THE SOCIETY OF ACTUARIES IN IRELAND

ACTUARIAL STANDARD OF PRACTICE LA-3

ADDITIONAL GUIDANCE FOR APPOINTED ACTUARIES ON VALUATION OF LIFE ASSURANCE BUSINESS

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

European Communities (Life Assurance) Framework Regulations 1994

Application

Appointed Actuaries appointed pursuant to Section 34 of the Insurance Act 1989

Version	Effective from
1.0	25.04.1995
2.0	03.09.1997
2.1	30.12.2006

Definitions

"ASP" means Actuarial Standard of Practice

"the Act" means the Insurance Act 1989

"the Company" means the life assurance company in respect of which the Appointed Actuary is appointed

"the Financial Regulator" means the Irish Financial Services Regulatory Authority

"the Regulations" means the European Communities (Life Assurance) Framework Regulations 1994

1 Introduction

1.1 This ASP is the document referred to in the Regulations as *"the Guidance Note "Additional Guidance for Appointed Actuaries (GN8)" issued by the Society of Actuaries in Ireland"*.

1.2 The primary references in this ASP are to Paragraphs 1 to 12 of Annex IV of the Regulations. Annex IV of the Regulations comprises Paragraphs governing the valuation of liabilities of life assurance companies for various statutory purposes under the Insurance Acts, 1909 to 1990. In particular, these Paragraphs govern the valuations of life assurance liabilities for the purposes of an investigation to which Article 15 of the Regulations or Section 16 or 17 of the Act applies. Such an investigation would normally be for determining:

(a) whether the statutory certificate in respect of life assurance business required by Article 32(b) of the Regulations could be given;

(b) the extent to which assets could be transferred out of the fund in accordance with Section 15(2) of the Act; or

(c) whether a dividend may be declared by the Company or a parent, having regard to Section 15(7) of the Act**.**

These Paragraphs are also relevant to the determination of the margins of solvency required by Article 12(1)(b) of the Regulations.

1.3 Such valuations are the responsibility of the Appointed Actuary and this ASP, which is supplementary to ASP LA-1, has been prepared to draw the attention of Appointed Actuaries to certain aspects of their professional responsibilities relevant to these valuations.

1.4 Annex II of the Regulations comprises regulations prescribing margins of solvency for life assurance companies. The amounts of mathematical reserves and of capital at risk to be used in the calculations required under Annex II are required to be assessed by the Appointed Actuary. In addition, the Financial Regulator has issued guidance notes stating that it requires a certificate (in a prescribed form) from the Appointed Actuary to accompany any application by a Company to the Financial Regulator under Paragraph 2(g) of Part A of Annex II of the Regulations to enable implicit items as set out in Annex VI to count towards the margin of solvency.

1.5 If, for some exceptional reason, the Appointed Actuary is unable to comply fully with this ASP the Appointed Actuary has a professional duty to make timely written and reasoned disclosure, both to the Company and to the Financial Regulator. In this event, the statutory certificate must be qualified accordingly.

2 Paragraph 2 of Annex IV – The actuarial valuation

2.1 Paragraph 2 of Annex IV is paramount. The Appointed Actuary should use prudent bases determined according to actuarial principles, and the professional considerations set out in ASP LA-1, particularly section 4 thereof. Paragraph 2 of Annex IV refers explicitly to the inclusion of appropriate margins for adverse deviations of the relevant factors. This means that the valuation basis used should include appropriate margins for adverse deviations of each of the relevant factors having regard to materiality. In deriving the valuation basis it is permissible to group policies by category of contract. The term "category of contract" is used to mean contracts with similar types of benefit, including options and guarantees, that are considered to be sufficiently homogeneous by the Appointed Actuary. A valuation method which is not in general use in the profession (whether to value a normal type of contract or in other circumstances) is not precluded, but an Appointed Actuary who uses such a method needs to be prepared to justify it by reference to actuarial principles. The Appointed Actuary should also bear in mind that any excess of assets over liabilities disclosed by the valuation can legally be transferred out of the life assurance fund.

2.2 Paragraph 2 of Annex IV also requires that the valuation liability must not, in aggregate, be less than that calculated in accordance with Paragraphs 3 to 12 of Annex IV. These Paragraphs require professional interpretation in their application, and guidance on them is therefore given in section 3 of this ASP. However, Paragraphs 3 to 12 of Annex IV should not be regarded as necessarily satisfying the more general actuarial principle set out in Paragraph 2(a) of Annex IV. They are the basis of a minimum statutory valuation, and the Appointed Actuary should carry out such investigations as considered necessary to be satisfied (and, where required, to satisfy the Financial Regulator) that the valuation satisfies the criteria. The criteria apply for each separate category of contract.

2.3 Paragraph 2 of Annex IV refers to the valuation, in the case of participating contracts, taking into account, either implicitly or explicitly, future bonuses of all kinds. When carrying out the valuation in compliance with Paragraphs 3 to 12 of Annex IV, this should be interpreted as requiring the valuation basis to be sufficiently strong to enable an appropriate level of reversionary bonus to emerge (and similar bonuses which are added periodically over the term of the contract) but not as requiring implicit or explicit provision for any element of terminal bonus or any final payment of additional bonus. The Appointed Actuary would, however, be expected to make other investigations in order to be satisfied that the life assurance fund is able to support a proper level of future terminal bonus having regard to the bonus smoothing policy followed by the Company.

2.4 Paragraph 2 of Annex IV refers to the need to provide appropriate margins for adverse deviations of the relevant factors. The Appointed Actuary should consider the resilience of the valuation to changes in circumstances, with special

reference to more extreme changes to which the office may be vulnerable, and provide appropriate margins in the valuation basis.

2.5 The Appointed Actuary should take account of any relationship which the company has with another company which is relevant for the purposes of the valuation. For example, where there are service agreements with other companies (whether or not within a group structure) the Appointed Actuary should consider whether any additional provision is appropriate for the contingency that such agreements might cease. This would be particularly relevant where a subsidised or beneficial agreement exists.

2.6 Paragraph 2 of Annex IV also refers to the method of calculation and assumptions used in the valuation not being subject to discontinuities from year to year arising from arbitrary changes. This requirement shall not be interpreted to preclude changes to valuation interest rates which arise from changes in market yields, or changes to valuation expense mortality or other assumptions, which arise from changes in the Company's actual or anticipated experience.

3 Paragraphs 3 to 12 of Annex IV – The minimum criteria

3.1 General

3.1.1 As explained in paragraph 2. 2 of this ASP, Paragraphs 3 to 12 of Annex IV set out minimum criteria against which the valuation basis of Company should be determined for each separate category of contract. However, there are several respects in which these criteria are not precise, and the Appointed Actuary has to interpret them in a prudent way, in regard to both the individual criteria and the criteria as a whole. If the Appointed Actuary considers that one of the required provisions or margins for any element of the basis is excessive, then it is not permissible for this purpose to offset part of it against another provision or margin required by the Regulations except as set out in paragraph 3.5.1 below.

3.1.2 The Paragraphs apply equally to both linked and non-linked business, except for Paragraphs 5 and 6 of Annex IV which do not apply to linked business.

3.2 Paragraph 3 of Annex IV

3.2.1 Professional judgement is particularly necessary in applying the requirement in Paragraph 3 of Annex IV, which applies to the aggregate liability, that the determination of the amount of life assurance liabilities shall include prudent provision against the effects of possible future changes in the value of the assets on their adequacy to meet the liabilities. Paragraph 4.8 of ASP LA-1 sets out considerations to be taken into account, as does paragraph 2.4 above.

3.2.2 Paragraph 3 of Annex IV gives no indication of the range of possible future changes in the value of the assets which is to be allowed for. In determining an

appropriate range, the Appointed Actuary must use professional judgement as an experienced financial practitioner. The essential point is that if changes, for example in market yield or currency values, would result in a change in the aggregate liability that is not matched by a change in the market value of the corresponding assets, then Paragraph 3 of Annex IV requires the Appointed Actuary to consider what provision is required as a contingency margin, having regard to the consequences should the provision prove to be insufficient. In particular, the Appointed Actuary needs to exercise special care with regard to any investments presenting novel or unorthodox features, derivatives (whether assets or liabilities) and any contracts containing substantial options.

3.2.3 Appointed Actuaries should look at mismatching provisions from the viewpoint of cash flow over a wide range of investment conditions. Even if assets and liabilities are exactly matched on a cash-flow basis, however, additional reserves may nevertheless have to be set up to cover a mismatch created by the valuation requirements of Annex IV.

3.2.4 The Company's reserves (including any additional reserves required under Paragraph 3 of Annex IV) should be sufficient to absorb the effect of changes in interest rates and asset values, on a suitably prudent basis, without prejudicing the Company's ability to hold reserves which satisfy Paragraphs 2 and 4 to 12 of Annex IV in the changed conditions. Where the life assurance fund has liabilities under derivative contracts, these should be revalued on an estimated market value basis in the changed conditions when assessing any additional reserves required under Paragraph 3 of Annex IV.

3.2.5 As referred to in paragraph 3.3.7 below, Paragraph 7(10) of Annex IV allows a notional apportionment of assets for the purposes of determining the rates of interest to be used when valuing a particular category of contract. Paragraph 3 of Annex IV can, if desired, be applied separately to each differentiated category having regard to the assets notionally apportioned to it. Any assets which are entirely free after such an apportionment do not have to be brought into account in determining the matching position.

3.2.6 Furthermore, when applying the Regulations to the changed investment conditions postulated, it is appropriate to allow for the revised yields on the relevant assets at their new value and to review any margins in the valuation basis that are not strictly required by the Regulations.

3.2.7 For with-profits business, however, actuaries must ensure that the liability in the changed investment conditions adequately covers policyholders' (revised) reasonable expectations and (more generally) that the valuation basis satisfies Paragraph 2 of Annex IV (excluding the reference to Paragraph 3 of Annex IV).

3.3 Paragraph 7 of Annex IV

3.3.1 The Appointed Actuary must decide the rates of interest to be used in the valuation of the liabilities. These are affected by the Appointed Actuary's estimate of the rate at which future investment will be possible and by relevant regulatory requirements.

3.3.2 Due allowance must be made for the current and future taxation position of the investment return on the policyholder assets. Any such allowance must be consistent with any allowance made for tax relief on expenses.

3.3.3 The Appointed Actuary will need to be aware of the possible effects of derivative instruments used by the Company when choosing the valuation basis. This should particularly be borne in mind when choosing the basis used in the changed investment conditions envisaged under Paragraph 3 of Annex IV of the Regulations. The appropriate valuation interest rates should allow for the return on the assets held as adjusted to reflect economic exposure under futures contracts and contracts for differences. Consideration should be given to the treatment of, and allowance for, financial options, particularly when close to an option date.

3.3.4 Paragraph 7(7)(a) of Annex IV requires an adjustment (where relevant) to the yield on assets other than equity shares or land to recognise the possibility of default. This is in addition to the 2.5% margin required by Paragraph 7(3) of Annex IV. This Paragraph refers to the need to have regard to the yields available on risk-free investments of a similar term in the same currency when assessing this adjustment. It is appropriate to have regard to any differences in yield which arise from differences in marketability of the asset in question as compared with the risk-free alternative when assessing the deduction for the default risk.

3.3.5 Paragraph 7(7)(b) of Annex IV requires an adjustment (where relevant) to the yield on equity shares and land to recognise the possibility of a future reduction in aggregate yield on each category of asset. When assessing this adjustment, it is appropriate to allow for market knowledge, degree of marketability and, for land, the covenant of the tenant.

3.3.6 Paragraph 7(8) of Annex IV specifies an upper limit of 7.5% per annum for the yield on investments in all currencies made more than three years after the valuation date. The Appointed Actuary should consider, in the light of conditions prevailing at the valuation date, whether a limit lower than 7.5% per annum might be appropriate. Furthermore, the limit of 7.5% per annum has been set in the context of Republic of Ireland interest rates and lower limits may be appropriate where the liabilities and assets are in currencies other than Euros.

3.3.7 Paragraph 7(10) of Annex IV allows assets to be notionally apportioned, where appropriate, between different categories of contracts for the purpose of determining the rates of interest to be used in valuing a particular category of contract. Any such apportionment shall have regard to the prudence concept. It would not, for example, be prudent to allocate overseas branch assets to cover

Republic of Ireland policyholders' liabilities where, in practice, local regulations in the territory concerned made such an allocation impractical to achieve. Where derivative contracts are held in connection with particular assets or liabilities in the life assurance fund, then it will generally be appropriate to apportion these derivatives together with the corresponding assets and liabilities.

3.4 Paragraph 8 of Annex IV

3.4.1 Paragraph 8 of Annex IV requires prudent rates of mortality and disability. Account should be taken of relevant trends in experience within the Company or the industry, including appropriate allowance for future improvements in mortality for contracts where the assumption of lighter mortality increases the required reserve. For assurance and sickness business, allowance should be made for the incidence of mortality and morbidity arising from known diseases whose impact may not yet be reflected fully in current mortality or morbidity experience.

3.5 Paragraph 9 of Annex IV

3.5.1 Paragraph 9 of Annex IV should be interpreted as requiring the Appointed Actuary to make provision for the future increases considered likely in expenses for existing business, based, inter alia, on prudent assumptions as to the future rates of increase in prices and earnings. In considering such provision, it would be reasonable for the Appointed Actuary to take into account margins arising from, and restrictions on, interest rate assumptions e.g. increases in income from existing holdings of index-linked stocks, equities and property or the restriction on income created by the limitations of Paragraphs 7(8) and 7(9).

3.5.2 In requiring provision to be made for meeting the expenses likely to be incurred in future in fulfilling the existing contracts, it is permissible to take credit to the extent appropriate for the difference between the gross premium and the valuation net premium. Explicit allowance for future expenses will be required for all contracts under which no future premiums are receivable where these are not provided by disclosed margins in the valuation rate of interest.

3.5.3 Whether or not the Appointed Actuary performs the valuation under Paragraph 2 of Annex IV on the assumption that the Company will continue to transact new business, Paragraph 9 of Annex IV requires an assessment of the provision for future expenses against the total (net of tax) cost that would be likely to be incurred in fulfilling existing contracts if the Company were to cease to transact new business. Experience has shown that the transition to a closed fund is likely to be costly and that more than twelve months may elapse from such closure before the lower level of expense appropriate to a closed fund is achieved. In addition, the future tax position of the fund may be affected.

4 Solvency margins, etc.

4.1 Although it is not a requirement of the Regulations, the Appointed Actuary will need to advise the Company as to the action required:

(i) to maintain the margins of solvency as prescribed by Annex II to the Regulations as the existing business becomes more mature, or

(ii) in view of the requirement under Article 32(b) of the Regulations for the Appointed Actuary to continue to give statutory certificates, to protect its position in certain circumstances, if in the Appointed Actuary's opinion there are reasonably foreseeable circumstances in which the Company would be unable to meet its obligations.

4.2 The prudent assumptions on which the reserve under Annex IV must be calculated will naturally allow for stochastic variations as well as other contingencies. In determining the extent to which the Appointed Actuary would consider it prudent to make provision for the more extreme stochastic variations in valuing particular categories of contract (for example, in relation to mortality and morbidity fluctuations, and variations in benefits resulting from the inclusion in a unit-linked contract of a maturity guarantee) the Appointed Actuary may reasonably take into account the basis of the solvency margin that the Company is required to hold on account of the liabilities under those contracts (net of the permitted deduction for reinsurance cessions). However, this should only be done if the Appointed Actuary is satisfied that:

(a) the Company's available assets can provide explicit cover for the amount of required solvency margin that the Appointed Actuary is taking into account, and

(b) the balance of the solvency margin required in respect of the Company's life assurance business can be covered by the balance of the available assets and by any allowable implicit items, and that the former are sufficient to satisfy Paragraph 4 of Part B of Annex II of the Regulations.

4.3 In exercising professional judgement in the circumstances envisaged under paragraph 4.2 of this ASP, the Appointed Actuary will need to assess the security for the required margin of solvency for the life assurance business as a whole, particular caution being required where it is in part covered by assets held outside the life assurance fund. Furthermore, the Appointed Actuary will have to certify that the resulting reserves, standing on their own, constitute a proper provision for the life assurance liabilities on actuarial principles and reliance on the margin of solvency must not result in the margins in the valuation basis falling below the level where the Appointed Actuary can give this certificate.