disclosure Regulations or for the purposes of paragraph 12(a)(iii) of Schedule D of the Trust RACs Disclosure Regulations must be determined as the sum of the fund value at the effective date of the statement plus the total amount of contributions expected to be paid in the period from the effective date of the statement up to and including the specified date to which the projected retirement fund refers plus projected investment growth less projected total deductions to cover expenses and charges less projected deductions for the



- cost of protection benefits less, if Paragraph 3.4(i)(a) applies, projected stamp duty or pension levy.
- 3.3 Projected retirement funds must be determined allowing for the actual (e.g. monthly) timing of contribution receipts, investment growth and deductions to cover expenses, charges and, if Paragraph 3.4(i)(a) applies, stamp duty or pension levy. The rate of investment return used for each month of the projection period must be determined in accordance with Section 4 of this ASP.
- 3.4 Where a stamp duty or pension levy is applicable to the market value of assets under management in a pension fund and where it is intended that the cost of such stamp duty or pension levy shall be met by making deductions from the assets of the pension fund:
 - (i) Information on the effect of the stamp duty or pensions levy must be included in the Statement of Reasonable Projection DC or Statement of Reasonable Projection Trust RAC (as applicable) in one of the following ways:
 - (a) Any duties or levies payable, from the date of the illustration until the end of the period for which the duty or levy must be applied, must be reflected in the projected retirement fund and an explanatory note must be provided with the projection; or
 - (b) Where any duties or levies payable, from the date of the illustration until the end of the period for which the duty or levy must be applied, are not reflected in the projected retirement fund, an explanatory note must be provided with the projection and this note must clearly indicate that the projected retirement fund shown does not allow for the duties or levies. The note must also include numerical information on the financial impact of the duties or levies. Where such numerical information is approximate, it must not understate the financial impact; for example, the note may state the maximum percentage by which the duties or levies will reduce the retirement fund.
 - (ii) Where a projected retirement fund is illustrated on a generic basis within a brochure or marketing material, the principles of Paragraph 3.4(i) must be applied in respect of duties or levies payable from the date of publication (which must be stated) until the end of the period for which the duty or levy must be applied (which must also be stated).
- 3.5 Projected retirement funds must be determined having regard to Section 7, Section 9, Section 10 and Section 11 of this ASP.



4 Assumed investment return

- 4.1 The Occupational Pensions Disclosure Regulations and the Trust RACs Disclosure Regulations prescribe that the maximum rate of investment return, before deduction of all anticipated expenses, charges, stamp duty or pension levy, to be assumed in illustrating projected future benefits for the purposes of a Statement of Reasonable Projection DC or for the purposes of a Statement of Reasonable Projection Trust RAC, as appropriate, is 6% per annum. For the purposes of this ASP, the maximum rate of investment return is 4.5% per annum before the deduction of all anticipated expenses, charges, stamp duty or pension levy.
- 4.2 The rate of investment return, before deductions to cover expenses and charges, shall be determined having regard to the asset mix, on the following basis:
 - (i) the maximum gross investment return for equities and property will be 4.5% per annum;
 - (ii) the maximum gross investment return for fixed interest securities will be 1% per annum;
 - (iii) the maximum gross investment return for cash will be 0% per annum; and
 - (iv) the maximum gross investment return for other asset classes, hybrid instruments or derivatives will be determined on the basis of a "look through" to the underlying assets and the current and expected long-term asset mix as outlined under Paragraph 4.3

For this purpose, in the case of geared funds, borrowings must be treated as negative holdings of assets. The rate of investment return applied to borrowings must be the expected rate of interest payable on such borrowings, subject to a minimum of the gross investment return for fixed interest securities.

The rate of investment return so determined shall be subject to an upper limit of 4.5% per annum.

For long-dated projections, the use of the maximum rates above would normally be appropriate as expected long-term returns on asset classes may differ from current yields. However, for projections of less than five years, it is important to have regard to the current level of prevailing yields on the underlying assets.

It is important that the Actuary documents the reasons for his or her assumptions regarding the rate of investment return.

4.3 When determining the rate of investment return under paragraph 4.2(iv), it is important to understand the economic effect of any derivatives and gearing on the future performance of the assets of the pension fund. The assumed rate of investment return must be consistent with:



- (i) the past volatility and/or expected volatility of the investments (whichever is more relevant);
- (ii) where applicable, the published asset mix information provided to investors;
- (iii) where applicable, the published risk rating of investments; and
- (iv) any other relevant information (such as a relevant fund manager's target value at risk).

The Actuary shall further ensure that, in the calculation of the assumed rate of investment return on the fund, the assumed returns on underlying assets do not exceed the maximum rates specified in paragraphs 4.2 (i), (ii) and (iii), as relevant.

Where the Actuary has insufficient information to determine the rate of investment return for a particular asset or holding in an investment fund, the gross investment return assumed shall be subject to a maximum of 0% per annum.

- 4.4 Where assets and / or future contributions are invested in accordance with an investment strategy under which the allocation of contributions and / or accumulated assets to different asset classes is expected to change in the future, the assumed investment return for a month must be based on the expected asset mix for that month. The (monthly equivalent of the) upper limit specified in Paragraph 4.2 applies separately to each month of the projection period.
- 4.5 The amount of investment return for each month of the projection period must be determined by applying the monthly equivalent of the rate of investment return determined in accordance with Paragraph 4.2, Paragraph 4.3 and, where applicable, Paragraph 4.4 to the fund value. In the case of geared funds, the fund value for this purpose is the gross value of the assets of the fund less any borrowings of the fund.
- 4.6 Where an actuary providing advice to the trustees of an occupational pension scheme in relation to the preparation of Statements of Reasonable Projection DC or to the trustees of a Trust RAC in relation to the preparation of Statements of Reasonable Projection Trust RAC has doubts about the rate or rates of investment return to assume in specific situations, the actuary should normally consult the Society.

5 Effect of Charges

- 5.1 The Effect of Charges must be calculated as a percentage to not less than one decimal place.
- 5.2 The Effect of Charges must be calculated as follows.
 - (a) The projected retirement fund (net of deductions to cover expenses and charges, including deductions for the cost of protection benefits and



- stamp duty or pension levy) must be determined in accordance with Section 3.
- (b) The rate of investment return must be determined at which the accumulation of the fund value at the effective date of the statement plus the accumulation of the expected gross contributions, net of deductions to cover expenses and charges, including deductions for the cost of protection benefits, stamp duty or pension levy, would equal the projected retirement fund calculated at (a).
- (c) The rate of investment return must be determined at which the accumulation of the fund value at the effective date of the statement plus the accumulation of the expected gross contributions, without any deductions to cover charges other than deductions in respect of the cost of protection benefits, stamp duty or pension levy, would equal the projected retirement fund calculated at (a).
- (d) The difference between the rate of investment return underlying the projected retirement fund calculated at (b) and the rate of investment return calculated at (c) is the Effect of Charges.

6 Retirement benefits

6.1 Where retirement benefits are illustrated as a percentage or multiple of final salary, or of final pensionable salary, such benefits must be determined on the assumption that the current salary or current pensionable salary, as appropriate, escalates at a compound rate of 1.5% per annum. Where benefits in monetary form are expressed in terms of current value, such benefits must be determined by deflating the projected retirement benefits to the effective date at a compound rate of 1.5% per annum.

7 Contribution increases

- 7.1 Where contribution increases apply, the effect of these must be reflected in the projected retirement benefits on the basis of best estimates of the determinant of the increases which are consistent with the assumed investment return, subject to the proviso that the rate of contribution increase assumed must not exceed the rate of deflation required for the purposes of Paragraph 6.1.
- 7.2 Where, for the purposes of Paragraph 7.1 or otherwise, it is necessary to make assumptions about the rate of change in consumer prices or the rate of change in general earnings, the rate of change in general earnings used must be 1.5% per annum, while the rate of change in consumer prices used must be 1% per annum.

8 Annuity rates

- 8.1 The Occupational Pensions Disclosure Regulations and the Trust RAC Disclosure Regulations require the conversion of retirement funds into an annuity to be illustrated. Except where Paragraph 8.7 or Paragraph 8.8 applies, the following must be used in making this calculation:
 - (a) a maximum interest rate of 0.5% per annum (which is deemed to be net of provision for expenses);



- (b) female mortality for the retiree (irrespective of the actual gender of the retiree) and male mortality for the retiree's spouse or civil partner;
- (c) the following mortality assumptions:

Female mortality: 50% ILT15 (Females); and Male mortality: 42% ILT15 (Males); and

- (d) assume that spouses or civil partners are the same age, or where actual age is known this may also be used.
- 8.2 Subject to Paragraphs 8.7 and 8.8, provision for improving mortality beyond 2013 must be made by assuming that the price of both single and last survivor annuities will increase by 0.33% per annum compound for each calendar year after 2013.
- 8.3 Any life expectancy stated in a Statement of Reasonable Projection DC or a Statement of Reasonable Projection Trust RAC must be determined in accordance with Paragraph 8.1 and Paragraph 8.2, using a rate of interest of 0% per annum.
- 8.4 Illustrations of benefits in annuity form must show annuities which escalate at a rate of 1% per annum, unless the rules of the pension scheme or Trust RAC dictate that a different rate of escalation will apply, in which case that rate must be used in conjunction, where necessary, with assumptions about the rate of change in consumer prices or the rate of change in general earnings determined in accordance with Paragraph 7.2. Level annuities may also be shown but these may not be given greater prominence than escalating annuities.
- 8.5 All annuities shown must be assumed to be payable monthly in advance and guaranteed to be payable for a period of five years, unless the rules of the pension scheme or Trust RAC dictate that different terms will apply to pensions in payment, in which case those terms must be reflected in the projections.
- 8.6 Statements of Reasonable Projection DC and Statements of Reasonable Projection Trust RAC must contain a note describing the nature of the annuity shown, including the duration or durations of life for which the annuity is payable and any reduction that would apply in the event of a death during this period and also including the information specified in Paragraphs 8.4 and 8.5.
- 8.7 Where the remaining term to the assumed retirement age is less than 5 years, then either an appropriate current market annuity rate, or an annuity rate derived from an actuarial basis broadly consistent with prevailing market annuity rates, must be used to illustrate the conversion of the retirement fund into an annuity. In addition, for all illustrations, a statement must be made to the effect that the actual annuity rate at retirement is likely to differ from the annuity rate used in the illustration.



8.8 If a guaranteed annuity rate which is greater than the rate determined above applies, this rate must be used in the illustration of the conversion of the retirement fund into an annuity.

9 Projected deductions for the cost of protection benefits

- 9.1 The current charging basis for protection (i.e. risk) benefits (with allowance for rates increasing with age) must be assumed, unless there is reason to believe that the actual charging basis in the future will be higher than that currently applicable.
- 9.2 Reductions in mortality and other risk charges arising out of anticipated secular improvements in mortality must not be incorporated when determining projected retirement funds.
- 9.3 Where deterioration in risk experience is expected, leading to a consequent increase in the charging basis for protection benefits, this must be reflected in the illustrations.

10 Projected deductions to cover expenses and charges

- 10.1 Projected deductions to cover expenses and charges include charges for profit, where applicable.
- 10.2 The current charging basis for expenses must be reflected when illustrating projected retirement benefits, unless there is reason to believe that this will increase in the future. In particular, any anticipated systematic adjustment in charges to reflect inflation of expenses must be allowed for, using, where necessary, assumptions about the rate of change in consumer prices or the rate of change in general earnings determined in accordance with the provisions of Paragraph 7.2. Reduction in charges must not be anticipated, unless these are contractually guaranteed.
- 10.3 The actual (e.g. monthly) timing and the actual level of expense deductions must be reflected when illustrating projected retirement benefits.
- 10.4 It may be assumed that investment return is achieved after:
 - (a) meeting the costs of buying and selling investments, including transaction related stamp duty, to the extent that these are the arm's length costs actually disbursed for the avoidance of doubt, such costs do not include charges made in respect of investment management;
 - (b) custodial and other fees which are the necessary costs of maintaining an investment fund, to the extent that these are the arm's length costs actually disbursed; and
 - (c) meeting the arm's length cost of routine property maintenance, including property valuation fees and rent collection.

Accordingly, these charges need not be shown as deductions to cover expenses or profit.



- 10.5 The following costs are not regarded as implicit in the investment return:
 - (a) costs of buying and selling investments or maintaining properties which are in excess of what could be negotiated on an arm's length basis;
 - (b) bulk discounts on stockbroker commissions which are retained for the account of the provider of the contract or investment vehicle; or
 - (c) the costs of investment management.

This list is not necessarily exhaustive.

- 10.6 With the exception of the investment related charges exempted above and the cost of protection benefits, if any, all other charges must be treated as deductions to cover expenses (and / or profits). The following is a typical list of such charges in the context of a unit-linked investment vehicle, but this list is not necessarily exhaustive.
 - (a) Contribution charges, premium charges or bid/offer spreads. "Charges" arising from the operation of dual pricing which do not accrue to the provider of the unit-linked investment vehicle need not be shown as deductions;
 - (b) Regular management charges net of "loyalty bonuses", to the extent that these are in addition to the investment costs described in Paragraph 10.4;
 - (c) Extra management charges on "Initial" or "Capital" units;
 - (d) Retention of dividend and other income;
 - (e) Policy or account or contract fees;
 - (f) Reduced allocations of contributions to units;
 - (g) Non-investment periods during which contributions received are not allocated to units;
 - (h) "Rounding" charges. In making a best estimate of the effects of rounding charges where these are uncertain, the illustrations must err on the side of overstating the potential effect. Best practice would be to illustrate a "worst case" scenario;
 - (i) Explicit charges, e.g. for policy/account/contract set-up charges or medical expenses.

In addition to these charges, penalties may apply and these must be allowed for in illustrations of projected benefits.

10.7 For some products, e.g. those where the charge takes the form of all or a proportion of the investment income from a portfolio of investment



securities or all or a proportion of the dividend yield on an index of security prices or other measure of capital values, the form of the charge will be explicit but its level may not be known precisely at inception of the contract but may, for example, become known only as actual experience emerges. In these circumstances, illustrations of projected retirement benefits must be based on best estimates of the anticipated deductions. The pricing of the product will have been based on a targeted level of deductions and, where available, this may provide a suitable estimate.

10.8 Where an asset of a scheme or of a contract is itself an investment in other packaged products or investment vehicles, it will be necessary to 'look through' to the underlying assets to ensure that all charges and expenses, both implicit and explicit, are included.

11 Additional information and / or adjusted methodology may be required

11.1 If additional information is required in order to ensure that a Statement of Reasonable Projection – DC or a Statement of Reasonable Projection – Trust RAC is fair, clear and not misleading, such additional information must be included.

An example of such a situation would be a scheme that is invested in an asset structure (e.g. an insured contract) under which relatively large bonuses may be added to the fund at the scheme member's normal retirement date or in the year(s) immediately preceding that date. In this case, additional information must be provided to ensure that the scheme member is properly informed of the significance of the timing of the bonus.

11.2 It is possible that the prescribed illustration may give a misleading impression of the charging basis applicable to the assets or contracts in which the fund and / or contributions are invested.

An extreme example of this would be a charging structure under which a proportion of the investment return in excess of a prescribed rate is deducted and retained by the provider of the underlying investment vehicle for its own account. A more likely example would be fund management charges which vary in accordance with investment performance.

Another example is certain derivative-based products where the benefit profile is not a smooth function of underlying investment returns and the illustrated scenario of a constant deterministic and conservative investment return could be totally misleading as to the potential benefits, and thus the charges, under such products.

Undoubtedly these examples are not exhaustive. In such circumstances, an appropriate adjustment must be made to the calculations. The objective of this adjustment is to present a fairer illustration of the expected benefits after deductions for expenses and charges, rather than necessarily to present a precise reflection of the prescribed scenario. If necessary, the Statement of Reasonable Projection – DC or Statement of Reasonable Projection – Trust RAC must give a clear explanation of how and why a departure has been made from the prescribed formula.



EXPLANATORY NOTE

ACTUARIAL STANDARD OF PRACTICE PEN-12, VERSION 1.6

This Explanatory Note does not form part of the ASP.

Version 1.7 has been updated to reflect changes to the financial and economic assumptions as shown in the table below:

ASP Financial and Economic Assumptions	ASP PEN- 12	V1.6	V1.7
Assumption	Reference	Rate	Rate
Maximum Investment growth - overall	4.1 & 4.2	5.00%	4.50%
Maximum Investment growth - equity & property	4.2(i)	5.00%	4.50%
Maximum Investment growth - fixed interest	4.2(ii)	2.50%	1.00%
Maximum Investment growth - cash	4.2(iii)	1.00%	0.00%
Maximum Investment growth - other assets with insufficient information	4.3	1.00%	0.00%
Salary inflation rate or benefit deflation rate	6.1	2.50%	1.50%
Contribution increases linked to general earnings	7.2	2.50%	1.50%
Contribution increases linked to consumer prices	7.2	1.50%	1.00%
Maximum interest rate for annuities	8.1	2.00%	0.50%
Rate of escalation for annuities	8.4	1.50%	1.00%