



Solvency II –and technical provisions

39th ASTIN Colloquium –Helsinki –3 June 2009

Annette Olesen
Pasi Laaksonen

Agenda

- Introduction to Groupe Consultatif –the role of the profession
- Status on Solvency II –and its challenges for actuaries
 - The Directives' requirements
 - The latest consultation papers
- Why harmonisation of technical provisions across Europe is difficult
- The current discussion between CEIOPS and Groupe Consultatif
 - Best estimate papers
- Discussion on Actuarial Function
 - Likely impact on the role of the actuary
- Conclusion

Introduction to Groupe Consultatif

Established in 1978

Represent 35 actuarial associations from 32 countries

- Approx. 17000 actuaries

Aim: Communication on professional and technical matters

- to provide advice and opinions to various organisations of EU
(Commission, Council of Ministers, Parliament, CEIOPS)

- not restricted to European issues













Current key focus areas:

- Solvency II

- The role of the actuary

- Gender issues

Groupe Consultatif – Solvency II Pillar I Non-life working group

Country	Representative	Country	Representative
Austria 	Christoph Krischanitz	Italy 	Gennaro Olivieri
Belgium 	Rosella Piccaluga	Netherlands 	Peter Franken
Denmark/ UK 	Annette Olesen (Chair)	Norway 	Simen Gaarder
Finland 	Pasi Laaksonen	Poland 	Robert Pusz
France 	Benoit Courmont	Spain 	Teresa Sendra-Vives
France 	Sandra Ratovonarivo	Sweden 	Arne Sandström
Germany 	Clemens Frey	Switzerland 	Philipp Keller
Germany 	Gregor Blasel	UK 	David Paul
Ireland 	John McCrossan	UK 	Gavin Hill

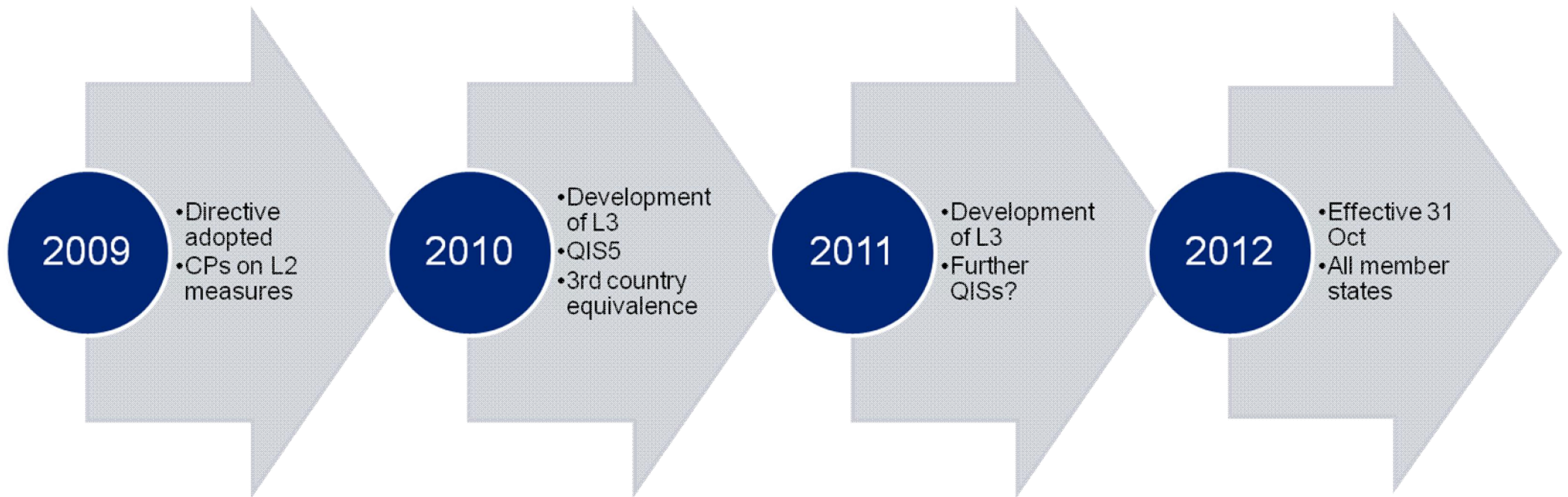
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Status on Solvency II

Framework Directive confirmed

- Adopted by European Parliament 22 April 2009, by Council 5 May 2009



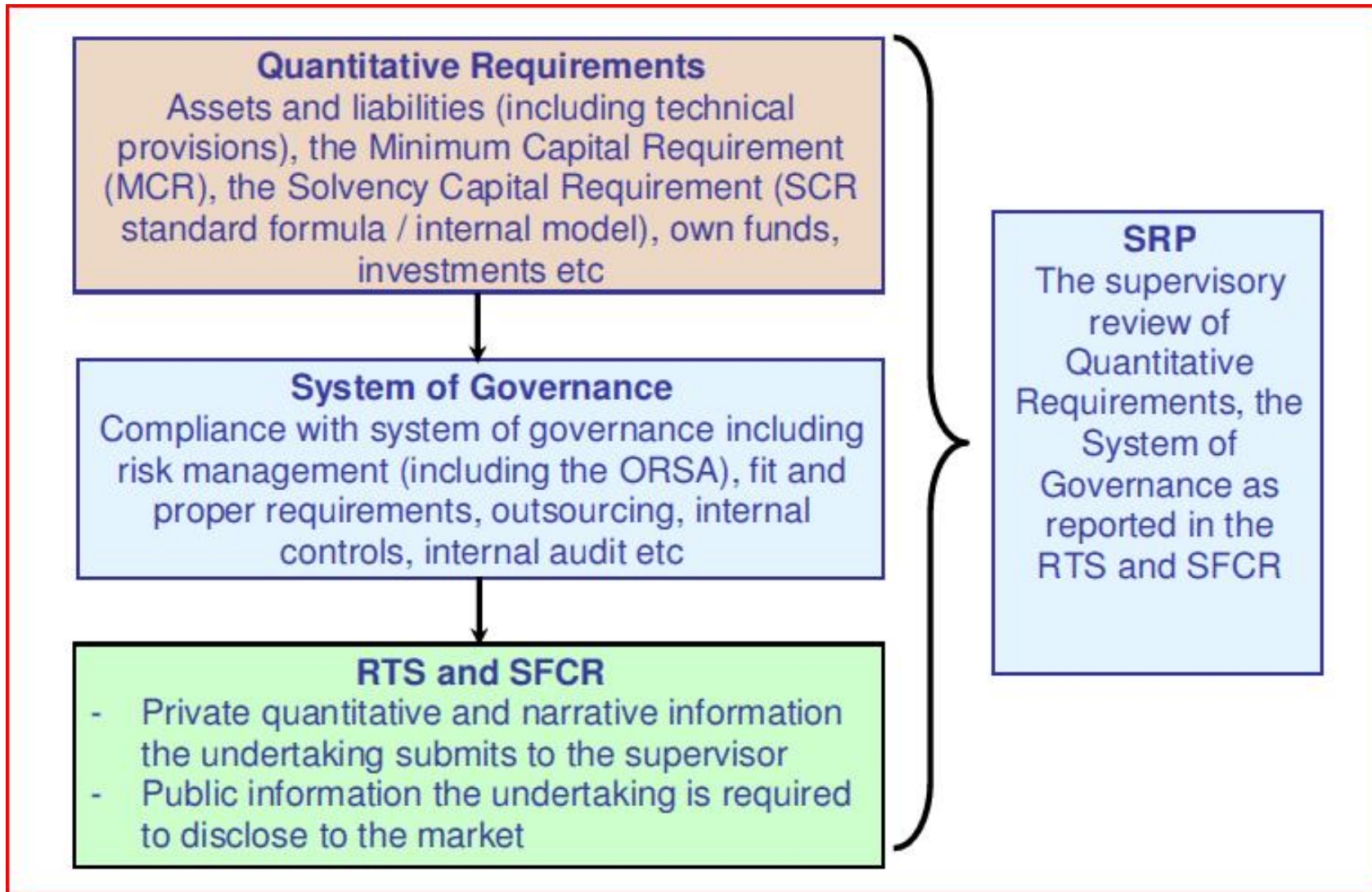
Solvency II – A quick reminder

- Increased focus on effective risk management, control and governance
- Ownership Board & senior management
- Embedded in day-to-day activity and within strategic decision making

- Market consistent valuation of assets & liabilities
- Risk based forward looking solvency regime
- Increased disclosure and transparency

- Effective by 31 October 2012

Solvency II – A quick reminder



Source: CEIOPS Issues Paper –Supervisory Review Process and Undertakings Reporting Requirements, August 2008

The Directive – Valuation of assets and liabilities

Market consistent valuation for assets and liabilities

liabilities shall be valued at the amount for which they could be transferred, or settled, between knowledgeable willing parties in an arms' length transaction.”

Article 74 Framework Directive

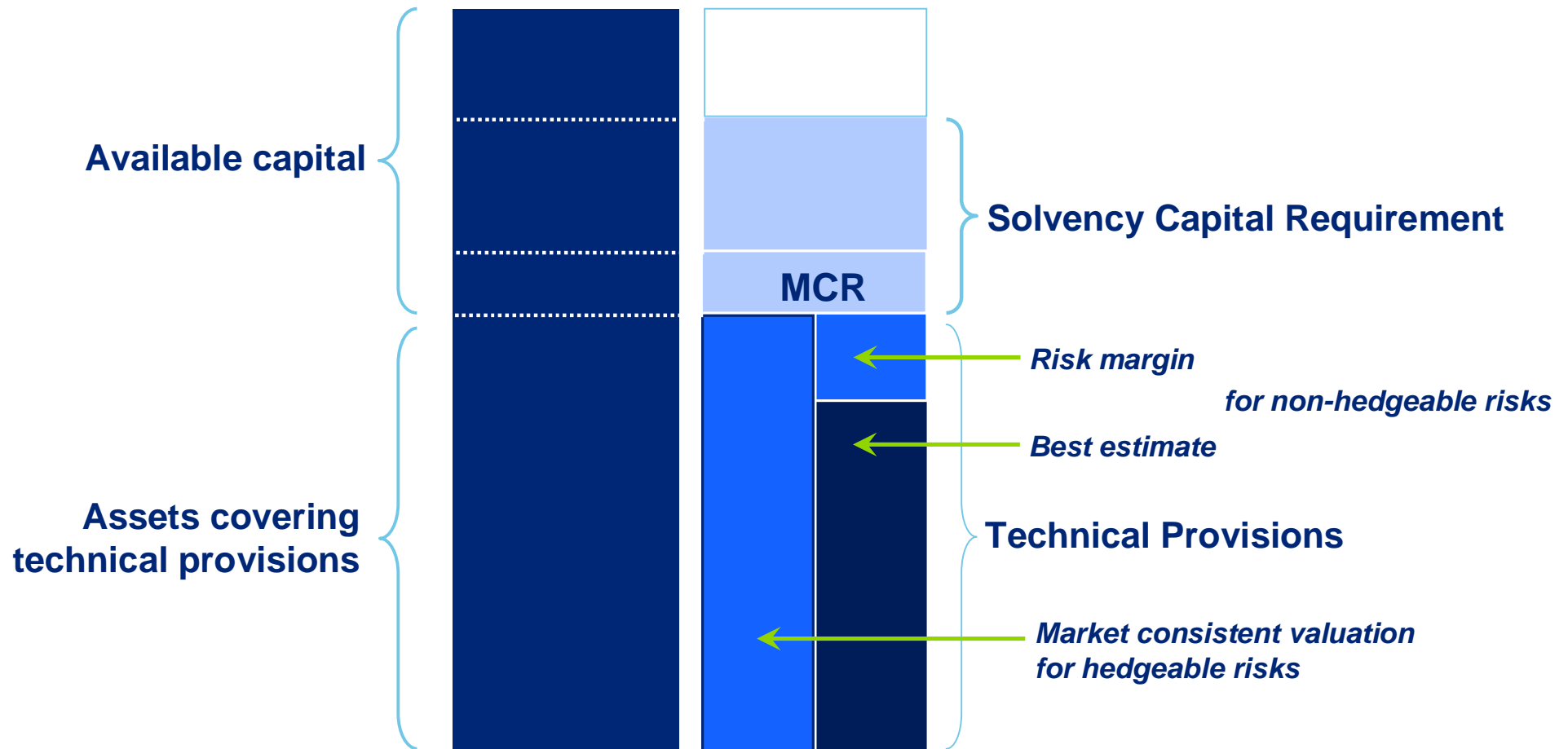
Value of technical provisions = best estimate + risk margin

Insurance and reinsurance undertaking shall value the best estimate and the risk margin separately

However, where future cash flows ... can be replicated reliably using financial instruments for which a reliable market value is observable ...”

Article 76 Framework Directive

The Directive – Valuation of technical provisions



Conceptually in line with IFRS

The Directive – Valuation of the best estimate

*The best estimate shall correspond to **the probability-weighted average of future cashflows**, taking account of the time value of money (expected present value of future cash-flows), using the relevant risk-free interest rate term structure.*

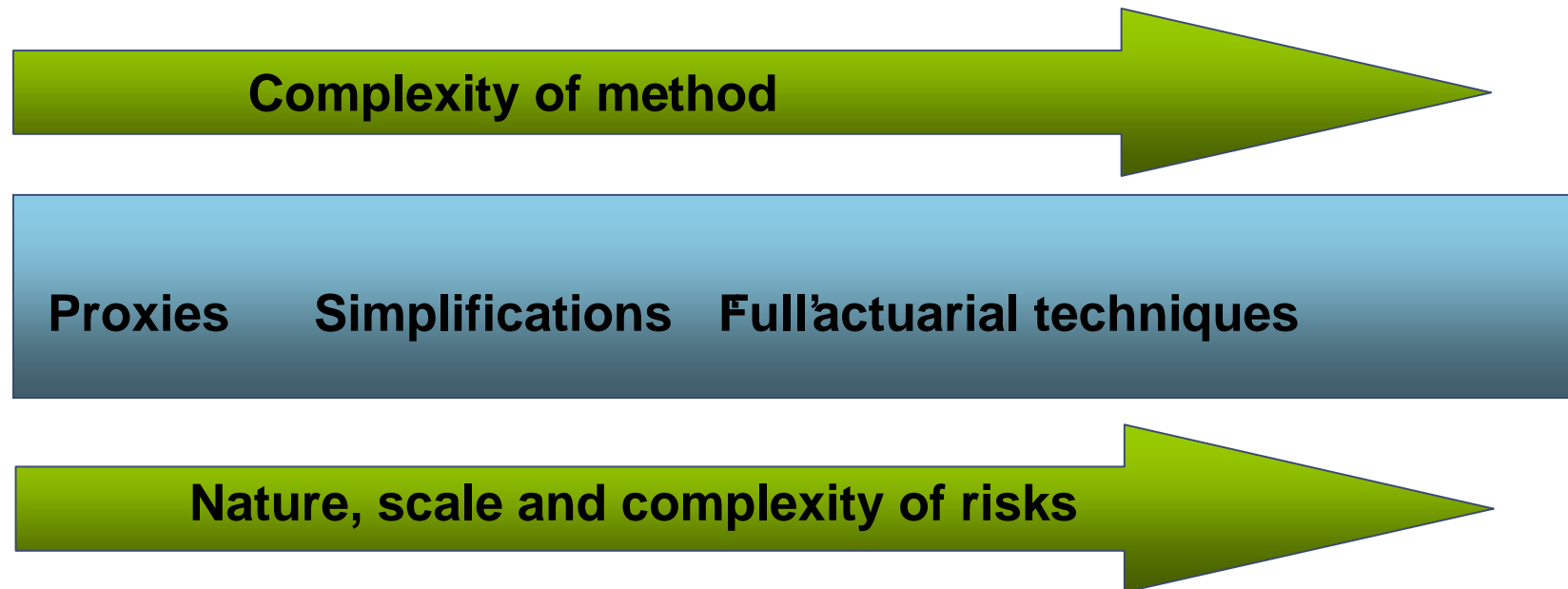
*The calculation of the best estimate shall be based upon **up to date and credible information and realistic assumptions** and be performed using adequate, applicable and relevant actuarial and statistical methods.”*

Article 76 Framework Directive

Valuation of the best estimate

Work of CEIOPS/ GC coordination group

Continuum of methods for determining the best estimate reserve available to the actuarial function differing in degree of complexity



Likely L2 advice – Valuation of the best estimate

In order to capture the above uncertainty a (re)insurance undertaking shall ideally:

- *Consider all possible future scenarios.*
- *Estimate the likelihood/probability of each of those scenarios.*
- *Calculate the cash-flows receivable/ payable by the insurer in each of those scenarios.*
- *Discount the projected cash-flows to reflect the time value of money in each of those scenarios.*
- *Take the probability weighted average of the discounted cash-flows from each of those scenarios.”*

CP 26 Technical provisions – Elements of actuarial and statistical methodologies for the calculation of best estimate’

The Directive – Valuation of the best estimate

The best estimate shall be calculated gross, without deduction of the amounts recoverable from reinsurance contracts and special purpose vehicles. Those amounts shall be calculated separately, in accordance with Article 80”

Article 76 Framework Directive

*The result from that calculation shall be adjusted to take account of expected losses due to default of the counterparty. That adjustment shall be based on an **assessment of the probability of default of the counterparty and the average loss resulting there from (loss-given default)**”*

Article 80 Framework Directive

The Directive – Valuation of the risk margin

*∴ the risk margin shall be calculated by **determining the cost of providing an amount of eligible own funds equivalent to the Solvency Capital Requirement** necessary to support the insurance and reinsurance obligations over the lifetime thereof.*

The rate used in the determination of the cost of providing that amount of eligible own funds (Cost-of-Capital) shall be the same for all insurance and reinsurance undertakings and shall be reviewed periodically.”

Article 76 Framework Directive

CEIOPS Consultation papers –L2 on technical provisions



Best estimate is not just about the number

- Requirements to
 - Justify appropriateness and robustness of technique
 - Demonstrate assumptions are realistic reflects nature of liabilities
 - Governance including validation and review
 - Management ownership
- Link to
 - Quantitative SII measures: Risk margin, MCR, SCR
 - Internal model
- Reporting internally and externally
 - .. and at the heart of the Actuarial Functions' responsibilities

Opportunities & challenges for the actuarial profession

- Push for more sophisticated methods
- Impact on level of best estimate reserves for claims and premiums
- Calculation of risk margins
- Link and consistency to internal model

- Communication of uncertainty

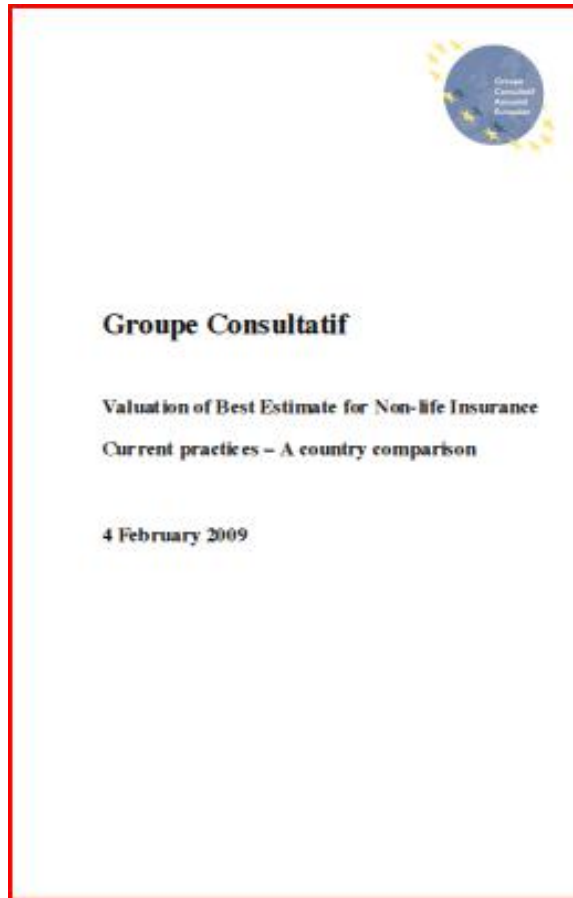
- Increased transparency
- Disclosure
- Actual versus expected analysis

- Data management
- Management information
- Governance

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Harmonisation challenges for technical provisions



- No standardised definition of a reserving best estimate across Europe
- No alignment between local GAAP figures and Solvency II valuation principles
- Historic differences in coverage and in definitions of business classes
- Lack of appropriate data and systems for some organisations and countries
- The fact that best estimate valuation is not an exact science but should incorporate professional judgements

Focus of Groupe Consultatif country comparison

Definition & principles of current best estimate for non-life claims reserves

Presentation of claims reserves

Approach to current premium provisions

Treatment of claims expenses

Use of discounting

Existence of risk margins

Other country specific technical provisions.

Communication of reserve uncertainty

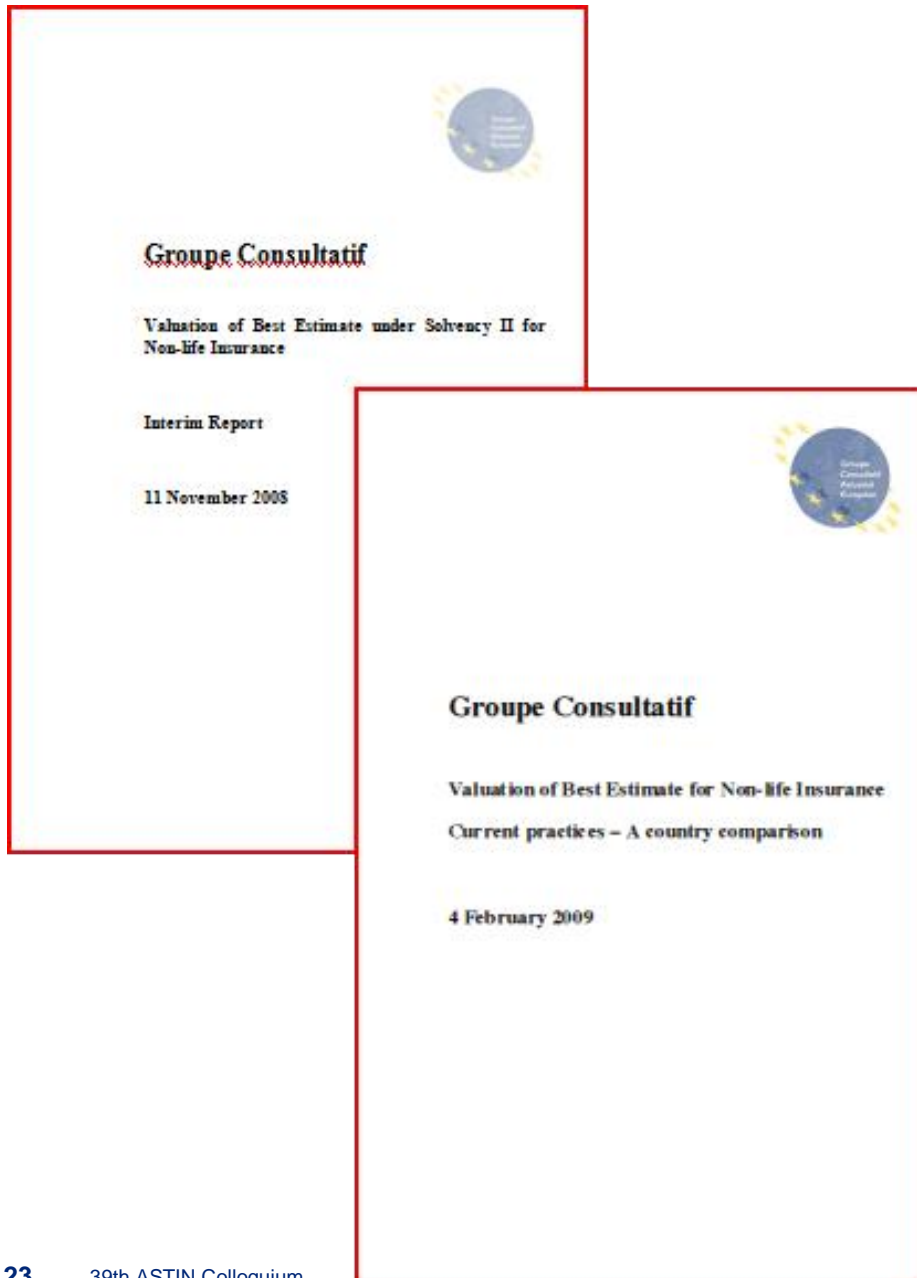
Professional guidance on reserving

Appointed actuary/
Actuarial opinion

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Groupe Consultatif response



Best estimate reserving process requires

- Judgement –Not a‘cook book’
- Knowledge & experience –Role of Actuarial Function and the Administrative or Management Body
- Process –Governance/ control framework/ data/ reporting/ documentation/ disclosure

Discussion - interpretation of Article 76

Probability weighted average of future cash-flows taking into account the time value of money ..”(Article 76)

Interpretation:

- The best estimate equals the **mean on a discounted basis**
- The estimation should be **unbiased**
- A combination of **entity-specific and external parameters** should be used
- The cash-flows should reflect the company's **current and expected future state**
- Cash-flows should be discounted using the **risk-free** yield curve

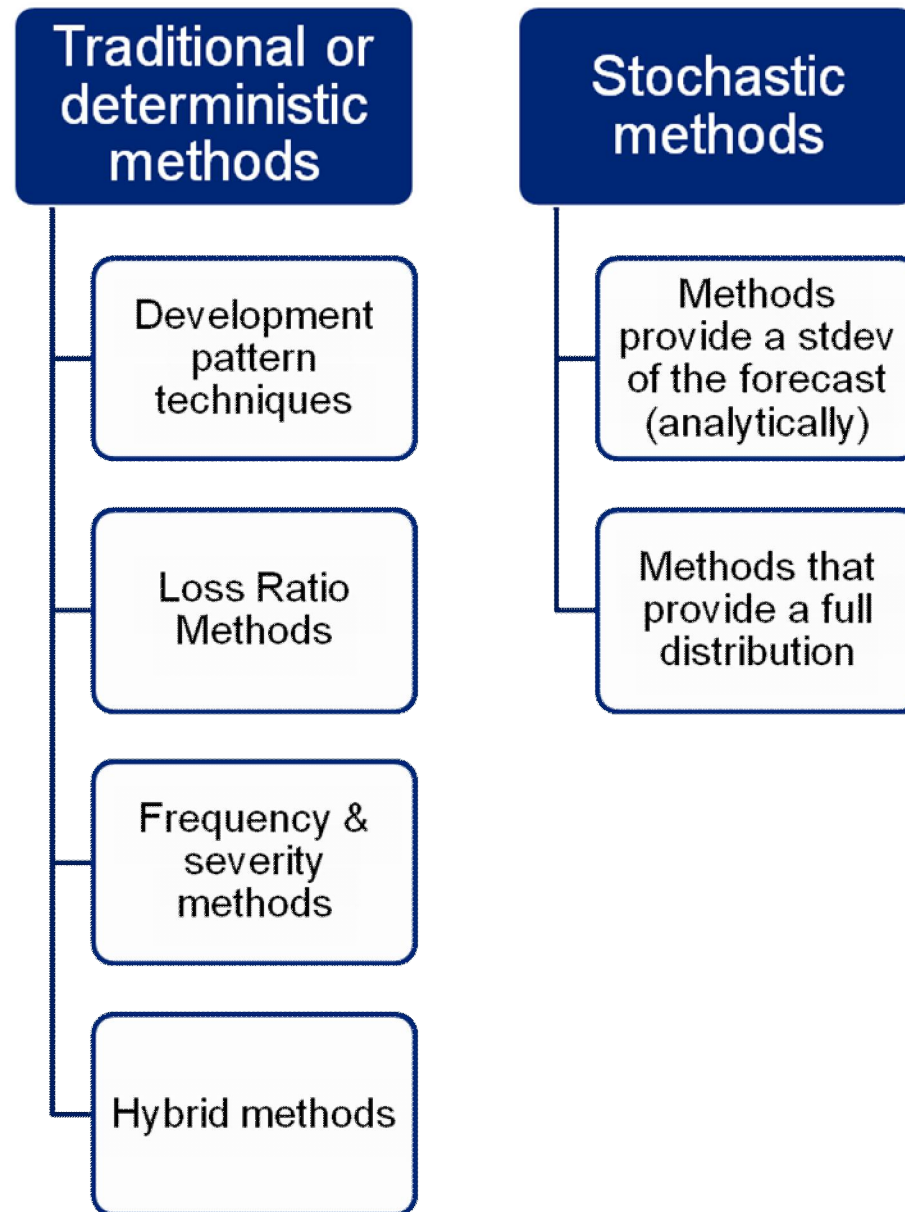
Does this mean that stochastic reserving is required?

Discussion - interpretation of Article 76

Valuation of best estimate technical provisions

- Not necessarily true stochastic method will produce a more reliable best estimate than a deterministic approach
- Weight to be given to losses with low probability and high cost
- Stress & scenario testing have important role to play
- Communication of uncertainty

Claims reserving methodologies and classifications



Best estimate reserving process

The best estimate valuation of technical provisions is not just about a number, it is a process requiring expert judgement



Best estimate reserving process

For an appropriate best estimate it should be ascertained that

- The model is fit for purpose;
- The limitations of the valuation and the valuation process must be understood by Administrative or Management Body;
- The data feeding the model must be verifiable and of sufficient granularity;
- Its underlying assumptions and parameters must be clear and explicit;
- It takes account and feasible clarify the main factors that affect or will affect the cash flows of the liabilities; and
- Uncertainties and sensitivities in the results must be communicated to the Administrative or Management Body.

Similar requirements are also set out in CP26

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The Directive –The actuarial function

“Insurance and reinsurance undertakings shall provide for an effective actuarial function to undertake the following :

- a) to coordinate the **calculation of technical provisions**;*
- b) to ensure the **appropriateness of the methodologies ...***
- c) to assess the **sufficiency and quality of the data ...***
- d) to compare **best estimates against experience**;*
- e) to inform the administrative or management body of the **reliability and adequacy of the calculation** of technical provisions;*
- f) to oversee the calculation of technical provisions in the cases set out in Article 81;*
- g) to express an **opinion on the overall underwriting policy**;*
- h) to express an **opinion on the adequacy of reinsurance arrangements**;*
- i) to **contribute to the effective implementation of the risk management system ..**”*

Article 76 Framework Directive

L2 advice/ discussion –Actuarial Function (CP33)

- Discussion on standards to be applied by actuarial functions
- CEIOPS envisage high level of convergence in guidelines
- Propose to be developed by body of representatives of different stakeholders
- Idea of annually produced written report on the mandatory tasks performed by the Actuarial Function
 - Steps undertaken
 - Shortcomings identified
 - Recommendations –how deficiencies could be addressed

Groupe Consultatif response

Issues to be considered for implementing measures regarding Article 47:

- The full framework and scope for professional standards
 - Minimum educational requirements
 - Ethical conduct (including conflict of interest)
 - Responsibility to those relying on actuarial output
 - Reasonable/unreasonable interpretation of all relevant forms of legislation or regulation.

Groupe Consultatif response - continued

Issues to be considered for implementing measures regarding Article 47:

- Balance and interaction between legislation and guidance or standards
 - open mind as to whether practitioner-influenced standards should form part of Level 3 guidance
- The respective roles and responsibilities of CEIOPS, national supervisors, the Groupe, its member associations and other parties in development and maintenance of professional standards, including interpretative standards
- The respective roles and responsibilities of the same parties in relation to monitoring of compliance with standards and, should it be necessary, enforcement and sanctions

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Conclusion

- Increased transparency & disclosure for technical provisions
- There is a push for development of additional actuarial guidance
- Solvency II will
 - Define mandatory tasks for the Actuarial Function
 - Impact the level of best estimate reserves for claims and premiums
 - Set guidelines for the calculation of risk margins
- For technical provisions there is a requirements to
 - Justify appropriateness and robustness of technique
 - Demonstrate assumptions are realistic reflects nature of liabilities
 - Stress & scenario testing have important role to play
 - Governance including validation and review
- Need for the Actuarial Profession to stay engaged (address challenges)

Contact details

Annette Olesen,

Partner, Actuarial & Insurance Solutions, Deloitte

Phone +45 3610 3499

Email anolesen@deloitte.dk

Pasi Laaksonen

Director, Pohjola Insurance Company

Phone +358 10 559 2324

Email pasi.laaksonen@pohjola.fi