

SOLVENCY II

Overview – May 2013

Where are we now? A Non-Life Insurance Perspective



Purpose and scope

- This document is written for senior managers, executives and members of the boards of (re)insurance companies. It provides an overview of the process companies need to follow in order to achieve Solvency II compliance and reflects the latest guidance published by EIOPA and other regulatory authorities in Europe.
- We have structured this document around seven themes: **Economic Balance Sheet, Data Management, Solvency Capital Requirement, Risks Governance & Supervisory Review, Reporting & Disclosure, Insurance Groups and Third Country Equivalence**. Our selection of these main themes is motivated by the following:
 - The proposed Solvency II standard may be markedly different from current best practice.
 - Each theme is likely to be bound up with a company's core strategy.
 - Significant investment may be required to achieve Solvency II compliance in relation to a given theme.
- The implementation of Solvency II is in a state of flux. In the absence of further clarity on timelines, the FSA (now superseded by the FCA and PRA) has indicated that the implementation date of 1 January 2014 is no longer achievable and that 1 January 2016 is a more realistic start date.



Current Developments

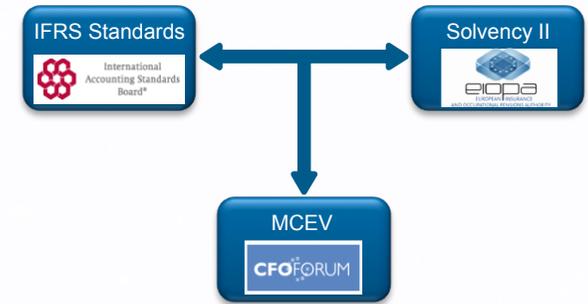
- Over the period 28 January 2013 to 31 March 2013 EIOPA ran a ‘Long Term Guarantee Assessment’ (or LTGA) where undertakings were asked to test alternative scenarios and their impact on the Solvency Capital Requirement (SCR) for long term obligations. The objective of this exercise was to generate quantitative evidence to justify a final set of technical specifications for the standard formula-based calculation of the SCR.
- On 29 January 2013, the FSA set out its approach for early use of Solvency II work to meet existing ICAS requirements (ICAS +):
 - ICAS rules will continue to apply.
 - A two-phase approach by which firms currently in IMAP may make use of their Solvency II internal models for ICAS purposes.
 - ✓ **Phase 1** – reconciliation between a firm’s Solvency II model and its previous ICA model. This should include understanding any changes in the firm’s business and in the model since the previous ICA review
 - ✓ **Phase 2** – allow firms to use their Solvency II balance sheet and model for ICAS purposes without further on-going reconciliation between the bases
 - The FSA (and its successor the PRA/FCA) will consider the ‘ORSA in-development’ aspect of the reviews, i.e. bringing together of business model analysis, forward-looking capital planning, assessment of stress and scenario testing, evidence of use and capital risk management.
 - Some additional reporting will be required, e.g., data around stress testing, but full Solvency II reporting will not be required.
- On 27 March 2013, EIOPA launched a consultation on guidelines for the preparation for Solvency II. The purpose of the consultation is to ‘support both National Competent Authorities (NCAs) and undertakings in their preparation for the Solvency II requirements’ with the aim of ensuring a consistent and convergent approach in preparations.
- The consultation covers guidelines for the phased introduction of specific aspects of the Solvency II requirements into national supervision from 1 January 2014, in advance of the full implementation of the Solvency II regime:
 - System of governance;
 - Forward looking assessment of the undertaking’s own risks (based on ORSA principles);
 - Submission of information to NCAs; and
 - Pre-application for internal models.

Economic balance sheet

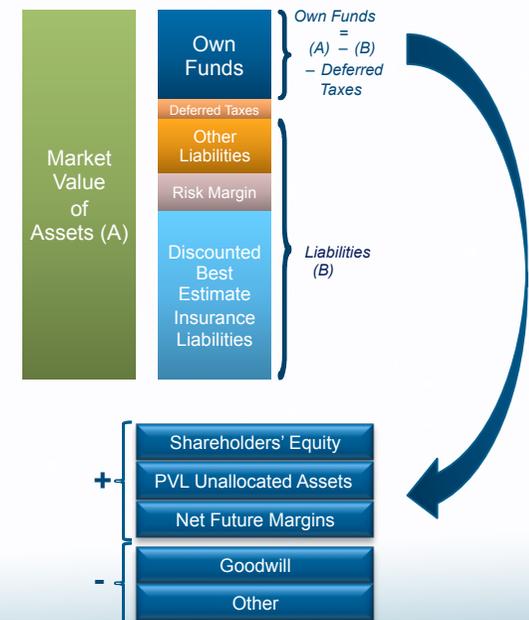
Economic balance sheet

Main principles to remember

- The insurance industry is knowledgeable about the requirements for building an economic balance sheet.
 - In addition to the methods of valuation of the different components of the balance sheet, it is important to highlight **two important principles**:
 - **Convergence of the regulatory environment:** EIOPA has chosen a pragmatic approach by defining the economic valuation of the different components of the Solvency II balance sheet according to the IFRS principles. This approach should be beneficial to (re)insurance companies:
 - ✓ By leading to a synergy of costs and resources between Solvency II and IFRS projects
 - ✓ By easing future financial communications (inside and outside of the company) as reporting will be undertaken on a consistent basis across different departments/ subsidiaries
- It should be noted that although Solvency II and IFRS Phase II contain similar principles, there are a number of important differences in the technical provisions and other elements of insurance company balance sheets.
- **Predominance of the Balance Sheet approach:** Following an approach similar to IFRS, Solvency II focuses on defining the valuation principles of assets and liabilities. As a result, own funds are simply estimated as the balancing item between the valuation of those two elements.
 - ✓ It is important to note that this approach leads to a recognition of net asset value, comprised of the value of future profit/loss generated by existing contracts as well as reserves strengthening/being released. The cash flows generated by the assets can be split between the policyholders (best estimate and risk margin), taxes (deferred taxes) and the future profit allocated to shareholders. As a result, the economic valuation of both assets and liabilities implicitly leads to the consideration of future profits within the net assets.
 - ✓ Moreover, the balance sheet approach will ultimately lead (re)insurance companies to adopt new KPIs (Key Performance Indicators) which are more relevant within this new environment. A Solvency II implementation plan, based on a thorough gap analysis, would identify more appropriate measures of the company's performance (or evolution of value over time), e.g. via an embedded value approach.



Solvency II Balance Sheet



Economic balance sheet

Technical provisions

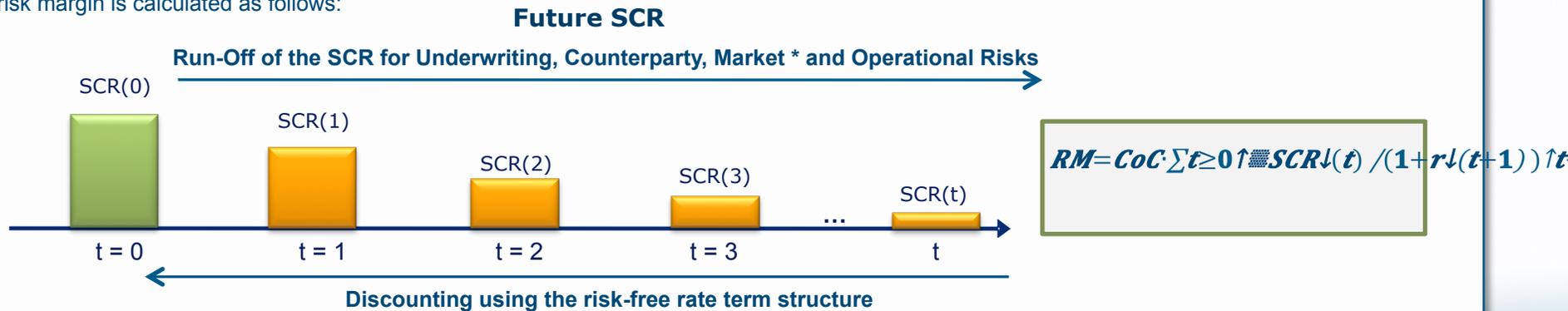
- The Solvency II Framework Directive will lead to major changes in the valuation of the balance sheet items compared to the current local GAAP and, in particular, in the valuation of insurance liabilities which will need to be undertaken on a market-consistent basis.
- Technical provisions will typically be estimated on a proxy to a market value, i.e. a best-estimate basis allowing for the time value of money supplemented by a risk margin to allow for uncertainty of future cash flows. It will now become important that companies focus on the projection of future cash flows. In projecting cash flows, companies need to bear in mind that:
 - Cash flows should be estimated separately for gross of amounts recoverable from reinsurance contracts and for reinsurers' share.
 - Cash flows should account for the full lifetime of existing insurance contracts and reflect policyholder behaviour and management actions.
 - Companies need to consider all inflows (e.g. premiums and receivables) and outflows (i.e., claims payments, all expenses ...).
 - Cashflows for premiums provision and outstanding claims need to be estimated separately and it should be done by currency.
- The methods used to calculate the technical provisions shall be proportionate to the nature, scale and complexity of the risks. The Revised Technical Specifications for the LTGA set out simplified calculations for various aspects of the technical provisions (although they may not be kept in Solvency II going forward), including the recoverables from reinsurance contracts and special purpose vehicles, the risk margin, and the counterparty default adjustment.
- A major change for the insurance industry is the fact that unearned premiums reserve is to be replaced by premiums provision. Premiums provision corresponds to the present value of cash inflows and outflows related to the unexpired risk. Therefore, it may happen that premiums provision could be negative (e.g., premiums paid in arrear). Generally speaking, this change could have a significant impact on the balance sheet as expected future profits or losses on unexpired risk are recognised.
- It appears to have remained largely unnoticed, but tacit renewals which have already taken place at the valuation date should lead to the recognition of the renewed contract and therefore be included in the calculation of the best estimate of the premiums provision.
- Particular attention is also required on the analysis of expenses (allocated and unallocated) as all expenses will be included in projected future cash flows.
- Recoverables should be shown separately on the asset side of the balance sheet and should follow the same principles as the gross claims provisions. Note that recoverables should be adjusted for the counterparty default risk and do not require any risk margin.
- EIOPA has moved away from a full stochastic approach and come back to an expert judgement approach based on a blend of different methods. Thorough documentation and validation processes (such as sensitivity tests, actual versus expected checks ...) need to be implemented.

Economic balance sheet

Technical provisions

- The choice of discount rate is of particular importance. The discount rate is currently prescribed using the sum of the rates of a basic risk-free interest rate term structure and either a counter-cyclical premium or a matching adjustment. While the matching adjustment would only apply to liabilities meeting specific criteria, the counter-cyclical premium would apply to all liabilities (except those where the matching adjustment is being applied).
- The counter-cyclical premium replaces the illiquidity premium used in QIS5 and is aimed at preventing pro-cyclicality and so enables insurers to continue offering reasonably priced long-term products and take long term investment strategies by increasing the discount rate for liabilities during periods of market stress. Unlike the QIS5 illiquidity premium, the counter-cyclical premium will include exposure to sovereign debt. The counter-cyclical premium only applies during periods of stressed financial markets. The uncertainty around when the premium can be applied may leave companies unable to fully take account of the premium for pricing and capital management, effectively limiting its impact for such purposes. Additionally, EIOPA's discretionary power to decide when markets are stressed may lead to political issues between countries.
- The matching adjustment (or matching premium) is aimed at reducing volatility arising from spread movements on assets with fixed maturity dates where companies have mitigated the impact of spread movements on own funds. The ability of companies to include the matching premium is still very uncertain.
- EIOPA has retained a cost-of-capital approach for the estimation of the risk margin with a rate (CoC) of 6% on top of the risk free rate. As in QIS5, the risk margin will continue to be calculated at an undertaking level and not at a line-of-business level. This means that undertakings will enjoy the diversification benefits between lines of business within the risk margin. Should an undertaking decide to transfer a line of business, the contribution of each line of business to the risk margin can be allocated separately.

The risk margin is calculated as follows:



* 'Where it is material, the residual market risk that the reference undertaking is exposed to **other than interest rate risk**.' This definition has to be clarified because in QIS5 the unavoidable market risk was referring to the interest rate risk.

Economic balance sheet

Technical provisions - Methodology



Assumptions must be consistent both with:

- Financial market data
- 'Generally available' insurance risk data.

Must be documented, justified and validated

Segmentation is part of the process.

- Segmentation suggested by EIOPA is based on the risks covered by insurance policies: A policy covering several risks will need to be split into different segments. EIOPA prescribes 16 risk classes for Non-Life (re)insurance and 8 risk classes in Life (re)insurance.
- It is very likely that for reporting purposes (Pillar 3), EIOPA will ask that economic capital be split according to the same segmentation.
- We think that communication around economic capital split by risk class may cause several issues:
 - ❑ **Coherence of communication:** A company's communicating emphasis varies by topic depending on its relative strengths and weaknesses
 - ❑ **Allocation of the diversification benefit**
- As these are usually questions of strategic importance for insurance groups, it is important to follow future developments regarding segmentation and public disclosure.

16 segments in Non-Life (Re)Insurance	
Non-Life Insurance and Proportional Reinsurance	Non-Life Non-Proportional Reinsurance
Medical expense	Health
Income protection	Casualty
Workers' compensation	Marine, aviation, transport
Motor vehicle liability	Property
Other motor	
Marine, aviation, transport	
Fire and other damages to property	
General liability	
Credit and suretyship	
Legal expenses	
Assistance	
Miscellaneous financial loss	

Economic balance sheet

Own funds

- Undertaking's own funds are classified in three tiers which are based on six key characteristics (Article 93 of the Solvency II Directive) such as subordination, loss absorbency, sufficient duration, free from requirements to redeem, free from mandatory fixed charges and absence of encumbrance.

Nature \ Quality	On balance sheet (basic own funds)	Off balance sheet (ancillary own funds)
High	Tier 1 - Unrestricted	Tier 2
	Tier 1 - Restricted	
Medium	Tier 2	Tier 3
Low	Tier 3	

Source: European Commission

In addition, capital tiering will have to satisfy the following requirements:

- SCR limits applicable
 - Tier 1 items $\geq 50\%$
 - Tier 3 items $< 15\%$
 - MCR limits applicable
 - Tier 1 items $\geq 80\%$
 - Tier 3 items = 0
 - Other limits
 - Restricted Tier 1 items $< 20\%$ "Restricted + Unrestricted" Tier 1 items (Restricted Tier 1 items in excess of the 20% limit are available as Tier 2 basic own funds)
- Treatment of participations in financial and credit institutions:
 - Basic own funds shall be reduced by the full value of participations that exceed 10% of the basic own funds (excluding subordinated liabilities and preference shares).
 - Basic own funds shall be reduced by the part of the value of all participations that exceed 10% of the basic own funds (excluding subordinated liabilities and preference shares). The deduction shall be applied on a pro-rata basis.
 - Undertakings shall not deduct strategic participations which are included in the calculation of the group solvency on the basis of the 'accounting consolidation' method (Directive 2002/87/EC).
 - The deduction shall be made from the corresponding tier in which the participation has increased the own funds.
- The supervisory approval of an undertaking's own funds should be principle-based. The undertaking assesses the appropriate classification of the own fund item for which it seeks supervisory approval and whether the inclusion of this item is compatible with the quantitative limits envisaged by the implementing measures to cover the Solvency Capital Requirement and the Minimum Capital Requirement. The undertaking is responsible for providing the related documentation.

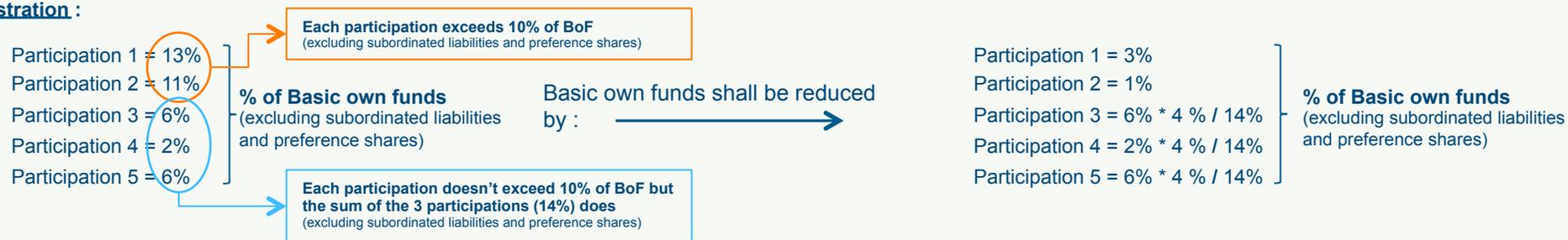
Economic balance sheet

Other topics – Points to note

Treatment of participations in financial and credit institutions in the determination of basic own funds

- The two paragraphs concerning the treatment of participations in financial and credit institutions in the determination of basic own funds have to be clarified (Articles SCR.14.14 to SCR.14.24 from the Revised Technical Specifications). As it stands, we understand that :

Illustration :



- If the sum of the participations is less than 10%, the participations should not be excluded from the basic own funds, but they should be subject to equity risk.

Future Premiums and Contracts boundaries

- The treatment of future premiums within the valuation of the Best Estimate for technical provisions is a very sensitive issue which impacts the available capital of an insurance company directly. There are several points to consider:
 - Definition of Existing Contracts**
 - There is still uncertainty around when future premiums should be included in the valuation of the best estimate. The boundary for existing contracts (which should be included in the best estimate of premiums provision) is based on when an undertaking becomes a party of the contract or when the contract between undertaking and policyholder is legally formalised
 - This may differ from current national guidance on future premiums (e.g., anniversary date of the contracts for tacit renewal)
 - A contract should be recognised as existing unless the undertaking has a unilateral right to cancel or make adjustments to the premium.
 - Potential Issues**
 - In theory, the assessment of contracts boundaries should be done contracts by contract which would be cumbersome.
 - It might be difficult to use lapse assumptions on contracts for which the insurance cover has not incepted yet.

Economic balance sheet

Other topics – Points to note

Deferred Taxes

- **Reminder:**

Companies shall recognise and value deferred taxes in relation to all assets and liabilities that are recognised for solvency or tax purposes in conformity with international accounting standards (IAS12), i.e:

- Keep the IFRS amount of deferred tax assets arising from the carrying forward of unused tax credits and the carrying forward of unused tax losses
- Assess the deferred taxes on the basis of the difference between the values ascribed to assets and liabilities recognised and valued in accordance with Solvency II principles and the values ascribed to assets and liabilities as recognised and valued for tax purposes

In the case of deferred tax assets, the companies shall be able to demonstrate to the supervisory authority that it is probable that future taxable profit will be available (taking into account any legal or regulatory requirements on the time limits relating to the carrying forward of unused tax credits or the carrying forward of unused tax losses).

- **Interesting points to consider:**

- Deferred tax assets have been reintroduced and may be taken into account if the (re)insurer can demonstrate that it is probable that there will be future taxable profit for the deferred tax asset to be used against.
- The implementing measures leave open the question of whether insurers should cap the adjustment for loss absorbency of deferred taxes in calculating their SCR to the level of the net deferred tax identified when the company builds its economic balance sheet.
- CP35 suggests that where deferred taxes can be used, these should be undiscounted, in line with IAS12. In our experience, some insurers use discounted cash flows for deferred tax for their internal economic balance sheets, and we do not view this as a major issue.

Data management

Data management

Data cycle and good practice

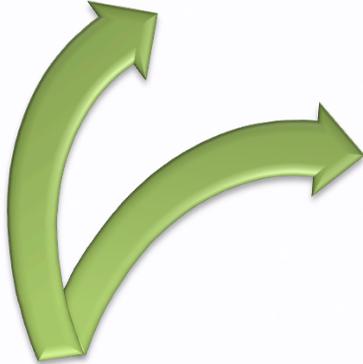
Scope of work should be defined and the data processing should be commensurate with the scope – what is (or is not) material or proportionate should be reasoned in a justifiable manner and documented.



A list of data requirements should be drawn up to satisfy user needs and the scope of the work.



Data processing steps should be repeated to get an accurate and complete data.



Final data set for undertaking analysis, modelling, etc.



Reporting – the following data related items should be reported to users:

- Compliance with appropriate data standards
- Reliance placed on data provided by others
- Any material adjustments made to the data
- Any material reservations about the accuracy or completeness of the data
- Any indication of any uncertainty inherent in the information
- Amendment to the scope of work if data is considered inaccurate or incomplete

When required data is unavailable, investigations should be made into additional sources that might be used to supplement or substitute for the data.



Investigate the feasibility of making compensating adjustments to data that is found to be inaccurate or incomplete. Taken overall, such adjustments should result in sufficiently accurate and complete data.



A set of data checks should be constructed and performed to determine whether the data is sufficiently accurate and complete to meet the needs of the analysis.

Data management

Internal models – Data

- In September 2012 the FSA published a report giving interim feedback to firms on its ongoing assessment of whether firms' data management complies with the standards required for internal model approval as set out in the Solvency II Directive and the draft Level 2 implementing measures. The key findings reported are summarised below.
- **Most firms underestimated the time required to embed the data governance framework into business as usual (BAU).**
 - Some firms were also unable to articulate what 'accurate', 'complete' or 'appropriate' meant in practice and were therefore unable to assess data quality effectively.
- **Most firms found it difficult to assign data ownership as part of their governance model.**
- **Many firms struggled with ensuring a consistent interpretation and application of group-wide policy and standards.**
 - The FSA commented that it will be looking for consistency in standards and in the metrics used for monitoring and escalation.
- **Most firms did not use an impact and risk assessment to apply proportionality and materiality in relation to the data used in the internal model and associated data processes.**
- **Many firms confused the term 'data directory' with 'data dictionary'.**
 - A data dictionary is a centralised repository of information about data (such as meanings, origin, usage, format, relationship to other data, etc.); a data directory is intended to ensure documentation on what data is used in the model, where it comes from and what its characteristics are. All data should be documented at an appropriate level of granularity for ongoing maintenance and use.
- **Nearly all firms struggled with an efficient classification of data within the data directory.**
- **Nearly all firms had difficulty in demonstrating the effective operation of data quality checks.**
 - This resulted from a lack of evidence of controls and inconsistent reporting of issues highlighted through checks.
- **Where data was sourced from third parties, some firms had an over-reliance on third-party controls with no mechanism to obtain assurance over the control environment and no independent validation of the external data received.**
 - Use of third-party models does not exempt firms from the tests and standards relating to internal models set out in Articles 120-125 of the SII Directive.
- **Compliance with existing end user computing policies and standards was found to be inadequate or non-existent for many firms.**
 - Where tools such as spreadsheets are material to internal model data flow, appropriate controls over data quality are expected.
- **Few companies had considered the controls and processes needed to operate new or revised IT infrastructure in BAU.**
 - Any planned significant IT change post-submission should be discussed with the firm's usual FSA supervisory contact.

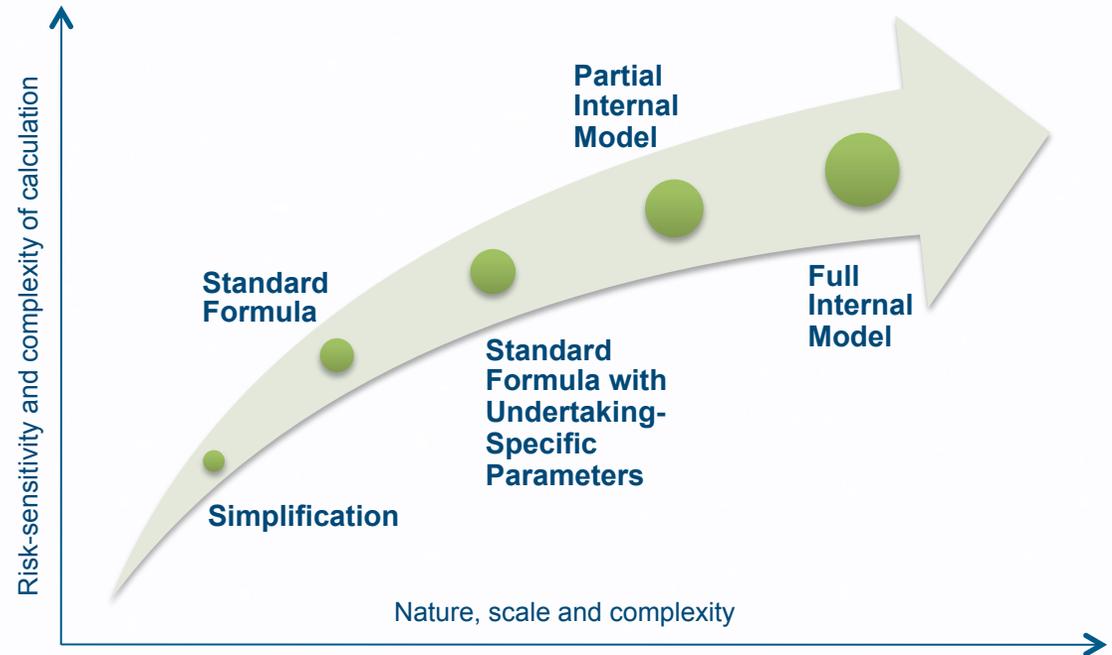
SCR solo

Regulatory capital requirements

Overall methodology

Solvency Capital Requirement (SCR)

- Article 101 of the Solvency II Framework Directive
 - ‘The Solvency Capital Requirement (SCR) shall be calibrated so as to ensure that all quantifiable risks to which an insurance or reinsurance undertaking is exposed are taken into account. It shall cover **existing business**, as well as the **new business** expected to be written over the following 12 months ... It shall correspond to the Value-at-Risk of the basic own funds of an insurance or reinsurance undertaking subject to a confidence level of 99.5 % over a one-year period.’
- Firms must determine the SCR by using appropriate methods and should be able to explain what methods are used and why specific methods are selected.
- Solvency II provides for a range of methods that increase in terms of both risk-sensitivity and complexity for the calculation of the SCR.



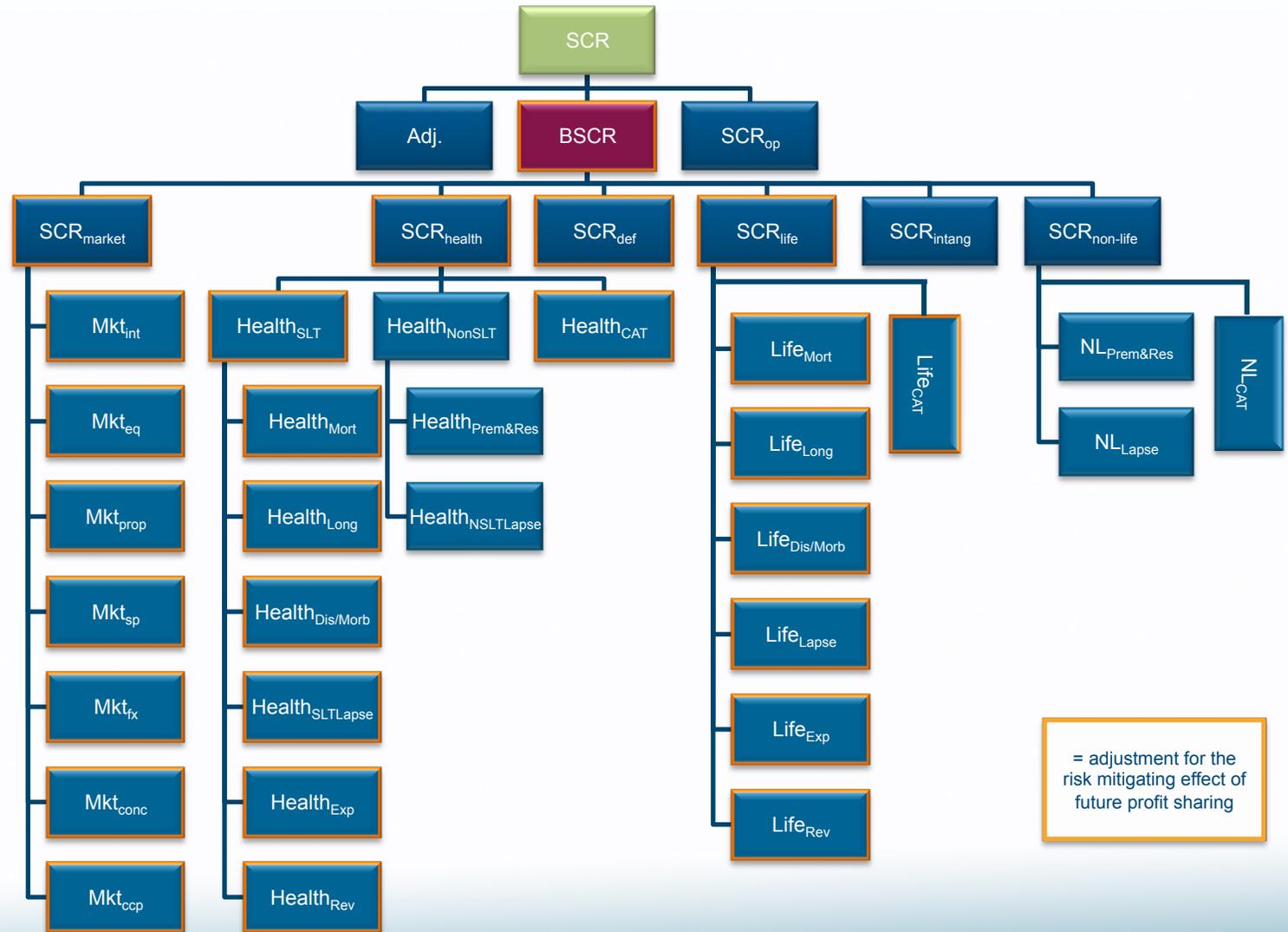
Minimum Capital Requirement (MCR)

- The calculation of MCR combines a linear formula with cap of 45% of SCR and a floor of the higher of 25% of SCR and an absolute floor, expressed in euros, depending on the nature of the undertaking.
- The linear formula depends on technical provisions and written premiums for each line of business and line of business specific factors.

Solvency Capital Requirement

Standard formula

- The standard formula for the SCR is a specified set of stress tests or factor-based formulae that companies will have to apply to their assets and liabilities for the various risks.
- The standard formula uses correlation matrices to aggregate within and across the risks.
- The standard formula is *calibrated to the whole EU market* and may not be suitable for every single company.



Solvency Capital Requirement

Standard formula: Non-life underwriting risk

Non-life premium and reserve risk

- The capital requirement for non-life premium and reserve risk is calculated as a function of volume measures and standard deviations for each of premium and reserve risk. Standard deviations are specified for each of 12 segments (lines of business) and then combined with use of a correlation matrix. The standard deviations specified for reserve risk are net of reinsurance; those for premium risk are gross, with a separate adjustment factor for non-proportional reinsurance to be applied.
- The premium volume measure is the greater of net premiums earned in the last 12 months and those expected to be earned in the following 12 months (note that written premiums is not used in the RTS), plus expected present value of future premiums, to be earned after the following 12 months in respect of existing contracts and the present value of premiums where the initial recognition date is in the following 12 months but excluding the premiums to be earned during the 12 months after the initial recognition date.
- The volume measure for reserve risk is essentially the net best estimate provision for claims outstanding. The volume measures are combined with an allowance for geographical diversification among 18 specified regions.
- The latest correlation matrix seen in the RTS is unchanged from QIS5; the standard deviations are broadly similar. The biggest changes are an increase in reserve risk standard deviation for the assistance segment and a reduction in premium risk standard deviation for the credit and suretyship segment. The adjustment factor for non-proportional reinsurance applied to the standard deviation for premium risk has been set by default as 80% for motor liability, property and general liability lines, and 100% (i.e., no adjustment) for other lines.

Non-life catastrophe risk

- Allowance must be made for the following types of catastrophe risk:
 - Natural catastrophe – the RTS has modules for each of the following types, to be calculated using a scenario approach based on a set of factors applied to sums insured (for non-EEA regions a simpler formula based on premiums is to be used other than for subsidence): windstorm, earthquake, flood, hail, subsidence.
 - Cat risk of non-proportional property reinsurance.
 - Man-made catastrophe – the RTS specify a scenario approach to each of: motor vehicle liability, marine, aviation, fire, liability and credit & suretyship
 - Other non-life catastrophe risk – for other segments (including MAT, financial loss and liability reinsurance) RTS specifies an approach based on applying factors to premiums.

Non-life lapse risk

- The risk of policy discontinuance is to be estimated based on considering stressed scenarios. RTS specifies this as assuming 40% of insurance policies discontinue (where this would result in increase technical provisions without RM) and that for RI, a reduction of 40% in the assumed number underlying contracts to be written as compared to that assumed when calculating the technical provisions.
- NB this is a somewhat difference specification to QIS5 in terms of scope and level of shock (QIS5 shock = 30% of policies with a negative premium provision).

Undertaking specific parameters (USP)

- Subject to satisfying data requirements and seeking supervisory approval, firms may use their own 'undertaking-specific parameters' for the standard deviation of non-life premium and reserve risk and the non-proportional reinsurance adjustment factor (although USPs can't be used for both the premium risk standard deviation and the adjustment factor for the same segment).
- USPs must be derived using a standard method.

Solvency Capital Requirement

Standard formula: Other risk charges relevant to non-life insurers

Market risk

The solvency capital requirement for market risk is made up of charges for the following types of market risk, aggregated together with use of a specified correlation matrix.

- Interest rate risk – the charge is determined by assessing the effect on own funds of stressing the yield curve by specified amounts varying by maturity.
- Equity risk – the equity risk charge is 39% of the market value of equities for EEA/OECD equities, 49% elsewhere, and 22% for strategic participations. A symmetric adjustment to reduce pro-cyclical effects is to be made based on an equity index to be specified by EIOPA. The adjustment will be in the range $\pm 10\%$.
- Property risk – the charge is equal to 25% of the value of the properties.
- Spread risk – the sum of three components: bonds and loans, 'tradable securities or other financial instruments based on repackaged loans' and credit derivative. Charges are calculated as a function of the duration and credit quality of the assets.
- Market risk concentration – the charge is applied where exposures to counterparties exceed defined thresholds.
- Currency risk – the charge equates to the loss in own funds arising from a 25% change in the value of foreign currencies.
- Counter-cyclical premium risk (replaces illiquidity risk premium risk used in QIS5) – to be calculated as the loss resulting from an instantaneous decrease of 100% of countercyclical premiums (refer to slide 6 above).

Counterparty default risk

- For the purpose of the calculation, counterparties are split between type 1 and type 2 exposures.
- Type 1 includes reinsurers, cash at banks. The risk charge is calculated based on a loss distribution derived from losses given default and specified probabilities of default which are dependent on credit quality (specified probabilities are much less for low credit quality than QIS5).
- The charge of Type 2 counterparty default is based on a loss in basic own funds resulting from a loss of 90% of all receivables from intermediaries which have been due for three months or more, and a loss 15% of all other receivables.
- The counterparty default risk should be assessed based on single name exposures.

Intangibles

- The charge is set equal to 80% of the value of intangible assets.

Operational risk

- Operational risk is the risk of loss arising from inadequate or failed internal processes, or from personnel and systems, or from external events.
- For non-life companies the charge is calculated as the maximum of 3% of gross technical provisions (excluding the risk margin) and 3% of gross premiums earned in the previous 12 months (plus 3% of the amount by which these premiums exceeded those in the preceding 12 months uplifted by 20%).
- The charge is subject to a maximum of 30% of the basic SCR (i.e. the SCR excluding operational risk).
- No correlation is assumed between operational risk and other components of the SCR.

Solvency Capital Requirement

Points to note

Treatment of investment funds and indirect exposures – Look-through approach

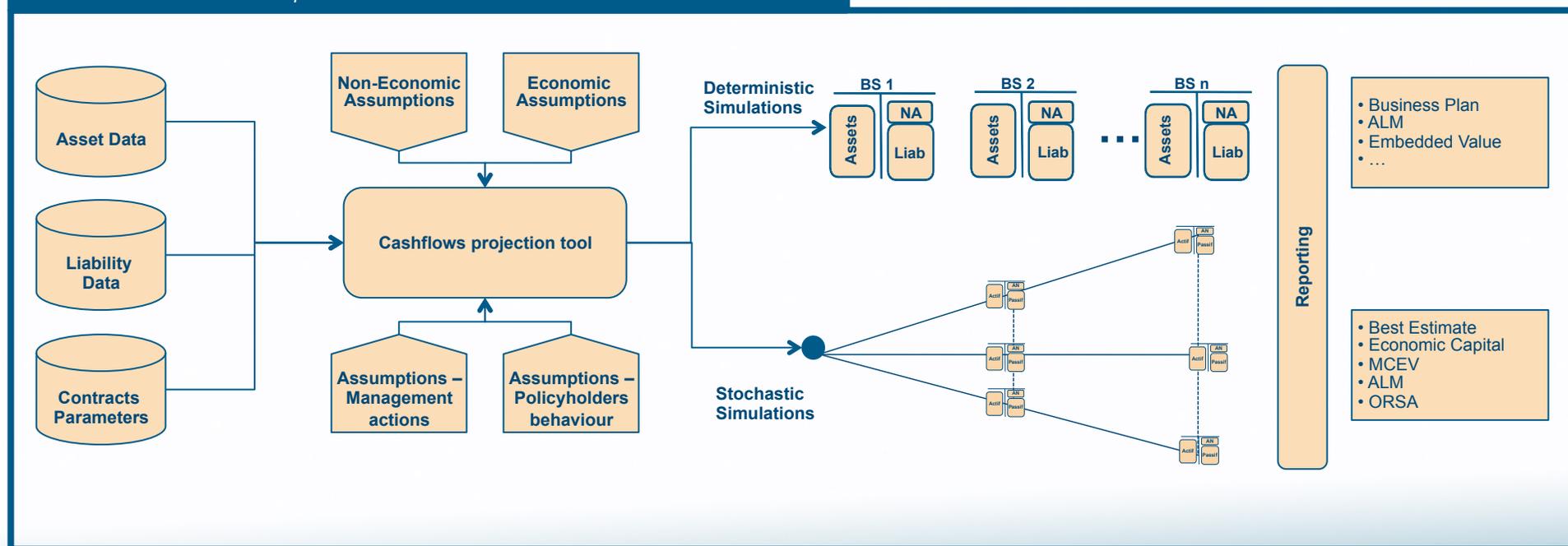
- As was seen for QIS5:
 - The SCR shall be calculated on **each of the underlying assets** of **collective investment vehicles and other investments packaged as funds**. The **look-through approach** shall also apply to **indirect exposures to market risk** other than investment vehicles and other investments packaged as funds.
- According to the Revised Technical Specifications:
 - The look-through approach shall also apply to **indirect material exposures** to **underwriting** and **counterparty default risk**, provided methods, assumptions and standard parameters for quantifying these risks are specified in the implementing technical standards.
- The look-through approach shall not apply to investments in related undertakings (i.e., subsidiary undertakings or other undertakings in which a participation is held).
- The scope of application has to be clarified.
- Note that a materiality principle was introduced.
- With regard to QRTs, according to the Level 3 pre-consultation on reporting, the look-through approach is only required for investments which are properly managed by undertakings.

Solvency Capital Requirement

Internal models

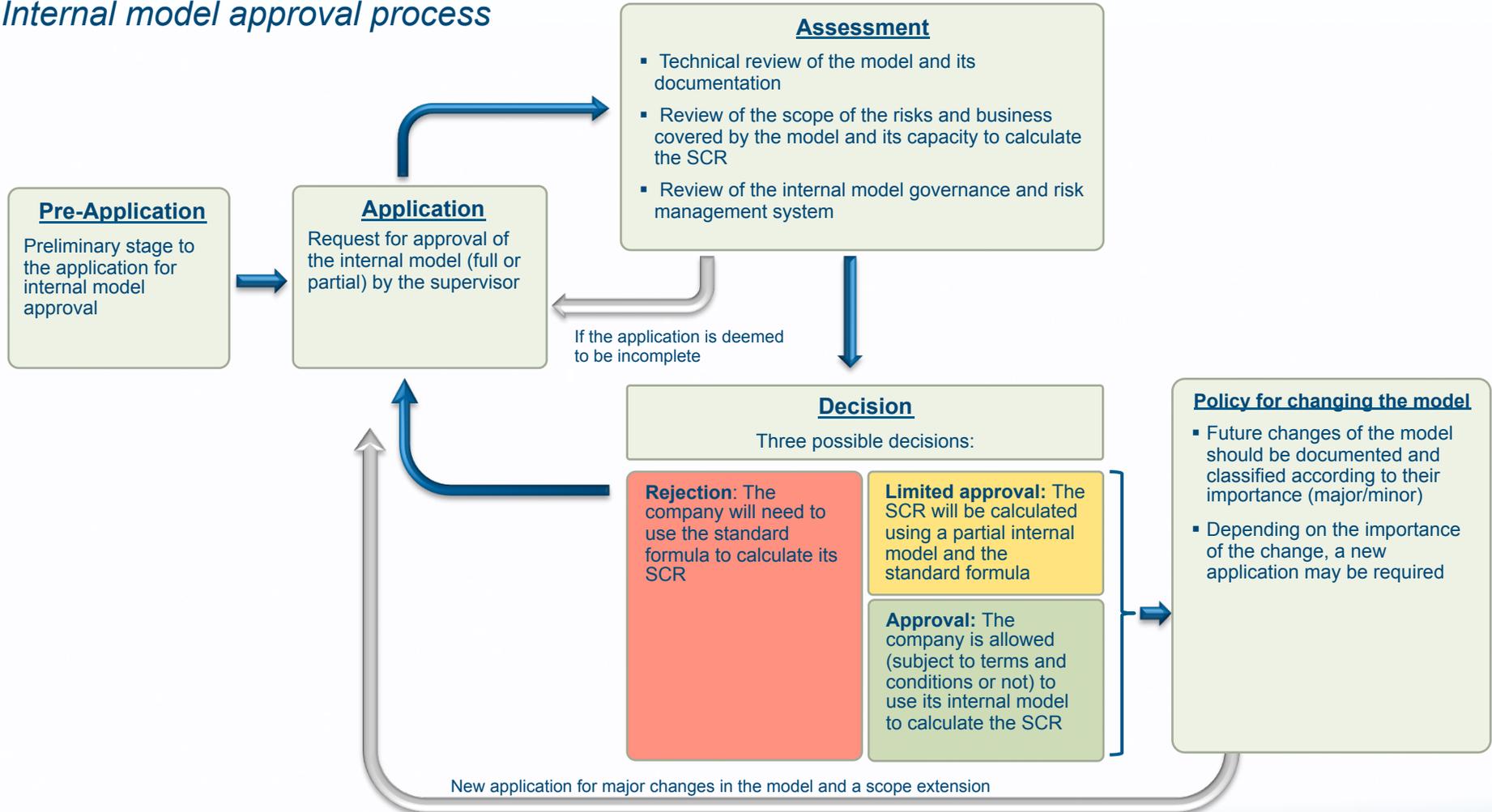
- Subject to regulatory approval, firms may use their own internal model in order to calculate their solvency capital requirement.
- On the following slides we set out the process for applying for internal model approval and some of the issues insurers currently applying for internal model approval are facing.
- Internal models may be calibrated using a different time period or risk measure than the 99.5% VaR over a one year period, as long as the choice can be justified. In particular, with regard to the choice of time period, firms must demonstrate that the model takes account of the fact that risk events may not be distributed evenly over time and that all risks over a one-year period are properly managed. The time period must be justified with regard to the duration of the liabilities. Firms must also demonstrate at least once a year equivalent protection to the 99.5% VaR over one year.

Illustration: Simplified structure of an insurance internal model



Solvency Capital Requirement

Internal model approval process



Solvency Capital Requirement

Internal models - Application

- The need to have the internal model approved before being allowed to use it for regulatory solvency requirements is a major development for the teams working on capital models. In any application for approval, undertakings will need to submit, as a minimum, documentary evidence that the internal model meets all the requirements set out in the Directive:

Use test

The need to show that the internal model is clearly relevant and integrated into daily risk management and decision-making process.

Validation

Regular validation of internal model is required to: monitor performance and appropriateness of specification, and testing its results against experience.

Statistical quality

The settings of the internal model (data, assumptions, methods, tools) must be accurate and credible.

Documentation

There must be detailed documentation of the specification and operation of the internal model, including the policy for changing the model.

Calibration

The internal model must be consistent with SCR framework (i.e., at least a 99.5% confidence level over a one-year time horizon).

External models & data

External models and data used to develop an internal model must be understood, suitable for the risk profile and regularly reviewed. The company must provide an explanation of the preference of external models or data.

Profit & loss attribution

The internal model must have the capability to produce an actual versus expected analysis at an appropriate level of granularity.

- Companies have to provide an estimation of the SCR calculated with the internal model and with the standard formula for the last point in time, prior to the application, that the SCR was calculated with the standard formula. If the application is submitted before any SCR is calculated, companies have to provide an estimation of the SCR calculated with the internal model and the standard formula for a point in time no longer than six months before the date of the submission of the application.
- Approval will be based on all the tests above and the model itself not on the software used or number produced.
- Companies will have to consider the pre-application process carefully, which is crucial in anticipating the hurdles in the actual application process.
 - Companies will need to prepare well in advance for the approval of the internal model by the supervisor. Basel II showed clearly the huge difficulty in getting an application's documentation ready in time.
 - Companies will also need to consider a dry-run period for their internal model in order to be able to produce stable results (SCR, ORSA, use test ...).
- When an internal model is approved, the supervisory authority will disclose the fact on its website, together with the start date of use of the model for calculating the SCR and the scope of the model. The supervisory authority will not disclose that an application has been made, withdrawn or rejected, but absence from the approval list may have implications for a firm's image.
- One of the key requirements to get the model approved by the supervisor is the implementation of internal model governance in order to ensure the durability and consistency of the methods and ensure the rules are understood and validated by the management.
- In addition to the assignment of roles and responsibilities and the system of control for the model, one of the main pillars of internal model governance is the policy of future development of the model, which classifies possible developments according to their importance and future implementation.

Solvency Capital Requirement

Internal models – Challenges and issues

- A letter to firms from the UK's Financial Services Authority (FSA) giving feedback on their work on the internal model approval process highlights a number of areas of weakness in firms' applications and areas that firms will need to focus on. The points raised include:
 - Firms must frame their key methodology choices and parameter assumptions to the materiality of ultimate results and uncertainties of the model. Some firms were noted as not ensuring a sufficient level of granularity in their modelling or adopting an overly complex approach that is less likely to be understood.
 - It was noted that catastrophe models are part of the internal model and subject to the same requirements.
 - Given the importance of aggregation and dependency assumptions to the overall result in terms of the level of diversification credit, a strong validation of the assumptions will be expected where there is a material level of diversification credit. Firms will need to consider the limitations of the data used in setting their assumptions as well as alternative methods and sensitivity, stress and scenario testing.
 - The FSA made a number of points about firms' validation policies. This included:
 - Firms should link their validation policies directly to the requirements of the Level 1 and draft Level 2 texts.
 - Whilst the level of detail of validation should reflect materiality, assumptions of immateriality should be supported. Validation should also be sufficiently granular.
 - Independent validation should be carried out by sufficiently competent parties who are separated from the development and parameterisation work. Expert judgement should be recorded and attributed.
 - The FSA has seen examples of documentation on the validation framework that had gone through the full governance process but where key areas were missing.
 - Firms should develop a range of stress and scenario tests and carry out sensitivity testing on key parameters.
 - The FSA highlighted a number of observations where the approach to the internal model was not consistent with satisfying the use test, e.g., models including elements of prudence or simplifying assumptions, use of different versions of cat models for pricing and capital modelling, and minimised interaction between the internal model team and other teams.
 - The FSA stated that many firms' documentation had been inadequate. Reasons for this were broadly that the documentation failed to evidence the firm's methodology and assumption, and the documentation not being provided at the required quality or timetable.
 - Policies on model change were also highlighted as being inadequate with firms setting the threshold for materiality too high. It highlighted the need to perform back-testing to present reasonable thresholds in their model change policy.
 - The FSA also highlighted the need for adequate documentation and validation in relation to un-modelled general insurance risks (e.g., where simple 'rate-on-line' or 'loss ratio' approaches are used, particularly with regard to emerging markets).

Internal models – Internal model validation by management

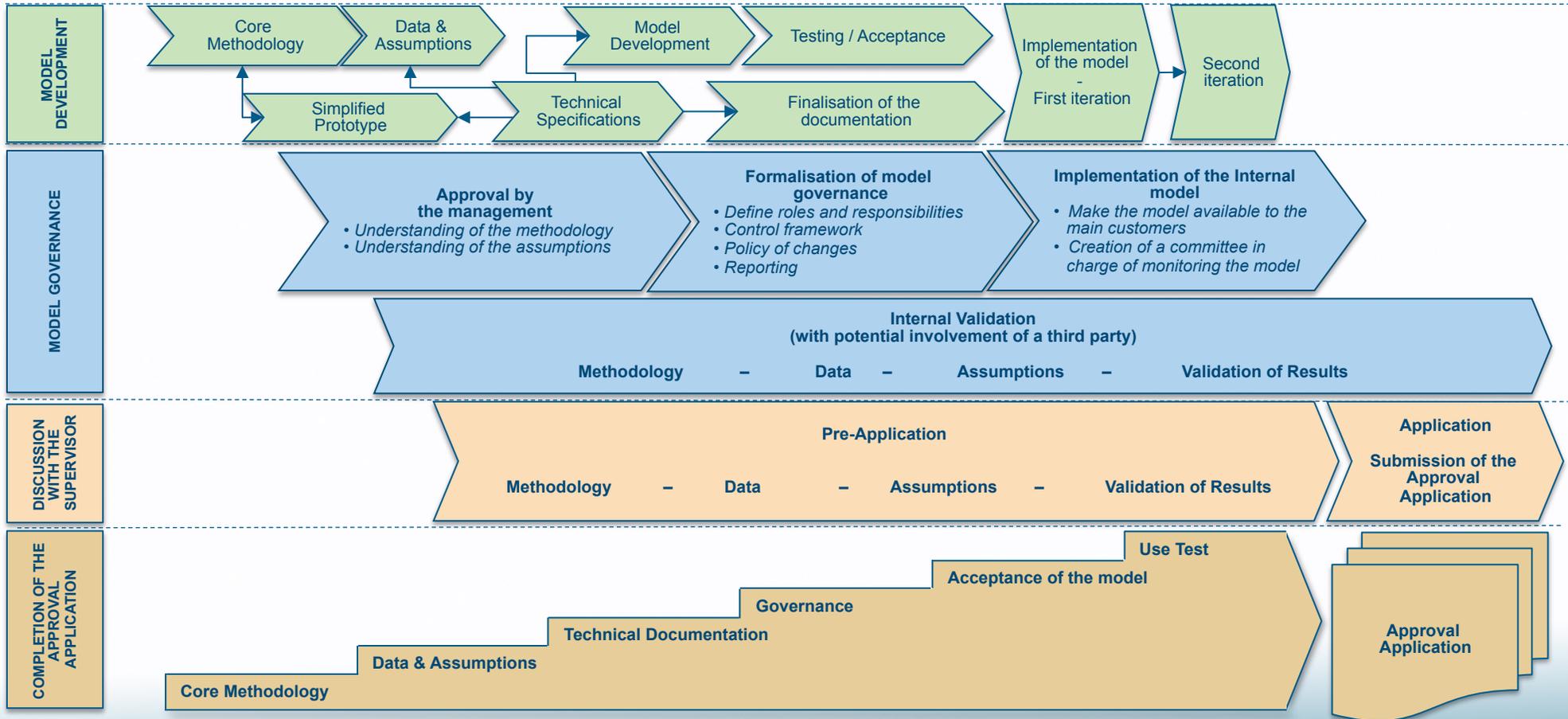
New responsibility

- Companies are allowed to consider expected management actions in their internal models. These assumptions will need to be approved by the management and will need to satisfy the following criteria:
 - **Objectivity:** For the purpose of the calculation of the ‘best estimate’ of technical provisions, there should be some clear trigger points and algorithms showing when and how management actions might be applied by companies.
 - **Realism:** Future management actions should be consistent with the company’s current principles and practices in running the business (i.e., respect their obligations to policyholders and reflect the appropriate degree of competitiveness experienced by the company).
 - **Verifiability:** There should be sufficient evidence to demonstrate that the management actions are objective and realistic (mainly through the analysis of management actions which were taken in the past).
- Companies shall assess the quantitative impact on the Solvency Capital Requirement of the future management actions implemented in the internal model.
- The criteria of realism is ambiguous: The valuation of liabilities (‘best estimate’ of technical provisions) is calculated in a run-off environment, whereas under the notion of realism it should be considered, like historical practice, as an ongoing environment. Further, with respect to asset management policy or profit-sharing policy, some management actions could be considered as reasonable in a run-off environment, but totally inappropriate in an ongoing environment.
- We would also like to raise the point about the potential risk of losing some autonomy of decision making in an environment where management actions, as implemented in an internal model, would have already been approved by the management. A limited use of management actions in internal models, however, would give more freedom to management, but at a certain capital cost. Thus, management and actuarial departments will need to find the right balance between the freedom of action in response to different events (an internal model cannot include all possible events) and the optimisation of economic capital as estimated by an internal model (requiring thorough parameterisation and assumptions).

Solvency Capital Requirement

Internal models - Steps to follow for the completion of an approval application

- Based on our experience of developing actuarial models, the documentation for the approval process needs to be produced alongside the development and the validation of the model. The documentation would also include information gathered during discussions with the supervisor in the context of the pre-application process.



Internal models

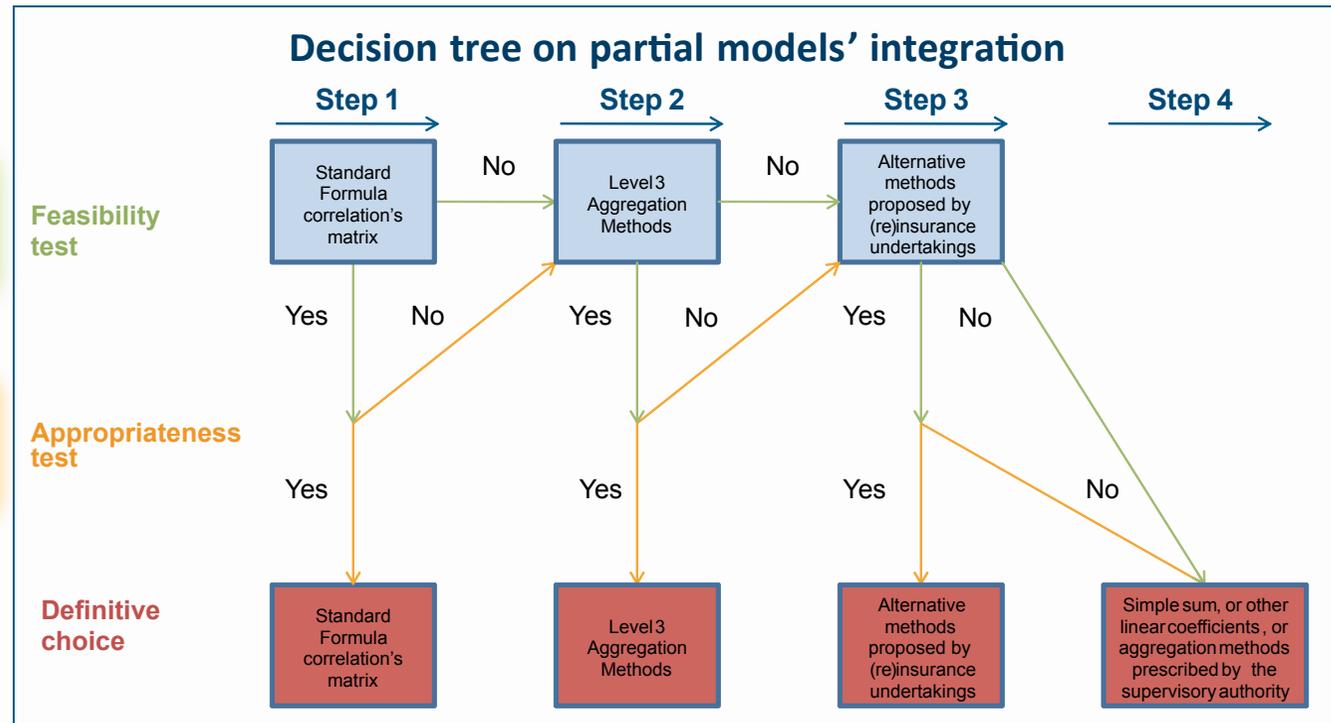
Partial internal models

- Article 112(2) of the Solvency II Framework Directive allows firms to use a partial internal model for the calculation of the SCR of certain risks or part of their business.
- Scope of partial models is flexible:
 - *One or more risk modules, or sub-modules*
 - *Different risk categorisations or risks not covered by the standard formula*
 - *Whole business or only one or more major business units*
- Approval process is required for partial model:
 - *Requirements of Articles 120 – 125 for internal model (adapted)*
 - *Justification for limited scope*
 - ✓ *Represent a transitory step towards a full internal model*
 - ✓ *Lack of reliable information to model other risks/business units*
 - ✓ *Proportionality principle*
 - ✓ *Encourage innovation and specialisation to certain area*
 - ✓ *M&A*
 - *Better reflection of risk profile*
 - *Design consistent with SCR principles*
- The onus lies with the undertaking to demonstrate that the limited scope is justified. Undertaking may supplement their rationale with quantitative evidence. If the supervisory authorities are dissatisfied with the justification provided by undertakings, they may require undertakings to perform specific exercises, if applicable and practicable.

Internal models

Partial internal models - Integration

The integration of partial internal model results into the standard formula, which could present challenges, will follow a multi-step procedure as shown below.



Direct application of standard formula correlation matrix is possible/feasible?

Direct application of standard formula correlation matrix is appropriate?

Governance and supervisory review

System of governance

Principles

General Governance Requirements

- Establish, implement and maintain effective internal reporting and communication at all levels of the undertaking, effective decision making procedures, clear organisational structure and allocation of functions and responsibilities taking into account the nature, scale and complexity of risks.
- Ensure that members of the administrative, management or supervisory body (AMSB) and relevant personnel possess necessary qualifications, competency, skills and professional experience in the relevant areas.
- Establish and maintain adequate information systems which produce complete, reliable, consistent and timely information concerning business activities and risks to which the undertaking is exposed.
- Establish policies on risk management, internal control and internal audit that clearly sets out relevant responsibilities, objectives, processes and reporting procedures. A business continuity policy should also be implemented and maintained.

Risk Management System

- Clearly defined risk management strategy consistent with overall business strategy, including approved risk tolerance limits.
- Written policies which ensure the definition and categorisation of risks to which the undertaking is exposed should facilitate control mechanisms.
- Where appropriate, performance of stress tests and scenario analysis should be included.

Risk Management Areas

- **Underwriting and reserving:** actions to be taken to assess and manage the risk of loss or adverse developments in the values of insurance liabilities, to maintain data quality and to maintain adequacy of claims management procedures.
- **Asset-liability management:** monitor mismatch between assets and liabilities, dependency between risks of different assets and liabilities classes or obligations, off-balance sheet exposure and the effect of risk mitigating techniques.
- **Investment risk management:** investments should comply with the prudent person principle, with the approved risk tolerance limits and with the nature of the undertaking's business.
- **Liquidity risk management:** appropriateness of the composition of assets in terms of their nature, duration and liquidity in order to meet the undertaking's obligations as they fall due.
- **Concentration risk management:** identify sources of concentration risk and ensure that concentrations remain within established limits and analyse possible risks of contagion.
- **Operational risk management:** regularly identify, document and monitor relevant operational risk exposures.
- **Reinsurance and other risk mitigation techniques:** selection of suitable risk mitigation techniques (according to nature of risks, capability to control the risks associated with those techniques, own assessment of credit risk).

System of governance

Four key functions

Internal Audit Function

- The internal audit function is an independent function within the organisation which examines and evaluates the functioning of the internal controls and all other elements of the system of governance as well as the compliance of activities with internal strategies, policies, processes and reporting procedures.
- An audit plan setting out the audit work has to be established by the internal audit function and reported to the AMSB.
- Reports should be produced if deficiencies are identified in an audited area and also be transmitted to the administrative or management body in the case of major deficiencies.

Compliance Function

- Compliance function is the administrative capacity for ensuring that all the actions of the company comply with applicable laws and regulatory requirements. It should also identify, assess, monitor and report the compliance risk exposure of the company. It should include a compliance policy and a compliance plan.
- An internal control system should ensure: effectiveness and efficiency of the company's operations in view of its risks and objectives, availability and reliability of information and compliance with regulations.

System of Governance

Actuarial Function

The actuarial function shall as a minimum:

- Apply methodologies and procedures to assess the sufficiency (and uncertainty) of technical provisions and to ensure that their calculation is consistent with the underlying principles.
- Inform the AMSB of the reliability and adequacy of the calculation of the technical provisions and how it arrived at its opinion (use of back-testing is recommended).
- Produce written reports to be submitted to the AMSB documenting the tasks that have been undertaken, clearly state any shortcomings identified and give recommendations as to how the deficiencies could be remedied. These reports should provide opinions about the technical provisions, the underwriting policy and the overall reinsurance arrangements.

Risk Management Function

- The risk management system shall cover, at least, the areas of underwriting and reserving, asset-liability management, investment, liquidity and concentration risk management, operational risk management, and reinsurance and other risk mitigation techniques.
- The risk management function is responsible for:
 - the coordination of risk management activities across the undertaking;
 - assisting the administrative, management or supervisory body (AMSB) in the effective operation of the risk management system, monitoring the risk management system, maintaining an aggregated view of the risk profile, reporting details on risk exposures, and identifying and assessing emerging risks;
 - designing, implementing, testing, validating and documenting the internal model (IM) and changes made to it;
 - analysing the IM performance and producing the required summary reports, informing the AMSB about IM performance, suggesting areas of improvement and providing updates on previous improvement efforts.
 - liaising closely with the users of the IM outputs and co-operating closely with the Actuarial Function

System of governance

Other requirements

▪ Fit and proper requirements

The system of governance should:

- Ensure that the members of the AMSB possess sufficient professional qualifications, knowledge and experience in the relevant areas of the business.
- Ensure it employs personnel with the skills, knowledge and expertise necessary for the proper discharge of the responsibilities allocated to them.
- Communicate to the supervisor any change of personnel within the management body with the skills mentioned above.

▪ Remuneration policy

The remuneration policy shall at least comply with the following:

- Being in line with the company's business and risk management strategy and therefore not encourage excessive risk-taking (avoid conflicts of interest).
- That should apply to the AMSB, persons who run the company and key function holders.
- There shall be a clear governance with regard to remuneration and an independent remuneration committee shall be created in order to support the AMSB.
- Fixed component of the remuneration should be sufficiently high in proportion of the total remuneration to avoid conflict of interest.
- The payment of substantial portion of the variable remuneration shall contain a flexible and deferred component (not less than three years).

▪ Outsourcing

- When companies outsource operational functions or any insurance or reinsurance activities, they should establish a written outsourcing policy and ensure that the outsourcing agreement is consistent with their obligations under the Directive.
- When choosing a service provider, the AMSB shall ensure that the service provider has the ability, capacity and authorisation required by law to deliver the required functions satisfactorily, that there is no conflict of interests and that rights and obligations are clearly defined between companies and service providers.
- The agreement between a company and a service provider should ensure that continuity is maintained should one of the parties decide to terminate the agreement and all relevant information should be accessible to auditors and the supervisory authority.
- All relevant aspects of the service provider's risk management and internal control system should be adequate and compliant with the Directive.
- The company should adequately take into account the outsourced activities in its risk management and internal control system.
- The company shall ensure that the service provider's staff are sufficiently qualified and reliable and that the service provider has adequate contingency plans in place.

ORSA

Principles

- Article 45 of the Solvency II Framework Directive states that:
 'As part of its risk management system every undertaking shall conduct its own risk and solvency assessment (ORSA). The ORSA shall include at least the following:
 - The overall solvency needs taking into account the specific risk profile, approved risk tolerance limits and the business strategy of the undertaking
 - The compliance with the capital requirements and with the requirements regarding technical provisions
 - The extent to which the risk profile of the undertaking deviates significantly from the assumptions underlying the SCR, calculated with the standard formula or with its partial or full internal model'



Source: Groupe Consultatif

- EIOPA released, on 13 July 2012, its final report on the public consultation of the draft Level 3 text setting out the detailed requirements of what a company's ORSA must achieve and how it must be documented. These are summarised into 21 guidelines (seven of them related to Group specificities) and expand on what companies should do to ensure that the outcome of the ORSA is acceptable. EIOPA strongly encourages the industry to use their final report in their early implementation of the ORSA.
- Each organisation should develop its own processes for the ORSA, tailored to fit its organisational structure and risk management system taking into account the principle of proportionality. The guidelines focus on the desired outcomes of the ORSA process rather than how the ORSA is to be performed. The use of an internal model is not compulsory within the ORSA process other than if the case where a model was used to calculate the regulatory SCR. Stress testing and scenario analysis of the business planning could suffice.
- The administrative, management or supervisory body (AMSB) should take an active part in the ORSA processes and in particular in challenging its results.
- ORSA is a risk management tool (not a supervisory tool) so it should consider the interrelation between risk and capital management, i.e. ORSA should ensure company's Board not to take on more risks than their capital base allows.
- All risks should be quantified regardless of how difficult the quantification would be (high-level assessment of the magnitude may be sufficient).

ORSA

Main guidelines

Documentation

- The following documentation is expected:
 - ❑ ORSA policy (description of processes in place to conduct ORSA, links between risk profile, approved risk tolerance limits and solvency needs, information on stress tests and scenario analysis, data quality and frequency of ORSA)
 - ❑ Record of each ORSA process (appropriately evidenced and documented)
 - ❑ Internal report on ORSA (once signed-off by AMSB, it should be communicated to all relevant staff)
 - ❑ ORSA supervisory report (not necessarily a specifically prepared report, it could be a subset of the internal report)

Features regarding the performance of the ORSA

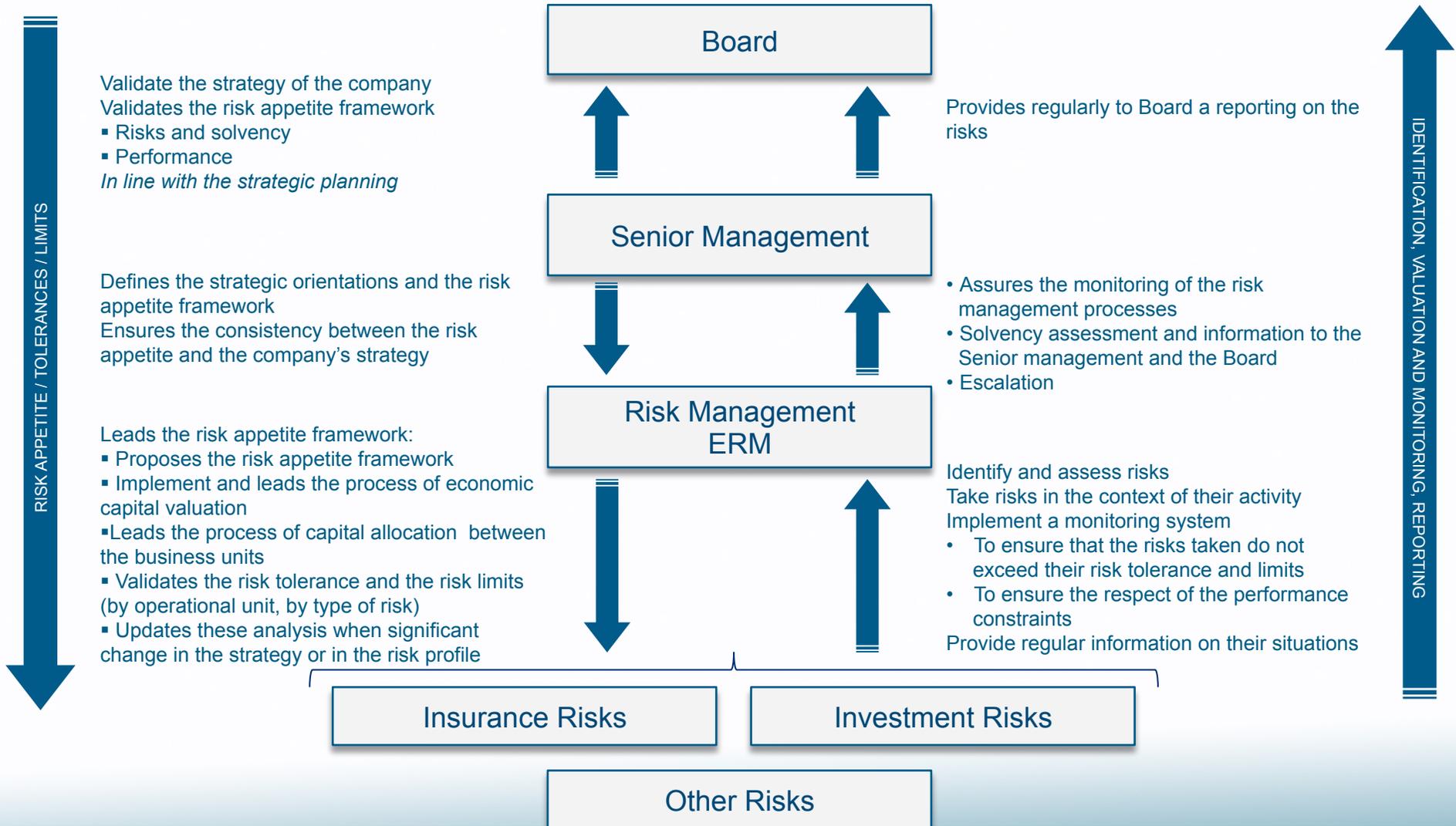
- Assessment of the overall solvency needs (expressed both in quantitative and qualitative terms). If valuation bases are different from solvency II basis, need to explain why and to provide quantitative estimation of the impact in doing so
 - Regulatory capital requirements (ORSA should include procedures that enable undertaking to monitor its compliance with regulatory capital requirements taking into account potential future changes in the risk profile and procedures to manage loss absorbing capacity of its own funds)
 - Technical provisions (ORSA process should ensure that actuarial function maintains compliance with requirements for the calculation of technical provisions)
 - Deviations from assumptions underlying SCR calculation (assess deviations both on a qualitative and quantitative basis)
 - Link to strategic management and decision-making framework (results of ORSA taken into account for capital management, business planning, etc.)
- The ORSA should consider the current risk profile:
 - ❑ Nature, complexity of all current identified risks with a measure of the exposure to such risks
 - ❑ Current solvency position
 - ❑ Risk appetite and business planning
 - And the prospective / forward-looking risk profile:
 - ❑ Multi-year business planning period is expected but no need to quantify solvency needs for each separate year
 - ❑ Target levels and quality of risks desired within the business and the level and type of capital required to run the business within this desired risk appetite.
 - ❑ Uncertain nature of future – Stress testing and scenario analysis
 - ❑ Risk mitigation techniques required to achieve the risk targets
 - ❑ Structure and quality of own funds

Group Specifics

- Group ORSA should reflect nature of the group structure and its risk profile and should include all of the entities within the scope of group ORSA.
- Group ORSA should adequately identify, measure, monitor, manage and report all group-specific risks and interdependencies.
- Forward looking perspective – link business planning periods at a solo level to the group's forward-looking perspective, specific risks the group could be exposed to, sources of own-funds within the group and assessment of availability, transferability and fungibility.
- In the group ORSA, third countries should be treated in the same manner as for EEA business with special attention to transferability and fungibility of capital. In case of equivalence, consequences of applying local capital requirements and technical provision calculations instead of Solvency II framework should be assessed.

ORSA

Illustrative risk appetite framework



Supervisory review

Capital add-on

- Setting a capital add-on is a supervisory power aimed at ensuring an adequate level of SCR, thereby protecting policyholders' interests and presenting a level playing field. This power shall be used as a corrective measure and not as a punitive one, in the context of 'exceptional circumstances'. This capital add-on will be reviewed once a year and removed once the deficiency have been rectified.
- Draft implementing measures have classified a capital add-on into two types:
 - Capital add-on triggered by a significant deviation from the risk profile embedded in the SCR calculation, either calculated by the standard formula or by an internal model, referred to as a 'Risk Profile Capital Add-On'
 - Capital add-on triggered by a significant governance deficiency, referred to as a 'Governance Capital Add-On'
- The setting of a capital add-on should follow a due process. The supervisory authority should give proper consideration to whether a capital add-on is an adequate supervisory measure, taking into account the position of the undertaking concerned:
 - That all the relevant steps (such as the **identification of an issue, the assessment of the issue and the calculation of an add-on if appropriate**) have been followed
 - That the results from the steps have been properly documented
 - That any relevant conclusion or measure by the supervisory authority have been shared with the undertaking concerned and that the undertaking has been given the opportunity to present its views on these conclusions or measures within an appropriate timeframe
- The setting and the amount of a capital add-on should be reviewed more frequently than annually if there are indications that the situation that led to the setting of the capital add-on has changed based on valid experience.
- In situations where a capital add-on is set, supervisory authorities should put down their decisions in writing and justify them to the undertaking. Future Level 3 guidance will set out guidance on the information to be transmitted to the undertaking in order to harmonise the process of setting a capital add-on.
- The public disclosure of the SCR incumbent on the undertaking shall provide separately the amount calculated using the standard formula or an internal model and any capital add-on, with concise information on its justification by the supervisory authority concerned.
- The decision-making process for applying a group capital add-on and the consultation process for applying a solo capital add-on is firmly embedded in the college of supervisors arrangements.
- The calculation of a group governance capital add-on should be assessed on a case-by-case basis to reflect the structure and complexity of the group.

Supervisory review

Capital add-on

1 Identification of an issue

Deviation from the risk profile standard formula / internal model

A risk profile deviation could be identified, for example:

- Via the analysis of ratios
- Via stress tests
- Via supervisory enquiries

The main source is likely to be the quantitative information received periodically from the undertakings (e.g., SFCR).

A risk profile may arise from any quantifiable risk, whether or not those risks are explicitly covered in the standard formula.

Governance deficiency

A governance deficiency could be identified:

- Via on-site inspections, either routine or on-site inspections triggered by an off-site analysis
- Via supervisory enquiries
- Via the knowledge by the supervisory authority of any relevant information (e.g. auditor's report)

However, simply requiring more capital would not compensate for poor governance.

2 Assessment of an issue

Deviation from the risk profile standard formula / internal model

The significance of the deviation should be assessed in view of the effect of the recalculation on the overall SCR of the undertaking (e.g., as per ORSA) exceeding the regulatory SCR calculated either through the standard formula or an approved internal model (if the difference is higher than 15% then the deviation is considered significant).

Supervisory authorities will also consider the nature and type of the deviation, the likelihood and severity of any adverse impact on policyholders and beneficiaries, the sensitivity of assumptions to which the deviation relates and the anticipated duration of the deviation.

Governance deficiency

It is likely to be a case-by-case analysis. The supervisory authorities should consider:

- If it is due to inadequate implementation or failure to implement governance standards
- Principle of proportionality
- Likelihood and severity of adverse impact to policyholders as well as anticipated duration

If the situation is very serious, the setting of an add-on could be followed/accompanied by other measures.

3 Calculation of a Capital Add-on

Underestimation of particular sub-risks risk modules or model component

1. Identify the relevant sub-risks or risk modules
2. Consider the cause of the significant deviation:

- Inadequacy of the calibration of parameters
 - => Ask the undertaking to use new parameters, derived from its own data, that best reflect the risk profile of the undertaking
- Inadequacy of the design assumptions
 - => Ask the undertaking to look for alternative design approaches
 - => Failing that, set the capital add-on on a more 'crude' basis, through comparative analysis or incorporating a more subjective analysis

Quantifiable risks not covered by the SCR calculation

1. Identify risks not covered by the standard formula
2. Consider the methodologies available to better quantify the risk
3. Aggregate the identified risk with the other risks covered by the standard formula

Aggregation mechanism

Identify the reasons for the significant deviation:

- Inadequacy of correlation factors
 - => Ask the undertaking to assess the value of 'new' correlation factors
- Inadequacy of the linear correlations assumption
 - => This case is not considered as feasible for the calculation of the capital add-on
 - => Set a capital add-on through comparative analysis
- Inadequacy of the dependency structure
 - => Ask the undertaking to find an alternative aggregation mechanism
 - => Failing that, set the capital add-on through comparative analysis

Governance deficiency

When assessing and quantifying the deficiencies, the supervisory authority will need to use an element of judgement

The calculation of the capital add-on should take into account the outcomes of the assessment review and where appropriate it could be set as per comparable deviations of other undertakings with similar risk profiles.

Reporting and disclosure

Supervisory reporting and public disclosure

Expected reports

Within the framework of Pillar 3, companies will have to communicate relevant values for Pillars 1 and 2 to the controlling authorities and to the public. These new requirements aim at improving the **transparency of the information communicated by the companies**. Regular public communication aims to enhance internal 'discipline' with respect to governance of risks (at the quantitative and qualitative level).

RSR - Regular Supervisory Report

- Narrative report
- Document which makes it possible to the **supervisor** to carry out his process of reviewing solvency (the SRP or Supervisory Review Process) and forms the base of the dialog between the company and the supervisor. It includes all the elements contained in the SFCR.
- Frequency: **annual** for certain information; **update supplements every three years**
- Timing of solo publication: **14 weeks after year end** (Note: 20 weeks in Year 1 post implementation, 18 in Year 2, 16 in Year 3)
- Timing of group publication: **6 weeks later**
- Includes ORSA report

SFCR - Solvency and Financial Conditions Report

- Narrative report
- Document aiming to **enhance transparency for the supervisor and the public**, allowing both to analyse the financial position of a company.
- Frequency: **annual; update in the event of major change**
- Timing of solo publication: **14 weeks after year end** (20 weeks in Year 1 post implementation, 18 in Year 2, 16 in Year 3)
- Timing of group publication: **6 weeks later**

QRTs- Quantitative Reporting Templates

- Communication **of annual and quarterly appendices**, providing important granular detail and supplementing the narrative reports.
- Note: as QRTs **constitute the quantitative part of the SFCR and the RSR**, some parts will not be made public (RSR only)
- Frequency: some are annual and others are quarterly
- Timing of the publication of the annual templates: **consistent with the RSR and SFCR** (14 weeks after YE for solos, 20 weeks for groups)
- Timing of the publication of the quarterly templates (including Q4): **5 weeks after quarter end for Solo** (8 weeks in Year 1, 7 in Year 2, 6 in Year 3) and 11 weeks for groups

Supervisory reporting and public disclosure

Contents of the narrative reports (SFCR & RSR)

Structure of the SFCR and RSR			
Chapter	Content	SFCR level 3	RSR level 3
Business, External Environment, and Performance	A.1 Business and external environment details A.2 Performance from underwriting activities A.3 Performance from investment activities A.4 Performance from other activities	G: 1 – 3 UW performance by material LOB and area, as well as in aggregate	G: 28 – 32 Market position and performance relative to projections
Governance & Remuneration Policy	B.1 General governance arrangements B.2 Fit and proper requirements B.3 Risk management system, including the ORSA B.4 Internal control B.5 Internal audit function B.6 Actuarial function B.7 Outsourcing B.8 Any other disclosures	G: 4, 5 Governance structure, Remuneration policy, outsourcing policy	G: 33 – 36 Remuneration of members of management body, outcome of ORSA, overview of internal audits performed
Risk Profile	C.1 Underwriting risk C.2 Market risk C.3 Credit risk C.4 Liquidity risk C.5 Operational risk C.6 Other material risks C.7 Any other disclosures	G: 6 Exposure on off balance sheet and SPVs, summary of risk concentration	G: 37, 38 Detail of risk mitigation technique used
Valuation for Solvency Purposes	D.1 Assets D.2 Technical provisions D.3 Other liabilities D.4 Alternative methods D.5 Any other disclosures	G: 7 – 20 Solvency II balance sheet, methods and assumptions	G: 39 – 42
Capital Management	E.1 Own funds – structure, amount & quality E.2 MCR and SCR E.3 SCR differences, if internal model used E.4 Non-compliance with the MCR and SCR E.5 Any other disclosures	G: 21 – 27	G: 43 Expectation of SCR, MCR, and OF over the business planning horizon

- Documents must at least address the points in the table
- In order to facilitate comparison, the organisation of the Chapter and content should be identical in each document:
 - For the supervisor (facilitating comparison between various sources for each solo entity and within a group)
 - For the other recipients (facilitating comparison between various companies)
- Additional group-specific information
 - SFCR:
 - ✓ Legal and organisational structure
 - ✓ Intra-group outsourcing arrangements
 - ✓ Fungibility & transferability descriptions
 - RSR:
 - ✓ Contribution of each subsidiary to the group strategy

Supervisory reporting and public disclosure

Presentation of QRTs

- The latest version of the QRTs was published on 09/07/2012. EIOPA encourages the industry to use this latest package already, in order to start the implementation phase.
- Summary table for the templates:

Topic	Code	Number of Solo Templates			Number of Group Templates			RFF* Annual * Ring Fenced Funds
		Annual	Quarterly	Annual disclosure	Annual	Quarterly	Annual disclosure	
Economic Balance Sheet	BS	3	1	1	3	1	1	1
Own Funds	OF	1	1	1	1	1	1	1
Variation Analysis	VA	3	NA	NA	NA	NA	NA	NA
SCR	SCR	10	2	3	10	2	3	10
MCR	MCR	2	2	2	NA	NA	NA	NA
Assets	A	5	7	NA	5	6	NA	NA
Non-Life Technical Provisions	TP – E	7	1	2	NA	NA	NA	1
Life Technical Provisions	TP – F	6	1	1	1	NA	NA	1
Reinsurance	Re – J	6	3	NA	3	1	NA	NA
Various	K1, A1	2	1	1	1	1	1	NA
Participations		1	NA	NA	NA	NA	NA	NA
Profit or Loss Sharing		1	1	NA	1	1	NA	NA
Duration of liabilities		1	NA	NA	1	NA	NA	NA
Lapses		NA	1	NA	NA	1	NA	NA
Group, Intra Group & Risk Concentration	G, IGT, RC	NA	NA	NA	9	NA	1	NA
TOTAL		48	21	11	35	14	7	14

Financial Stability Only

Current regulatory reports will be replaced by these templates. Only additional reports which highlight current national specificities will be preserved.

Supervisory reporting and public disclosure

Presentation of QRTs

Topic	Contents of the QRTs
Economic Balance Sheet	<ul style="list-style-type: none"> ▪ Economic balance sheet ▪ Details of own funds and eligible elements ▪ Details of off balance sheet items ▪ Assets and liabilities by currency ▪ Profit and loss
Classification of Own Funds	<ul style="list-style-type: none"> ▪ SCR by risk module and MCR ▪ Breakdown of reconciliation reserve ▪ A placeholder for participations treatment
Variation Analysis	<ul style="list-style-type: none"> ▪ Explanation of the movements in own funds over time
Assets	<ul style="list-style-type: none"> ▪ Investment details (line by line) ▪ Structured products ▪ Derivatives – Open positions and historic trades ▪ Return on investment assets (by category) ▪ Investment funds (Look-through approach) ▪ Securities lending and repurchase agreements (repos) ▪ Assets held as collateral
Non-Life	<ul style="list-style-type: none"> ▪ Details of Non-Life and Non-SLT Health Technical Provisions ▪ Projection of gross future cash out-flow and in-flow for Non-Life ▪ Undiscounted development triangles (gross paid, gross RBNS, salvage and subrogation, reinsurance recoveries) ▪ Details for movement in case reserves ▪ Segmentation of claims by value ▪ Peak risks and mass risks, based on net retention ▪ Duration of liabilities
Life	<ul style="list-style-type: none"> ▪ Details of Life and SLT Health Technical Provisions ▪ Projection of gross future cash out-flow and in-flow for Life ▪ Detailed information by product (identification and classification, stock and movement, BE and guarantees, valuation basis) ▪ Information on the portfolio of annuities and life assurances from the non-life and Health Non-SLT (direct business only)
Reinsurance	<ul style="list-style-type: none"> ▪ Details on the most important risks in terms of exposure protected by facultative cover ▪ Structure of reinsurance program for the coming year ▪ Details on recoverables from various reinsurers and associated guarantees received ▪ Details on Special Purpose Vehicles (SPVs)
Group	<ul style="list-style-type: none"> ▪ Entities in the group ▪ Solvency assessment overview: Details of capital requirements and own funds of each entity ▪ Contribution to group TP: Details of technical provisions by category and contributing to the technical provisions ▪ Contribution to group SCR: Decomposition of technical and financial results of each insurance entity ▪ Intra-group transactions (IGT) ▪ Risk concentration (RC) by counterparty

Insurance groups

Insurance groups

Solvency Capital Requirement and eligible own funds

- Articles 230 to 233 of the Solvency II Directive set two methods (or a combination of both methods) with regard to the calculation of the solvency at the level of the groups.
 - Method 1 (default method) is based on consolidated data and accounts and can be done either through the standard formula or through an approved internal model.
 - Method 2 is based on aggregated group eligible own funds and the aggregated group Solvency Capital Requirement. Method 2 is not allowed where there are significant intra-group transactions.
- The decision of which method to use is taken by the group supervisor in consultation with other supervisory authorities concerned and the participating undertaking.

Method 1 (based on Draft Level 2 Implementing Measures)

Determination of Consolidated Data

Full consolidation of data of all (re)insurance undertakings, third-country (re)insurance undertakings, insurance holding companies and ancillary services undertakings which are subsidiaries of the parent undertaking.

Proportional consolidation of data of all (re)insurance undertakings, third-country (re)insurance undertakings, insurance holding companies and ancillary services undertakings which are managed by an undertaking (subsidiary of the parent) together with other undertakings (not part of the group) whose responsibility is limited to the share of the capital they hold.

Proportional share of the undertakings' own funds calculated according to the sectoral rules in relation to holdings in related undertakings which are credit institutions, investment firms and financial institutions.

For the purpose of the calculation of group own funds, the data should be net of any intra-group transaction.

Calculation of Consolidated Group SCR

The consolidated group SCR should be the sum of:

- SCR calculated on the basis of consolidated data.
- Proportional share of the capital requirement for credit institutions, financial institutions and institutions for occupational retirement provision, calculated according to the relevant sectoral rules and the proportional share of notional capital requirements of non-regulated entities carrying out financial activities.
- The proportional share of the SCR of the related (re)insurance undertakings and insurance holding companies which are not subsidiary undertakings.

Group-specific Parameters

Subject to approval by the group supervisor, SCR at group level are allowed to use, within the standard formula, parameters specific to the group concerned.

Requirements about data to be used for group-specific parameters are similar to those for undertaking specific parameters.

Standardised methods used to calculate group-specific parameters shall fulfil the same requirements than those for undertaking parameters.

Supervisory approval procedure for the use of group-specific parameters is identical to that of undertaking specific parameters.

The group supervisor shall inform and consult other supervisory authorities, within the college of supervisors, of the application for group-specific parameters.

Best Estimate and Risk Margin

The best estimate of technical provisions on the basis of consolidated data should be the sum of:

- Best estimate of participating undertaking
- For each (re)insurance undertaking and related third-country (re)insurance undertaking, the proportional share of the best estimate of that undertaking

Best estimates considered should be adjusted for intra-group transactions, in particular:

- The best estimate of the undertakings that accepts risks shall not include the cash-flows arising from obligations of the intra-group reinsurance contracts
- The undertaking that cedes the risk shall not recognise the amounts recoverable from intra-group reinsurance contracts

Risk margin of technical provisions at the group level is the sum of the risk margin of the undertaking plus the proportional share of related undertakings.

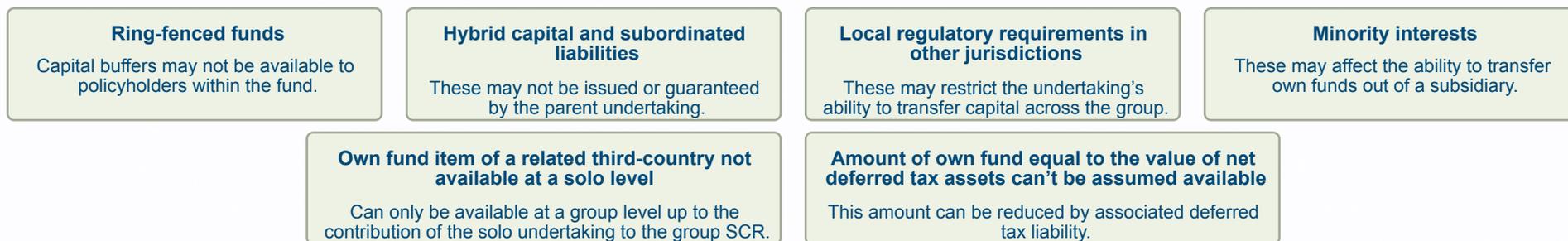
- We note that, in the LTGA technical specifications, participations in credit and financial institutions are excluded from the consolidation.

Insurance groups

Availability at group level of the eligible own funds and treatment of participations

- Fungibility and transferability constraints occur because:
 - Transfer of assets to another entity may not be allowed.
 - Transfer of assets to another entity cannot be completed within a nine-month period.
 - Some own funds may be available to absorb only certain losses.

- Areas where fungibility and transferability constraints require particular attention include:



- The tier classification of own fund items of an undertaking which is part of a group should remain the same at group level, assuming that it is free from encumbrances and not connected with any other transaction. This applies similarly to related third-country undertakings, provided that the definitions of SCR and MCR are identical at related undertakings and group levels.
- The industry has strongly condemned the removal of the Group Support plan without which would seriously reduce the financing flexibility of group subsidiaries (e.g. through the use of diversification benefits).
- The treatment of participations must ensure that the supervisors have a meaningful picture of the solvency position of each solo undertaking. The following objectives are relevant when considering the treatment of participations:
 - Avoiding double gearing
 - Ensuring that the capital held in each solo entity is commensurate with the risks run in that entity - this requires supervisors to have the ability to identify where capital and risks reside
 - Limiting systemic risk
 - Avoiding the contagion of risks within a group through subsidiaries/ participations
 - Avoiding incentives for regulatory arbitrage through group structuring

Insurance groups

Internal model application

- The Directive recognises two cases where the full or partial internal model is only used for the group SCR and where the full or partial internal model is also used to calculate related undertaking's SCR.

Full/Partial Internal Model for Group SCR Only

- Application shall be provided to the group supervisor who will inform and forward the application to the college of supervisors
- Additional information (than the ones required for a solo internal model application) required:
 - Scope of the model (e.g. list of related undertakings included within the scope, legal and organisational structure of the group, explanation why the internal model is not used to calculate related undertakings' SCR, where applicable explanation why some undertakings are excluded)
 - Estimation of consolidated group SCR using both the internal model and the standard formula before the approval of the internal model
 - Estimation of each related undertaking's SCR using the standard formula before approval of the internal model
 - Explanation of the difference between the sum of the SCR of all related (re)insurance undertakings of the group and the consolidated group SCR calculated with the internal model
- Policy for changing the internal model and changes to the internal model for the group calculation follow the same rules than for solo internal model
- **Final decision with regard to the application is made after consultation of the college of supervisors** and in particular additional information quoted above will be part of the evaluation
- Participating undertakings whose consolidated group SCR is calculated on the basis of the internal model should comply with the Use Test

Full/Partial Internal Model for Both Group SCR and Related Undertakings' SCR

- The above requirements also apply to this case.
- The application should make clear which of the related undertakings are using the 'group internal model' to calculate their own SCR.
- Note that the extension of the use of the group internal model to the calculation of related undertakings SCR is a major change and therefore will require approval by the group supervisor and the relevant supervisory authorities.
- The group supervisor must notify within 45 days to the applicant if the application is complete or not, and in the case that it is not complete, the six-month period will be postponed accordingly.

Third country equivalence

Third country equivalence

- Under Solvency II, equivalence for third country solvency regimes is assessed under three articles of the Solvency II Directive:
 - Article 172 – EEA direct writers using reinsurance outside EEA
 - Article 227 – Group Solvency Calculation for an EEA parent company with a subsidiary in a third country
 - Article 260 – Group Supervision for a parent company in a third country with a subsidiary in the EEA
- Six overarching principles under-pinning the equivalence assessment have been highlighted in the reports summarising the assessment in relation to supervisory regimes of Japan, Switzerland and Bermuda:
 - Provide a similar level of policyholder and beneficiary protection (i.e., solvency regime in third country requires to hold adequate financial resources, adequate system of governance, effective risk management system, etc.)
 - Maintain supervisory cooperation under conditions of professional secrecy
 - Be a flexible process based upon principles and objectives
 - Apply the proportionality principle
 - Be applied by the third country at the time of the assessment
 - Be kept under review, with equivalence advice updated at least every three years
- Transitional arrangements for third country supervisory authorities and solvency regimes deemed to be equivalent shall be for a period ending 31 December 2018. No later than 31 December 2016, the Commission shall review in relation to each third country for which a positive equivalence decision has been made the progress that has been made in meeting the requirements of the convergence programme.
- The Japanese supervisory system was found to be partly equivalent (largely equivalent once the anticipated move to market consistent valuations of liabilities is finalised) under Article 172.
- The Swiss supervisory system was found to be fully equivalent under Article 227 and partly equivalent under Articles 172 and 260 (caveat with regard to reinsurance captives exempt from Swiss Solvency Test, limited public disclosure and some shortcomings with regard to governance).
- The Bermudan supervisory system meets the criteria for equivalence under Article 260. There are a number of caveats under Articles 172 and 227 in particular around governance, disclosure requirements and the valuation framework.
- There are eight countries currently applying for transitional equivalence: Australia, Chile, China, Israel, Mexico, Singapore and South Africa.

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