ACTUARIAL STANDARD OF PRACTICE PEN-4

FUNDING PROPOSALS AND ACTUARIAL STATEMENTS (WHERE A FUNDING PROPOSAL IS IN PLACE) UNDER THE PENSIONS ACT 1990

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

The Pensions Act 1990 together with Regulations issued from time to time under the Act.

Statutory Guidance issued by The Pensions Authority and prescribed by the Minister for Social Protection under the Occupational Pension Schemes (Funding Standard) Regulations 1993 to 2009 (as amended or replaced).

Application

Any Scheme Actuary responsible for:

- (a) certifying that a Funding Proposal being submitted to the Pensions Authority meets the requirements set out in the Act, or
- (b) preparing a statement for a scheme annual report under section 55(4) of the Act.

Version	Effective from
1.0	01.06.1995
2.0	15.07.2003
3.0	01.10.2004
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4.3	01.04.2010
4.4	01.11.2010
4.5	01.07.2011
5.0	01.01.2013
5.1	01.03.2015



Definitions

"the Act" means the Pensions Act 1990 as amended

"ASP" means Actuarial Standard of Practice

"should normally" and, where the context requires, "should" indicate 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 of the Society or the public might reasonably expect of a member

"the Society" means the Society of Actuaries in Ireland

"Statutory Guidance" means guidance issued by The Pensions Authority and prescribed by the Minister for Social Protection under the Occupational Pension Schemes (Funding Standard) Regulations 1993 to 2009 (as amended or replaced).

1 Introduction

- 1.1 This ASP is the "applicable professional guidance issued by the Society of Actuaries in Ireland and specified in the regulations" referred to in section 49(2A) of the Act.
- 1.2 It is essential that the Scheme Actuary keeps himself informed on amendments to the Act as well as the Regulations pursuant to the Act and any amendments thereof as may occur from time to time. This ASP does not contain the full text of the relevant sections of the Act and does not give any interpretation of them. The Scheme Actuary must satisfy himself that he has acted in accordance with the legislation as well as this ASP.
- 1.3 The Scheme Actuary in completing a Funding Proposal or Actuarial Statement (where a Funding Proposal is in place) must comply with this ASP or "with any other applicable guidance issued by any other person (including the Minister) and specified in the regulations." It is essential that the Scheme Actuary keeps himself fully informed on any such additional applicable guidance including Statutory Guidance.
- 1.4 The requirements of Statutory Guidance are in addition to those outlined in this ASP and, in the event of any conflict, Statutory Guidance shall prevail.

2 General

2.1 Only an actuary who holds a Scheme Actuary Practising Certificate issued by the Society may certify that a Funding Proposal meets the requirements of the Act. Each Scheme Actuary, before certifying that a Funding Proposal meets the requirements of the Act,



- must consider whether his experience is sufficient in the light of the circumstances pertaining at the time of certification. If there is any doubt, the Scheme Actuary must seek help from another Scheme Actuary with relevant experience or from the Chairman of the Society's Professional Affairs Committee.
- 2.2 This ASP sets out the issues that must be addressed by the Scheme Actuary in certifying a Funding Proposal, including the considerations to be taken into account in the interpretation of the words "could reasonably be expected".
- 2.3 The Scheme Actuary must take particular care to notify the trustees and the employer of the key assumptions made and, in particular, of the factors to which the Funding Proposal is especially sensitive. They must also be made aware of the need to obtain further advice if experience is out of line with the Scheme Actuary's assumptions in these key areas.
- 2.4 In certifying that a Funding Proposal satisfies the requirements of the Act, the Scheme Actuary must comply with ASP PEN-3 issued by the Society.
- 2.5 The Funding Proposal must relate to the legislation in force at the date the Funding Proposal is certified. Therefore any change in the legislation governing the Funding Standard between the effective date of the Actuarial Funding Certificate and/or Funding Standard Reserve Certificate which gave rise to the Funding Proposal and the date of certifying the Funding Proposal must be taken into account.
- 2.6 When certifying a Funding Proposal, the Scheme Actuary must consider fully the likely experience of the scheme in the intervening period between the effective date of the Funding Proposal and the intended effective date of the next Actuarial Funding Certificate and Funding Standard Reserve Certificate or, where applicable, any later date specified under section 49(3) or 49(3B) of the Act, in light of the requirement provided for in Section 55(4) of the Act.

3 Certification of the Funding Proposal

- 3.1 In certifying that a Funding Proposal meets the requirements of the Act, the Scheme Actuary certifies that, in his opinion, the scheme could reasonably be expected to satisfy the Funding Standard and, where the proposal is submitted on or after 1 January 2016 or the effective date of the next Actuarial Funding Certificate (or such later date specified under section 49(3B) of the Act) is on or after 1 January 2016, the Funding Standard Reserve, at the intended effective date of the next Actuarial Funding Certificate and Funding Standard Reserve Certificate or, where applicable, any later date specified under section 49(3) or 49(3B) of the Act. He must state this date.
- 3.2 In certifying a Funding Proposal, the Scheme Actuary must include a statement to the effect that it has been prepared on the basis that the legislation governing the Funding Standard will not change in the period between the date of signing the Funding Proposal and the intended effective date of the next Actuarial Funding Certificate and Funding



- Standard Reserve Certificate or, where applicable, any later date specified under section 49(3) or 49(3B) of the Act.
- 3.3 The Scheme Actuary must set out the key assumptions on which his opinion is based. This disclosure must contain sufficient detail to allow an informed reader to form a judgement as to the appropriateness of the assumptions employed. Without prejudice to the generality of this requirement, the Scheme Actuary must disclose the following:
 - (a) The assumed rate(s) of investment return used to project the asset value and any adjustment for expenses, having regard to the trustees' expected investment policy over the period of the Funding Proposal;
 - (b) The assumed rates of salary, state pension and scheme pension increases, if applicable, used to project the benefits;
 - (c) The assumed rates of mortality and any allowance for future improvements therein, and the discount rate or the annuity rates used to project the value of pension benefits;
 - (d) The allowance for options, such as commutation, which could have a significant impact on the liabilities;
 - (e) The assumed rates of change in the membership, including leavers and retirements and any allowance for new entrants.
 - (f) Where the Scheme Actuary has assumed that bond yields will increase over the period of the Funding Proposal, he should highlight the potential impact if actual experience does not reflect this assumption.

The Scheme Actuary must clearly state the rate(s) and/or amount(s) of contribution that should be paid to the scheme over the period of the Funding Proposal, the relevant earnings to which any such rate(s) should be applied (if appropriate) and the timing/frequency of contribution payments.

3.4 The Scheme Actuary must state the assumed approach in relation to any discretionary practices that may have a significant impact on the liabilities (for example, the granting of discretionary pension increases or the granting of early retirement options requiring the consent of either the trustees or the employer) over the period to the intended effective date of the next Actuarial Funding Certificate and Funding Standard Reserve Certificate (or later date specified under section 49(3) or 49(3B) of the Act). The Scheme Actuary must confirm what, if any, agreements have been reached with those in whom the power to exercise the relevant discretions are vested. The Scheme Actuary must comment on the potential impact on the funding position if actual practice in this regard deviates from the assumed approach. The Scheme Actuary must also comment on the potential impact of any early retirement or other options which do not require the consent of the trustees or the employer.



- 3.5 The Scheme Actuary must comment on the sensitivity of the scheme's funding position to future investment market changes over the period to the intended effective date of the next Actuarial Funding Certificate and Funding Standard Reserve Certificate (or, where applicable, any later date specified under section 49(3) or 49(3B) of the Act). Such comments must have particular regard to the relationship between the assets held and the form and incidence of the liabilities and must seek to convey a reasonable understanding of the nature and extent of the investment risk.
- 3.6 If part of the assets of the scheme to be taken into account for the purpose of meeting the Funding Standard take the form of contingent assets as defined in Statutory Guidance published by the Pensions Authority the Scheme Actuary must comply with the relevant Statutory Guidance. Given that contingent assets may only be in place for a fixed period, the Scheme Actuary must carefully consider whether it is appropriate to take account of such assets as well as the impact their inclusion may have on the funding position over the term of the Funding Proposal.
- 3.7 If part of the assets of the scheme to be taken into account for the purpose of meeting the Funding Standard Reserve take the form of an Employer Undertaking, as defined in Statutory Guidance issued by the Pensions Authority, the Scheme Actuary must comply with the relevant Statutory Guidance.

4. Actuarial Statements where a Funding Proposal is in place

4.1 Section 55 of the Act requires that an Actuarial Statement be included in the trustees' annual report in specified circumstances.

This form of Actuarial Statement will attest as to whether the Scheme Actuary is reasonably satisfied that, at the last day of the period to which the trustees' annual report relates, the scheme will satisfy the Funding Standard and Funding Standard Reserve at the effective date of the next Actuarial Funding Certificate and Funding Standard Reserve Certificate or where applicable, any later date specified under section 49(3) or 49(3B) of the Act.

- 4.2 Where the Actuarial Statement states that the Scheme Actuary is not satisfied that the Funding Standard will be met at the effective date of the next Actuarial Funding Certificate or any later date specified under section 49(3) or 49(3B) of the Act, or that the Funding Standard Reserve will not be met at the date of the next Funding Standard Reserve Certificate or any later date specified under section 49(3B) of the Act, then the trustees of the scheme shall notify the Pensions Authority in writing to that effect.
- 4.3 It is not required that a full actuarial valuation be undertaken in order that the Scheme Actuary can sign the Actuarial Statement. Approximate projections may be used based on previous funding calculations for the scheme.



The Scheme Actuary must decide in the light of the funding level at the previous valuation and prevailing conditions, together with those experienced since the previous calculations, as to whether an approximate projection or a full valuation is appropriate.

- 4.4 In deciding whether to use approximate projections or not, the Scheme Actuary should take into account that, even with very stable financial conditions ruling over the period of projection, the value of liabilities in respect of active and deferred members can rise very rapidly and that the value of pension liabilities can rise as well as fall depending on the nature of the pension payments, on mortality experience and on annuity rates.
- 4.5 The Scheme Actuary should satisfy himself that the value of the assets represents their true value (usually they will have been audited or can be verified from statements from investment managers). Adjustments should then be made to reflect the estimated distributable proceeds on an orderly wind-up of the scheme commencing on the effective date.
- 4.6 The Scheme Actuary should be aware that there are certain circumstances as set out in Statutory Guidance and guidelines issued by the Pensions Authority in which there is a negative Actuarial Statement but where the Trustees may not be required to submit a Funding Proposal under Section 49.

5. Considerations

- 5.1 Attention is drawn to the following particular considerations (this list should not be taken to be exhaustive).
 - 5.1.1 The meaning which the Scheme Actuary attaches to the words 'could reasonably be expected' must comprehend a view of future events that is not more optimistic than best estimate, taking into account the considerations surrounding the certification of a Funding Proposal including, in particular, those set out below, but not taking into account every conceivable unfavourable development. The Scheme Actuary should be conscious that an excessively cautious approach could result in an unnecessary reduction in benefits. 'Events' includes events external to the scheme, e.g. economic and financial developments.
 - 5.1.2 The actuarial assumptions used by the Scheme Actuary for the purpose of the Funding Proposal must be determined by reference to the Appendix to this ASP and to Statutory Guidance issued by the Pensions Authority. In interpreting the limits prescribed, the Scheme Actuary must bear in mind that in aggregate the basis must, at a minimum, represent a best estimate of future events. However, it would be highly unlikely to be appropriate to set each element of the basis at the most optimistic level allowed.



- The prescribed limits set out in the Appendix will be reviewed by the Society periodically to take account of changing economic circumstances, and the Scheme Actuary must also take account of any revisions to Statutory Guidance.
- 5.1.3 The Act places the responsibility for submitting an Actuarial Funding Certificate and Funding Standard Reserve Certificate to the Pensions Authority on the trustees of a scheme and, as a consequence, the trustees decide on the effective date of each Certificate within the requirements of the Act. Given that the Funding Proposal is designed to relate to the position at the date of the next Actuarial Funding Certificate and Funding Standard Reserve Certificate (or later date specified by the Pensions Authority), the Scheme Actuary must discuss with the trustees the intended effective date of the next Certificates prior to preparing a Funding Proposal.
- 5.1.4 The Actuarial Funding Certificate and Funding Standard Reserve Certificate relate to the position in the event of the winding up of the scheme, so that in certifying a Funding Proposal the Scheme Actuary must have particular regard to the priority rule and to the effects on priority of the following:
 - (i) Certain benefits will naturally advance in priority during the period of a Funding Proposal, e.g. on a retirement, the pension coming into payment under the scheme is advanced in priority over the corresponding previously held statutory preserved benefit. Also, increases in the amounts of benefits arising from increases in earnings or increases in pensions in payment and deferred pensions must be taken into account.
 - (ii) When a winding-up occurs, some scheme members might well have options which they would otherwise have no occasion to take or exercise. Included here might be a unilateral right to immediate early retirement pensions on wind-up or an option which is only available subject to the consent of the trustees or employer. In this context, the definition of normal pensionable age as contained in the Act must be carefully noted.

If the Scheme Actuary is in any doubt as to the interpretation of the winding-up rule (or any other relevant rules) of the scheme, appropriate advice must be sought before the Funding Proposal is certified.

- 5.1.5 (a) The Scheme Actuary must make whatever enquiries he considers appropriate to satisfy himself that he has been supplied with all the relevant data and information to enable him to certify the Funding Proposal.
 - (b) In addition, the Scheme Actuary must make whatever enquiries he considers appropriate to satisfy himself that he has been supplied with information concerning changes likely to materialise in future, as well as those which have already occurred in the period since the effective date of the Actuarial



Funding Certificate and/or Funding Standard Reserve Certificate to which the Funding Proposal relates, in any aspect of the scheme that may affect its ability to satisfy the Funding Standard at the intended effective date of the next Actuarial Funding Certificate and Funding Standard Reserve Certificate (or later date specified under section 49(3) or 49(3B) of the Act). These could include (this list is not necessarily exhaustive):

- (i) Any change in the rules of the scheme affecting contribution or benefit levels or the degree of priority accorded to benefits in the event of the winding up of the scheme;
- (ii) Any change in the definition of pensionable earnings and any unexpected change in the general remuneration levels of scheme members;
- (iii) Any increase or decrease in the number of members or pensioners resulting, for example, from the acquisition or sale of participating companies, through early retirement, or the closure of the scheme to new entrants;
- (iv) Any discretionary augmentations of benefits on early, normal or late retirement or on the death of a member;
- (v) Any discretionary increase to pensions in payment and/or deferred pensions;
- (vi) Any change in investment policy.

He need not allow for possible changes which are not currently envisaged by the trustees or employer and which would not be in keeping with recent experience.



Appendix Actuarial assumptions used for the purpose of Funding Proposals

Projecting the fund value

- 1. The assumed rate of investment return should be no greater than the Scheme Actuary's best estimate of the return which can reasonably be expected on the assets of the scheme but should not exceed the limits set out. The assumed rate of investment return is also subject to the maximum limits specified in Statutory Guidance.
- The Scheme Actuary may set either a composite assumed rate of investment return for the assets as a whole or specific rates for the principal asset classes.
- 3. The assumed rate of investment return should reflect the nature and likely distribution of the assets of the scheme over the period in question. In particular, it may be reasonable to base the expected return on:
 - (i) the current asset distribution
 - (ii) the long term benchmark distribution as determined by the trustees, or
 - (iii) another distribution, provided that the Scheme Actuary is satisfied that this reflects the investment policy that the trustees will pursue.
- 4. The assumed rates of investment return on the various investment classes and on the fund as a whole must not exceed the following limits:
 - (i) The assumed rate of return for government bonds must reflect the actual gross redemption yield on such bonds or the yield on a government bond index of appropriate duration relative to the bonds held or the benchmark for the fund subject to adjustment to reflect possible risk of default where the bonds held are not investment grade.
 - (ii) The assumed rate of return for corporate bonds must reflect the gross redemption yield on a corporate bond index of an appropriate duration relative to the bonds held or the benchmark for the fund subject to adjustment to reflect possible risk of default where the bonds held are not investment grade.
 - (iii) The assumed rate of return on investments held under liability-driven investment (LDI) strategies must reflect the actual net yield on the underlying swap contracts or other instruments used.
 - (iv) The Scheme Actuary may assume that the rate of return on equity investments will exceed that available on fixed interest investments. In considering the extent of equity outperformance, the Scheme Actuary may take into account historic norms together with the prevailing level of markets. The assumed return on equities must not exceed the greater of:



- (a) the gross redemption yield on a AAA Eurozone government bond index plus 4% per annum; and
- (b) the "Discount rate pre-retirement" set out in Section 34 Statutory Guidance issued by the Pensions Authority.
- (v) The Scheme Actuary may assume that the return on property investments will exceed that available on fixed interest investments. In considering the extent of property outperformance, the Scheme Actuary may take into account historic norms together with the prevailing level of markets. The assumed return on property must not exceed the greater of:
 - (a) the gross redemption yield on a AAA Eurozone government bond index plus 3% per annum; and
 - (b) the "Discount rate pre-retirement" set out in Section 34 Statutory Guidance issued by the Pensions Authority.
- (vi) The assumed rate of return on cash investments must reflect the Scheme Actuary's expectation of deposit rates and must be consistent with the gross redemption yield on a AAA Eurozone government bond index.
- (vii) The assumed rate of return on alternative assets must reflect the return on cash investments unless the Scheme Actuary has sufficient reason and evidence to adopt a different rate of return. If a higher return than that on cash investments is chosen, the risk premium must be commensurate with the level of risk associated with the alternative assets, subject to the provision that the rate of return chosen must not exceed the gross redemption yield on a AAA Eurozone government bond index by more than 4% p.a.

For this purpose, "alternative assets" mean assets or funds where returns are generated through investing in non-traditional assets classes (such as private equity, infrastructure and commodities) and funds which typically target absolute returns (i.e. returns in excess of cash) through the use of various asset classes, investment techniques and derivative instruments (e.g. hedge funds, active currency funds and market neutral equity funds); and "alternative assets" exclude other assets or funds referred to elsewhere in this section 4 of the Appendix.

- (viii) The assumed rate of return for other asset classes must be consistent with the principles set out above.
- (ix) Regardless of the assumed distribution of the assets, the Scheme Actuary must not assume that the rate of return on the fund as a whole will exceed the gross



- redemption yield on an appropriate Eurozone government fixed interest index by more than 3.5% p.a.
- (x) The above limits apply before any allowance is made for investment expenses. The Scheme Actuary must reduce the assumed gross rates to reflect anticipated investment expenses.
- 5. In projecting the fund value over time, the Scheme Actuary must take account of the amount and timing of contributions paid to and benefits, expenses and taxes paid from the fund. Where cashflows are expected to be reasonably uniform, the Scheme Actuary may assume an appropriate weighted average.

Projecting the liabilities

- 6. In determining the value of the liabilities of the scheme at a future date, the Scheme Actuary must have regard to the principles of ASP PEN-2 and ASP PEN-3 as currently constituted.
- 7. The value of liabilities at a future date will depend on the prevailing yields on long dated bonds at the effective date of that valuation. It is reasonable for the Scheme Actuary to assume that these yields will remain unaltered between the effective date of the Funding Proposal and the effective date(s) of the future valuation(s).
- 8. Alternatively, it may be appropriate for the Scheme Actuary to assume that a different rate or rates will apply over the period, provided that the alternative rate(s) can be justified either by examination of the yield curve for the euro denominated bond market as a whole or by reference to historic norms, and provided further that:
 - (i) In no circumstances may yields be expected to increase by more than 1.5% p.a.
 - (ii) Where a yield other than the current yield is adopted, the Scheme Actuary must make appropriate adjustments to the assumed future rates of price and wage inflation and investment return.
 - (iii) The Scheme Actuary may assume that different yields may increase at different levels.
 - (iv) Any assumed increase in yields must be phased over a period of not less than five years.
- 9. In extrapolating the liabilities from the effective date of the Funding Proposal to the effective date of the future valuation:
 - (i) The assumed future rate of price inflation should reflect the Scheme Actuary's best estimate of prevailing levels.



- (ii) The assumed rate of future salary inflation should normally reflect price inflation, together with a further allowance for general productivity or promotional increases, or alternatively the employer's expectation as appropriate. In particular, where the employer participates in a national pay agreement, the rate of salary inflation should reflect the terms of that agreement. Equally, if an employer has implemented a pay freeze or pay reduction, the Scheme Actuary may take this into account; however, the Scheme Actuary should consider the possibility of exceptional salary increases at the end of a pay freeze or pay reduction.
- (iii) The Scheme Actuary must take account of the impact of advances in priority occasioned by the retirement of members during the projection period. The Scheme Actuary may assume levels of commutation consistent with the scheme's experience.
- (iv) Unless the Scheme Actuary has reason to believe otherwise, it may be assumed that leavers will be replaced by new entrants. However, where the Scheme Actuary is aware of a significant event, such as an acquisition or redundancy/early retirement programme or scheme closure, account should be taken of the expected impact of these events.
- (v) Where the projection period relates to a period of three or more years, the Scheme Actuary must make an allowance for future improvements in pensioner mortality. For pensions in payment at the effective date of the Funding Proposal, which must be valued on a basis consistent with current annuity rates, it is reasonable to assume that the existing basis incorporates an adequate allowance for mortality improvements for the purposes of projecting the value at the end of the period. For pensions that become payable during the period between the effective date of the Funding Proposal and the effective date(s) of the future valuation(s), allowance must be made for the impact of future mortality improvements on annuity rates for the purposes of projecting the value at the end of the period.

Material changes between the effective date of the Funding Proposal and the date of signing

10. The Scheme Actuary must take account of material changes in the value of either the assets or the liabilities between the effective date of the Funding Proposal and the date of signing thereof. In considering the impact of a change in the value of the assets, the Scheme Actuary should take account not only of the change in the value of assets but also any corresponding change in the assumed future rate of investment return. However, if the Scheme Actuary is satisfied that a change in the asset value would be broadly compensated by a corresponding change in the expected future rate of investment return and/or a change in the value of liabilities, then no adjustment is necessary.