THE SOCIETY OF ACTUARIES IN IRELAND

ACTUARIAL STANDARD OF PRACTICE PEN-4

FUNDING PROPOSALS UNDER THE PENSIONS ACT 1990

Classification

Mandatory

MEMBERS ARE REMINDED THAT THEY MUST ALWAYS COMPLY WITH THE PROFESSIONAL CONDUCT STANDARDS, 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.

Guidelines and pro-forma Certificates as issued by the Pensions Board from time to time.

Application

Any Scheme Actuary responsible for:

- (a) certifying that a Funding Proposal being submitted to the Pensions Board meets the requirements set out in the Act,
- (b) certifying the reasons for failure of a scheme to meet the Funding Standard under section 49(3) of the Act, or
- (c) 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 |
| 4.0 | 21.12.2005 |
| 4.1 | 30.12.2006 |
| 4.2 | 01.07.2008 |
| 4.3 | 01.04.2010 |
| | |

Definitions

[&]quot;the Act" means the Pensions Act 1990

[&]quot;ASP" means Actuarial Standard of Practice

[&]quot;the Society" means the Society of Actuaries in Ireland.

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 Section 49(1) of the Act requires that where the trustees of a scheme, in accordance with section 43 of the Act, submit an Actuarial Funding Certificate which certifies that, at the effective date of the Certificate, the scheme does not satisfy the Funding Standard, they shall submit to the Pensions Board a Funding Proposal.
- 1.3 Under Section 49(2) of the Act, a Funding Proposal shall:
 - "(a) contain a proposal designed to ensure that, in the opinion of the Scheme Actuary, the scheme could reasonably be expected to satisfy the funding standard at the effective date of the next actuarial funding certificate,
 - (b) be certified by the Scheme Actuary as meeting the requirements of paragraph (a),
 - (c) be signed by or on behalf of the employer and by or on behalf of the trustees of the scheme, in each case signifying agreement to the proposal, and,
 - (d) be submitted by the trustees of the scheme with the actuarial funding certificate to which it relates."
- 1.4 Under an amendment to section 49(3) of the Act contained in the Social Welfare (Miscellaneous Provisions) Act 2003, the Pensions Board has powers to specify a date later than the effective date of the next actuarial funding certificate for the purposes of section 49(2)(a) above where:

"the Scheme Actuary concerned certifies that the failure of the scheme to satisfy the funding standard relates wholly or mainly to the performance of relevant markets in relation to investments made with the resources of the scheme and that the performance of those markets in relation to those investments is not inconsistent with the performance generally of relevant markets for investment in the same period".

Subject to certain conditions, the Pensions Board may also modify the requirements (b), (c) and (d) above as it considers appropriate.

2 General

- 2.1 Only an actuary who holds a Scheme Actuary Certificate 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 have regard to ASP PEN-3.
- 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 which gave rise to the Funding Proposal and the date of certifying the Funding Proposal must be taken into account.
 - Where proposed changes in legislation that are likely to affect the ability of the scheme to meet the funding standard at the intended effective date of the next Actuarial Funding Certificate (or later date specified by the Pensions Board) are known to the Scheme Actuary at the time of certifying the Funding Proposal, he must consider the implications and advise the trustees and employer accordingly.
- 2.6 Section 55(4) of the Act provides for a requirement for the Scheme Actuary to certify in the annual report that he is reasonably satisfied that the scheme will satisfy the Funding Standard at the effective date of the next Actuarial Funding Certificate. These Actuarial Statements are designed to monitor the progress of the Funding Proposal, and the Scheme Actuary must adhere to the principles of this ASP in signing such statements.
- 2.7 When certifying a Funding Proposal, the Scheme Actuary must consider fully the circumstances which may occur in the intervening period between the effective date of the Funding Proposal and the intended effective date of the next Actuarial

Funding Certificate, in the 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 at the intended effective date of the next Actuarial Funding Certificate (or later date specified by the Pensions Board). 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.
- 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 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;
 - (b) The assumed rates of salary, state pension and scheme pension increases used to project the benefits;
 - (c) The assumed rates of mortality and the allowance for future improvements therein, 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.

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 (or later date specified by the Pensions Board). 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. 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 The Scheme Actuary must provide an indication of the implications for the funding level, over the period of the Funding Proposal, of anticipated changes in liabilities, in particular those associated with anticipated retirements.
- 3.7 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 the Contingent Asset Guidelines published by the Pensions Board - the Scheme Actuary must carefully consider whether he or she has the relevant skills to competently value such assets. Where necessary, the Scheme Actuary must ensure that advice and guidance is sought from appropriate experts (which may include but is not limited to legal advisers, covenant assessors or corporate debt specialists) when determining the value to be placed on the contingent assets. When valuing or considering the use of contingent assets, the Scheme Actuary must refer to and take account of the content of the Contingent Asset Guidelines published by the Pensions Board and in particular the section describing a framework for contingent assets included as part of the realisable value of the assets of a fund for the purpose of meeting the Funding Standard. 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.

4. Considerations

- 4.1 Attention is drawn to the following particular considerations (this list should not be taken to be exhaustive).
 - 4.1.1 The meaning which the Scheme Actuary attaches to the words 'could reasonably be expected' must comprehend a prudent view of future events,

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.

4.1.2 The actuarial assumptions used by the Scheme Actuary for the purpose of the Funding Proposal must be determined by reference to Appendix I. In interpreting the limits prescribed in Appendix I, the Scheme Actuary must bear in mind that in aggregate the basis must, at a minimum, represent a best estimate of future events. In particular, it would be highly unlikely to be appropriate to set each element of the basis at the most optimistic level allowed by Appendix I.

The prescribed limits set out in Appendix I will be reviewed by the Society periodically to take account of changing economic circumstances.

- 4.1.3 The Act places the responsibility for submitting an Actuarial Funding Certificate to the Pensions Board on the trustees of a scheme and, as a consequence, the trustees decide on the effective date of each Actuarial Funding 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 (or later date specified by the Pensions Board), the Scheme Actuary must discuss with the trustees the intended effective date of the next Actuarial Funding Certificate prior to preparing a Funding Proposal.
- 4.1.4 The Actuarial Funding Certificate relates 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.

- 4.1.5 (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 establish the position at the effective date of the Actuarial Funding Certificate to which the Funding Proposal relates.
 - (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 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 (or later date specified by the Pensions Board). These could include:
 - (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 extreme changes which are not currently envisaged by the trustees or employer and which would not be in keeping with recent experience.

5 Certifying the reasons for failure to satisfy the funding standard

5.1 Where the trustees of a scheme intend to apply to the Pensions Board for an extension of the period of a Funding Proposal, the Scheme Actuary will be asked to certify under section 49(3) of the Act the reasons for the scheme's failure to satisfy the Funding Standard. Any such certification should normally be made using the pro-forma statement required under the section 49(3) guidelines issued by the Pensions Board.

Certification may be made only if the scheme satisfies:

- (a) either the Standard Test as specified in paragraph 5.3 or the Scheme-Specific Test as specified in paragraph 5.4, and
- (b) the conditions specified in paragraph 5.5.
- 5.2 The period to be considered may be determined by the Scheme Actuary and should normally be the period beginning on the effective date of the last Actuarial Funding Certificate that certified that the scheme satisfied the Funding Standard. In exceptional circumstances, the Scheme Actuary may consider an alternative period. In all cases, the period chosen:
 - (a) must be continuous, and
 - (b) must not include periods prior to 1st July 1999, and
 - (c) must end on the effective date of the current Actuarial Funding Certificate.

5.3 The Standard Test

The Scheme Actuary may certify that the scheme passes the Standard Test if the notional value of the assets exceeds the Standard Test notional value of the liabilities at the effective date of the current Actuarial Funding Certificate.

The notional value of the assets is the value of the assets at the effective date of the Actuarial Funding Certificate assuming that the assets of the scheme had achieved the following returns over the period:

(a) For periods before 1 September 2005, the return that would have been achieved if the assets had been invested in a suitable long bond index.

- (b) For periods after 1 September 2005, the return that would have been achieved if the asset allocation over the period was as expected at the start of the period and the asset class returns were:
 - (i) for equities and property, the pre-retirement discount rate specified in ASP PEN-2 at the start of the period;
 - (ii) for bonds and cash, the gross redemption yield on the Fixed Benefits MVA reference stock specified in ASP PEN-2 at the start of the period;
 - (iii) for other assets, the expected return consistent with (i) and (ii) above.

The asset allocation for the purposes of this calculation should normally reflect the approximate distribution at the beginning of the period and may be adjusted during the period to reflect material changes in the actual underlying distribution of the assets.

The Standard Test notional value of the liabilities is the value of the liabilities (including the allowance for wind-up expenses) at the effective date of the current Actuarial Funding Certificate based on annuity costs, market rates, and financial assumptions applicable under ASP PEN-2 (formerly GN11(ROI)) at the start of the period chosen in accordance with paragraph 5.2. However, there are two exceptions:

- Firstly, if the start of the period is before 1 September 2005 and the end of the period is on or after 1 September 2005, annuity costs, market rates, and financial assumptions applicable under ASP PEN-2 (formerly GN11(ROI)) at 1 September 2005 must be used;
- Secondly, if the start of the period and the end of the period are before 1 September 2005, annuity costs, market rates, and financial assumptions applicable under ASP PEN-2 (formerly GN11(ROI)) at the end of the period must be used.

5.4 The Scheme-Specific Test

The Scheme Actuary may certify that the scheme passes the Scheme Specific Test if the notional value of the assets exceeds the Scheme Specific Test notional value of the liabilities at the effective date of the current Actuarial Funding Certificate.

The notional value of the assets is as calculated in paragraph 5.3.

The Scheme-Specific Test notional value of the liabilities is the Standard Test notional value of the liabilities further adjusted to reflect expected rather than actual experience in relation to all of the matters specified in the Section 49(3) guidelines issued by the Pensions Board. It should be noted that the Pensions Board will only grant an extension following certification under the Scheme-Specific Test where it can be demonstrated that actual experience could not

- reasonably have been anticipated and it will be a matter for the trustees to establish with the Pensions Board that the relevant experience could not have been so anticipated.
- 5.5 In relation to the assets, the Scheme Actuary must determine whether "the performance of those markets in relation to those investments is not inconsistent with the performance generally of relevant markets for investment in the same period". If the assets of the scheme were invested throughout the period in one or more reasonably diversified pooled funds which invest in a mix of asset classes, the Scheme Actuary may normally consider this condition to be met. Otherwise, the Scheme Actuary may consider this condition to be met if either:
 - (a) in aggregate the actual assets held by the scheme did not underperform the relevant indices, weighted for the actual distribution of the assets among asset classes and geographic spread, by more than 3% p.a. over the period, or
 - (b) the performance of the actual assets held by the scheme over the period exceeded that of a reasonably diversified pooled fund which invests in a mix of asset classes, regularly used by Irish pension schemes and having assets exceeding €0,000,000 at the end of the period.

6. Extension of the period of a funding proposal

- Where the Scheme Actuary is assisting the trustees in the preparation of an application to the Pensions Board for an extension of the period of a Funding Proposal under Section 49(3) of the Act, he must provide the trustees with the "Actuarial Information and Disclosures" required under the Section 49(3) guidelines issued by the Pensions Board.
- Where the Pensions Board has specified a date later than the effective date of the next Actuarial Funding Certificate under Section 49(3) of the Act, the Scheme Actuary must advise both the trustees and the employer that:
 - (a) under the current legislation, an Actuarial Funding Certificate will likely be required each year during the period of the Funding Proposal
 - (b) if, when any such Actuarial Funding Certificate is submitted to the Pensions Board, the Scheme Actuary cannot certify that he is reasonably satisfied that the scheme will satisfy the funding standard at the later date specified by the Board, a further Funding Proposal will be required
 - (c) the Pensions Board would not be obliged to permit an extension of the period of that Funding Proposal beyond 3 years, and that Funding Proposal would be prepared under the relevant legislation in force at that time, which may differ from that currently in force (see paragraph 2.5 above).

Appendix I 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 in any event exceed the limits set out below.
- 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 should reflect the actual gross redemption yield on such bonds or the yield on a government bond index of appropriate duration.
 - (ii) The assumed rate of return for corporate bonds must not exceed the gross redemption yield on a Eurozone AA corporate bond index of an appropriate duration.
 - (iii) The assumed rate of return on investments held under liability-driven investment (LDI) strategies should 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 excess return on equities, over the gross redemption yield on an appropriate Eurozone government fixed interest index, must not exceed 4% p.a.
 - (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 excess return on property, over the gross redemption yield on an appropriate Eurozone government fixed interest index, must not exceed 3% p.a.

- (vi) The assumed rate of return on cash investments should reflect the Scheme Actuary's expectation of deposit rates and should be consistent with the gross redemption yield on an appropriate Eurozone government fixed interest index.
- (vii) The assumed rate of return for other asset classes should be consistent with the principles set out above.
- (viii) 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.
- (ix) 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 and expenses 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 should the absolute yield be expected to increase by more than 1.5% p.a. nor should the real yield be expected to increase by more than 0.75% 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) Any assumed increase in the yield should 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.