



Society of Actuaries in Ireland

**Solvency II for Pensions
- latest developments
Brendan Kennedy**

09-May-2013

Holistic balance sheet

Resources

Security mechanism

Sponsor support

Financial assets

Obligations

Excess

Risk buffer

Best estimate of liabilities

Technical specifications - 25 options – “7,776 combinations”

| Main text: | Options: |
|--|--|
| 99.5% confidence level | 97.5% confidence level 95% confidence level |
| Basic risk-free interest rate | Long-term nature adjustment Extrapolation of risk-free rate using 10 year convergence speed Extrapolation of risk-free rate using QIS5 convergence speed |
| Risk margin cost-of-capital | Risk margin adverse deviation No risk margin |
| Include pure discretionary and mixed benefits | Exclude pure discretionary benefits Exclude pure discretionary and mixed benefits |
| Include pension protection schemes as an asset | Include pension protection schemes as impacting on the default risk of the sponsor Exclude pension protection schemes |
| Exclude ex post benefit reductions | Include ex post benefit reductions |
| Nominal interest rate risk module | Interest rate risk module separating real interest rate and inflation risk |
| Equity dampener | No dampener Duration-based dampener |
| Sponsor support as asset | Sponsor support as ancillary own funds |
| Minimum capital requirement | |
| Level B best estimate of technical provisions: expected return on assets | |



Streamlining outcomes – 18 sets

| Options | SET |
|--|---------|
| Current regime | Zero |
| Benchmark (with upper and lower bound) | 1,2,3 |
| Discount rate structure | 4,5,6,7 |
| Risk margin | 8,9 |
| Pure discretionary benefits | 10 |
| Mixed benefits | 11 |
| Pension protection scheme | 12,13 |
| Ex-post benefit reductions | 14 |
| Sponsor support (+PPS) | 15 |
| Equity dampener | 16,17 |
| Inflation risk module | 18 |



QIS calculations

- EIOPA spreadsheet estimates SCRs at 3 confidence levels
- Stresses and correlations based on Solvency II estimates
- SCR allows for operational risk, market risk, health risk, counterpart default risk, pension liability risk, intangible asset risk
- Calculations allow for adjustment and security mechanisms
- Simplifications allowed e.g., exclude a risk
- Not all sets relevant for all IORPs or national systems
- IE figures for SETs 0,1,2,3,4,5,8,9,14,16,17,18
- IE figures not for SETs 6,7,10,11,12,13,15



Irish figures

| | €bn |
|---------------------------------------|-------|
| Investments (financial assets) | 41.6 |
| Best estimate of technical provisions | 58.0 |
| Excess of assets over liabilities | -16.4 |
| Capital requirement | 7.5 |
| Surplus | -23.9 |



Comparison with other participants

€bn

| | BE | DE-PF | DE-PK | IE | NL | NO | SE | UK |
|------------------------------------|------|-------|-------|------|-------|------|------|--------|
| Investments | 14.4 | 25.3 | 122.6 | 41.6 | 782.1 | 13.9 | 12 | 1128.2 |
| Other assets | 0.8 | 8 | 32.8 | 0 | 95.8 | 0.2 | 0.6 | 734.4 |
| Total assets | 15.2 | 33.2 | 155.4 | 41.6 | 878 | 14.1 | 12.6 | 1862.5 |
| Best estimate technical provisions | 16 | 30.8 | 147.4 | 92.4 | 898.1 | 12.4 | 9.1 | 1995.2 |
| Other liabilities | 1.4 | 2.3 | 14.9 | 7.4 | 73.5 | 0.9 | 0.7 | 159.6 |
| Total liabilities | 17.3 | 33.1 | 162.3 | 99.8 | 971.6 | 13.3 | 9.9 | 2154.8 |
| Gross SCR - 99.5% | 4 | 8.1 | 51 | 34.6 | 167 | 2.5 | 2.2 | 481.1 |
| Adjustment loss-absorbency | -2.6 | -8.1 | -46.3 | 0 | -60 | -1.3 | -0.8 | -246.8 |
| SCR | 1.3 | 0 | 4.7 | 34.6 | 107 | 1.2 | 1.4 | 234.3 |