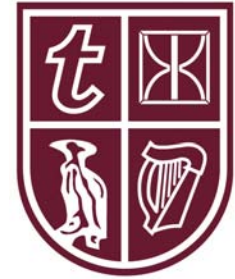


Society of Actuaries in Ireland

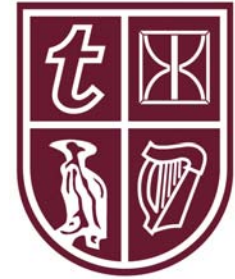


Solvency II Governance & the Actuarial Function

23rd November 2009

Alexander Hotel

Agenda



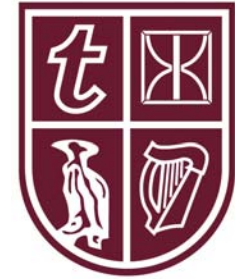
- **Governance**
 - General Requirements
 - Risk Management System
 - Specified Functions
 - Outsourcing
 - Own Risk & Solvency Assessment (ORSA)
- Actuarial Function
- Concluding Remarks

Governance

- Falls under Pillar II
 - considered to be as important as Pillar I by supervisors
- Level 1 Text
 - General Governance Requirements (41)
 - Fit and Proper Requirements (42)
 - Proof of Good Repute (43)
 - Risk Management Systems (44)
 - Own Risk & Solvency Assessment (45)
 - Internal Control (46)
 - Internal Audit (47)
 - Actuarial Function (48)
 - Outsourcing (38 & 49)



Level 2 Implementing Measures



November
2008

- **CEIOPS Issues Paper** - Implementing Measures on System of Governance.

March
2009

- **CP33** - Draft CEIOPS' Advice for Level 2 Implementing Measures on Solvency 2: System of Governance.

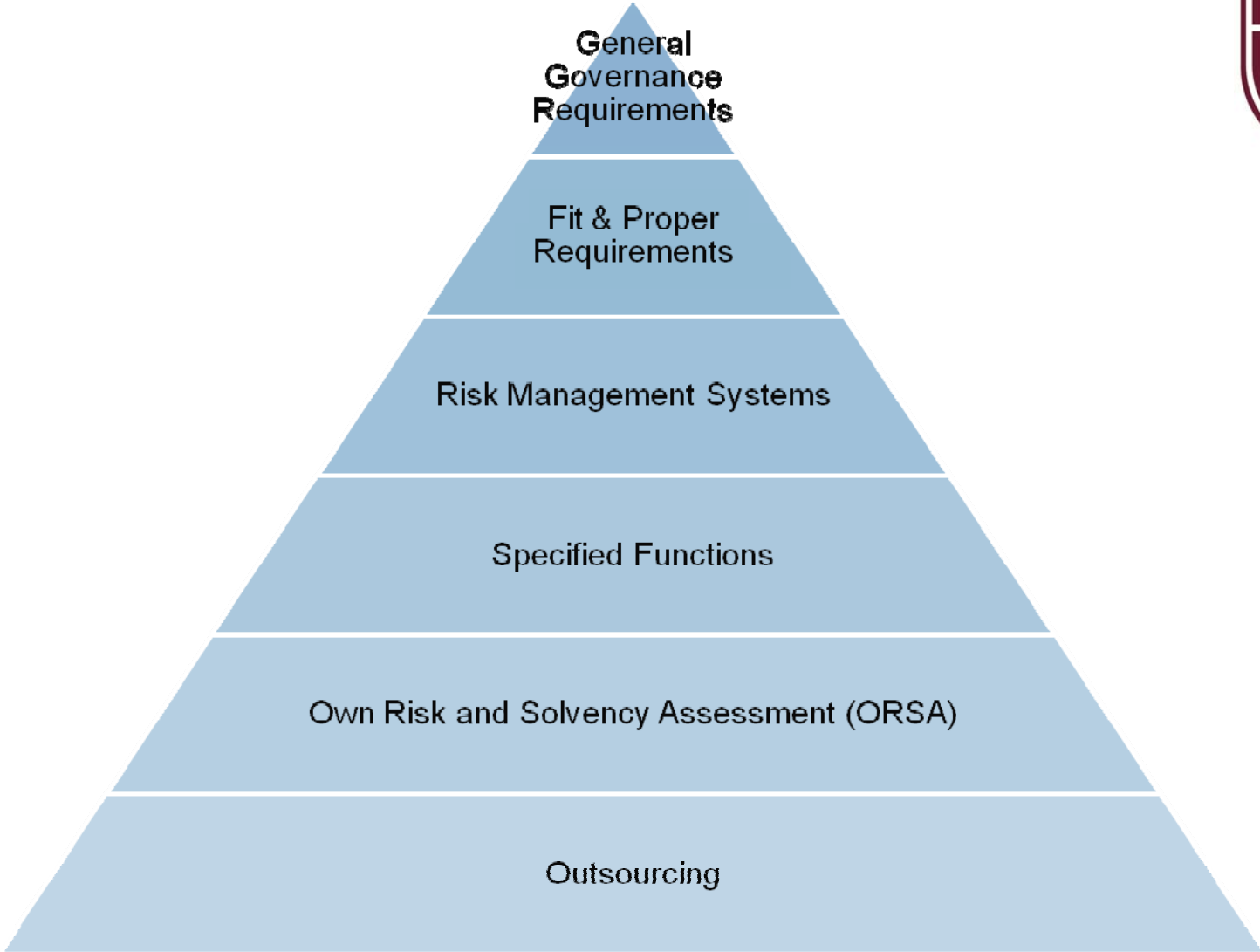
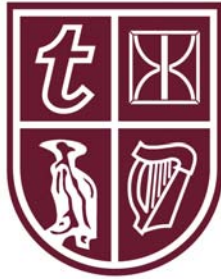
November
2009

- **CEIOPS-DOC-29/09** - CEIOPS' Advice for Level 2 Implementing Measures on Solvency 2: System of Governance.

* *CP33 attracted the highest number of comments from stakeholders in waves 1 and 2*

** *ORSA was addressed separately in a CEIOPS Issues Paper dated 27 May 2008. Level 3 guidance will be issued in respect of ORSA*

Governance Framework



General Governance

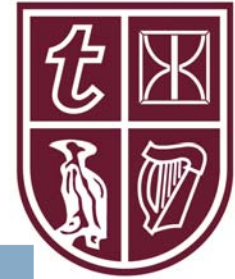


- Level 1 Text
 - *“administrative or management body” (the Board) is ultimately responsible*
 - *Written policies will be required “in relation to, at least, risk management, internal control, internal audit and, where relevant, outsourcing”.*

CEIOPS' Advice

- The organisational structure, reporting lines, skills, decision making process and record keeping should be appropriate.
- At least 2 persons should run the undertaking (the 4 eyes principle)
- Potential conflicts of interest should be identified and managed.
- The required written policies should clearly set out relevant responsibilities, goals, processes and reporting procedures.
- Contingency and business continuity plans should be in place.

General Governance



- Additional explanatory text comments of interest

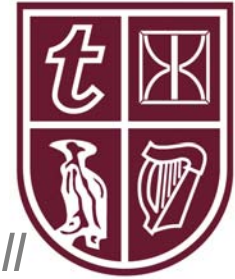
Remuneration policies should be in line with business strategy, risk profile and objectives and should avoid potential incentives for unauthorised or unwanted risk taking.

There should be an assessment of the effectiveness of the system of governance and reports drawn up at least annually, consistent with the principle of proportionality, to the Board. This report should include conclusions drawn from the ORSA process.

Subject to national laws, companies should consider whether there should be sub-committees of the Board including audit, risk, investment or remuneration committees.

Internal audit can't be combined with other functions and must be objective and independent from other functions.

Fit & Proper Requirements

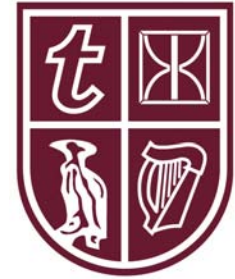


- Level 1 Text
 - *Insurance and reinsurance undertaking shall ensure that all persons who effectively run the undertaking or have other key functions at all times fulfil the following requirements:*
 - (a) ...*[fit]*
 - (b) ... *[proper]*

CEIOPS' Advice

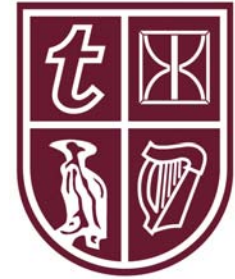
- Apply to all persons who effectively run the company including senior management and Board members.
- Board members should collectively be able to run the company soundly and prudently.

Agenda



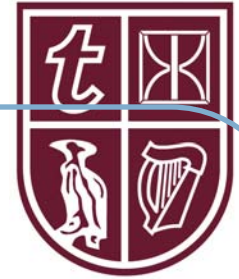
- **Governance**
 - General Requirements
 - **Risk Management System**
 - Specified Functions
 - Outsourcing
 - Own Risk & Solvency Assessment (ORSA)
- Actuarial Function
- Concluding Remarks

Risk Management System



- Risk Management System, as distinct from Risk Management Function.
- Level 1 Text
 - *Board is responsible for ensuring that the implemented risk management system is **suitable**, **effective** and **proportionate** to the nature, scale and complexity of the risks inherent in the business.*

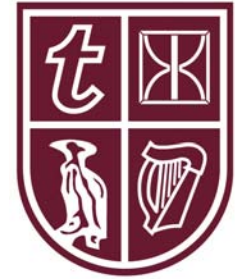
Risk Management System



CEIOPS' Advice

- specifies minimum requirements for an effective risk management system including:
 - A clearly defined risk management strategy (which should be approved by the Board) and
 - Adequate written policies (by senior management) to support the implementation of the risk management strategy
 - Appropriate processes & procedures for identifying and reporting on risks.
 - A suitable ORSA process.

Risk Management System

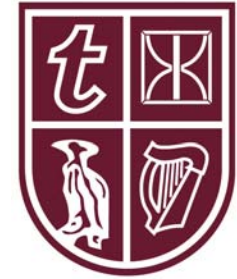


- Level 1 Text
 - *Written policies are required in respect of at least*
 - *underwriting and reserving;*
 - *asset – liability management;*
 - *investment, in particular derivatives and similar commitments;*
 - *liquidity and concentration risk management;*
 - *operational risk management;*
 - *reinsurance and other risk mitigation techniques.*

CEIOPS' Advice

- CEIOPS-DOC-29/09 sets out CEIOPS' views on what should be covered in the written policies for the asset liability management and investment policies.
- CEIOPS plans to expand on written policies for the other risks through level 3 guidance.

Risk Management System

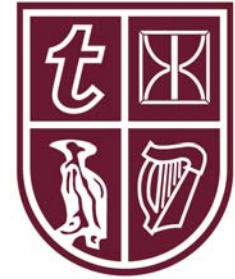


- Other points of interest from explanatory text

Although “prudent person” principle applies, quantitative limits and asset eligibility criteria may be developed under level 2 in the future by the Commission.

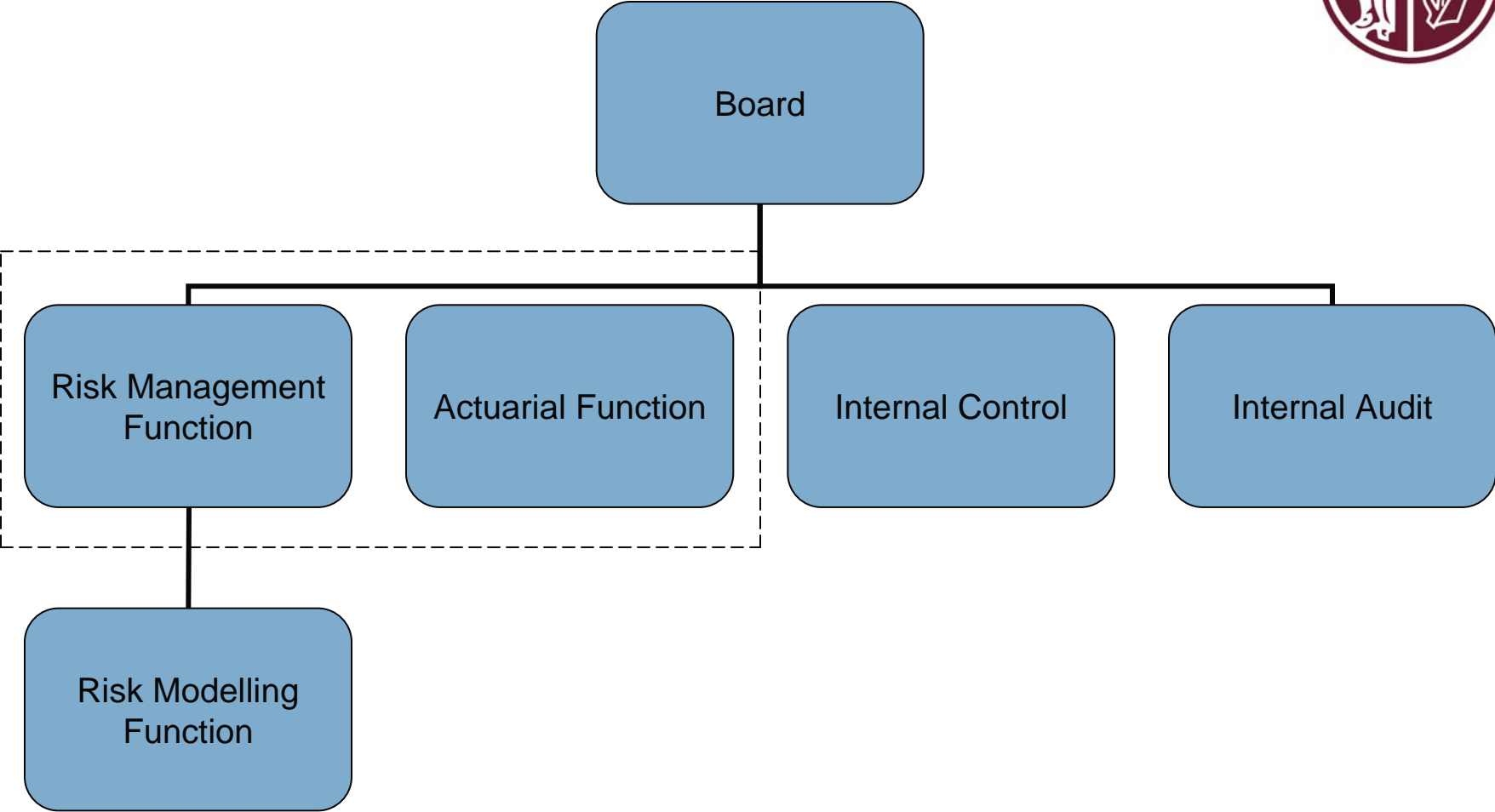
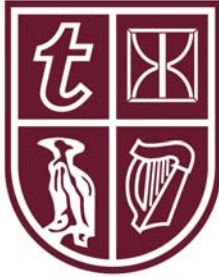
Companies should understand and be able to value their own investments according to Solvency 2 valuation principles e.g. will be necessary to independently verify tracker bond prices supplied by the asset issuer.

Agenda

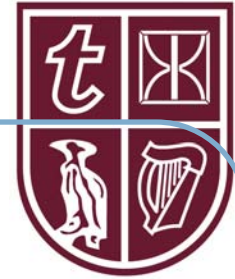


- **Governance**
 - General Requirements
 - Risk Management System
 - **Specified Functions**
 - Outsourcing
 - Own Risk & Solvency Assessment (ORSA)
- Actuarial Function
- Concluding Remarks

Specified Functions



Risk Management Function



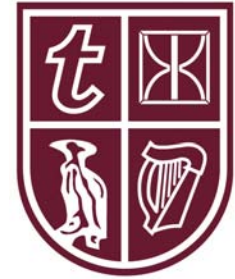
CEIOPS' Advice

- Should be organised so that it can be objective and not be responsible for the results of the operational business.
- Should assist the Board and management in the effective operation of the risk management system.
- Responsible for integration of the internal model with the risk management system and the day to day functions of the company.

- **Explanatory text**

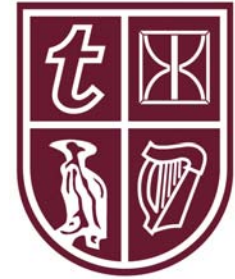
- In the explanatory text
 - CEIOPS believes that at least one member of the Board should be designated to oversee the risk management function
 - It also acknowledges that in larger companies and companies with more complex risk profiles, the person responsible for the Risk Management Function is sometimes designated as a Chief Risk Officer (CRO).

Internal Control Function



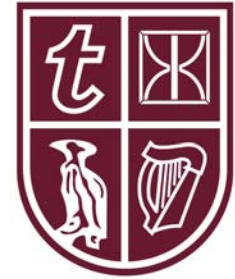
- Effectively a control and compliance function.
- Will be necessary to document a compliance plan setting out all the intended compliance activities.
- The function will have to report any major compliance issues promptly to the Board.

Internal Audit Function



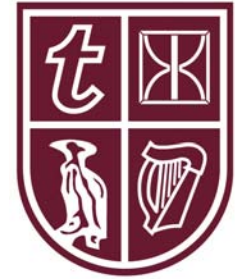
- Should have an appropriate standing in the company to ensure its independence
 - be free to audit any area of the company, with unrestricted access to information and people, and be free to express its opinions.
- An audit plan should be documented taking a risk based approach to deciding priorities.
- A written report should be presented to the Board at least annually.

Agenda



- **Governance**
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Outsourcing



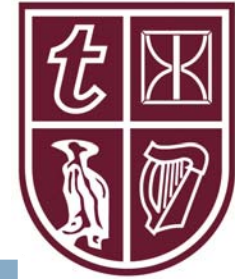
- Level 1 Text

- *Member States shall ensure that insurance and reinsurance undertakings remain fully responsible for discharging all of their obligations under this Directive when they outsource functions or any insurance or reinsurance activities.*

CEIOPS' Advice

- Written policy should consider impact on the business and the reporting and monitoring arrangements that should be put in place.
- For outsourcing within a group, reasonable to take into account extent to which company controls or can influence service provider.
- CEIOPS specifies minimum criteria
 - For choosing a service provider for any critical or important functions.
 - For inclusion in written agreement with the service provider.
- Outsourcing of any critical or important functions or activities should not lead to a material impairment of the quality of the company's governance system .

Outsourcing



- Other points of interest from explanatory text

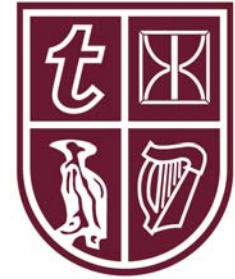
Possible to outsource to non-EU service providers
Different supervisory notification arrangements are not necessary.

In principle all functions and activities can be outsourced provided the Board remains ultimately responsible for discharging its obligations.

CEIOPS will expand further on what might or might not constitute outsourcing in level 3 guidance.

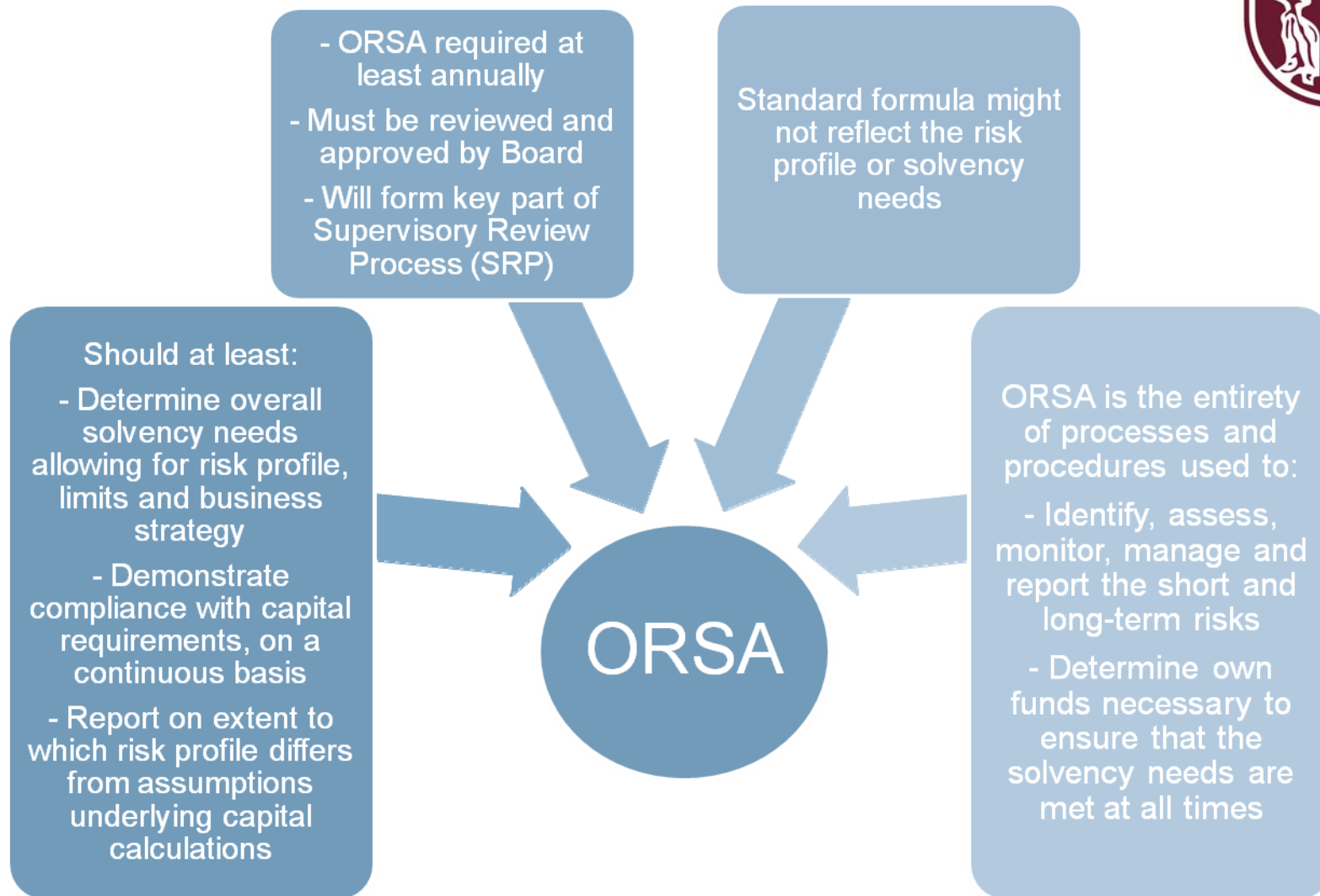
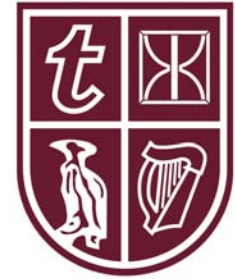
Companies required to notify the supervisor prior to outsourcing of critical or important functions or activities

Agenda

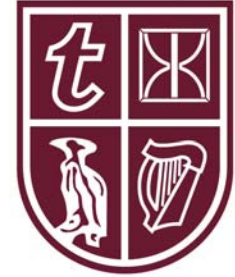


- **Governance**
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ORSA



ORSA



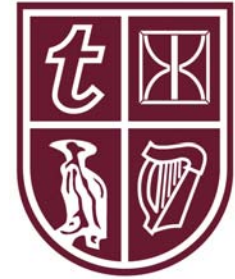
- Aim of ORSA is to enhance awareness of
 - Interrelationships between risks
 - Internal capital needs that follow from exposures
 - “Process is as important as final outcome”
- Encompass all material risks
 - Taking account of external factors
- Should be forward looking, taking account of business plans
 - Projections of capital requirement and own funds
- Integral part of business strategy
- Must inform regulator of process and results

ORSA



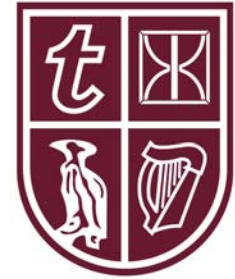
- Proportionality
 - Less complex risk profiles may use less sophisticated tools
 - “should not be too burdensome”
- Demonstrate processes to identify and assess risks
 - Appropriately documented
- Regular assessment of process by independent persons
 - Internal or external auditor
 - Conclusions reported to Board

ORSA



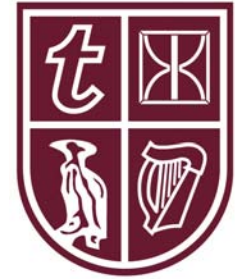
- Internal capital may be different to SCR
 - Different confidence level
 - Risk profile different to assumptions underlying SCR
 - Time horizon might differ
- ORSA might use different capital measure or time horizon but also required to calculate 99.5% one-year VAR
- If ORSA produces different capital requirement to SCR
 - Explain the reasons and identify the impact
 - Higher capital might not mean capital add-on
 - Lower capital will not result in capital release

Agenda



- **Governance**
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- **Actuarial Function**
- **Concluding Remarks**

Actuarial Function - Level 1 Text

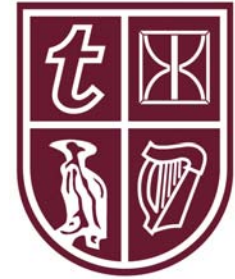


- Article 48(1)*

- (a) to coordinate the calculation of *technical provisions*;
- (b) to ensure the appropriateness of the methodologies and underlying models used as well as the assumptions made in the calculation of *technical provisions*;
- (c) to assess the sufficiency and quality of the data used in the calculation of *technical provisions*;
- (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*... in particular with respect to the risk modelling underlying the calculation of capital requirements ... and to [ORSA] ...

* Article 48 was previously article 47 but was renumbered in latest version of the Directive

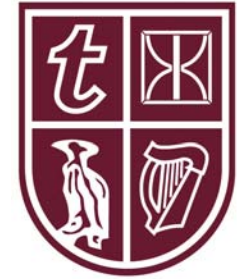
Actuarial Function - Level 1 Text



- Level 1 Text
 - Article 48(2)

*The actuarial function shall be carried out by persons who have knowledge of actuarial and financial mathematics, commensurate with the nature, scale and complexity of the risks inherent in the business of the insurance or reinsurance undertaking, and who are able to demonstrate their relevant experience with applicable **professional** and **other standards**.*

CEIOPS' Advice

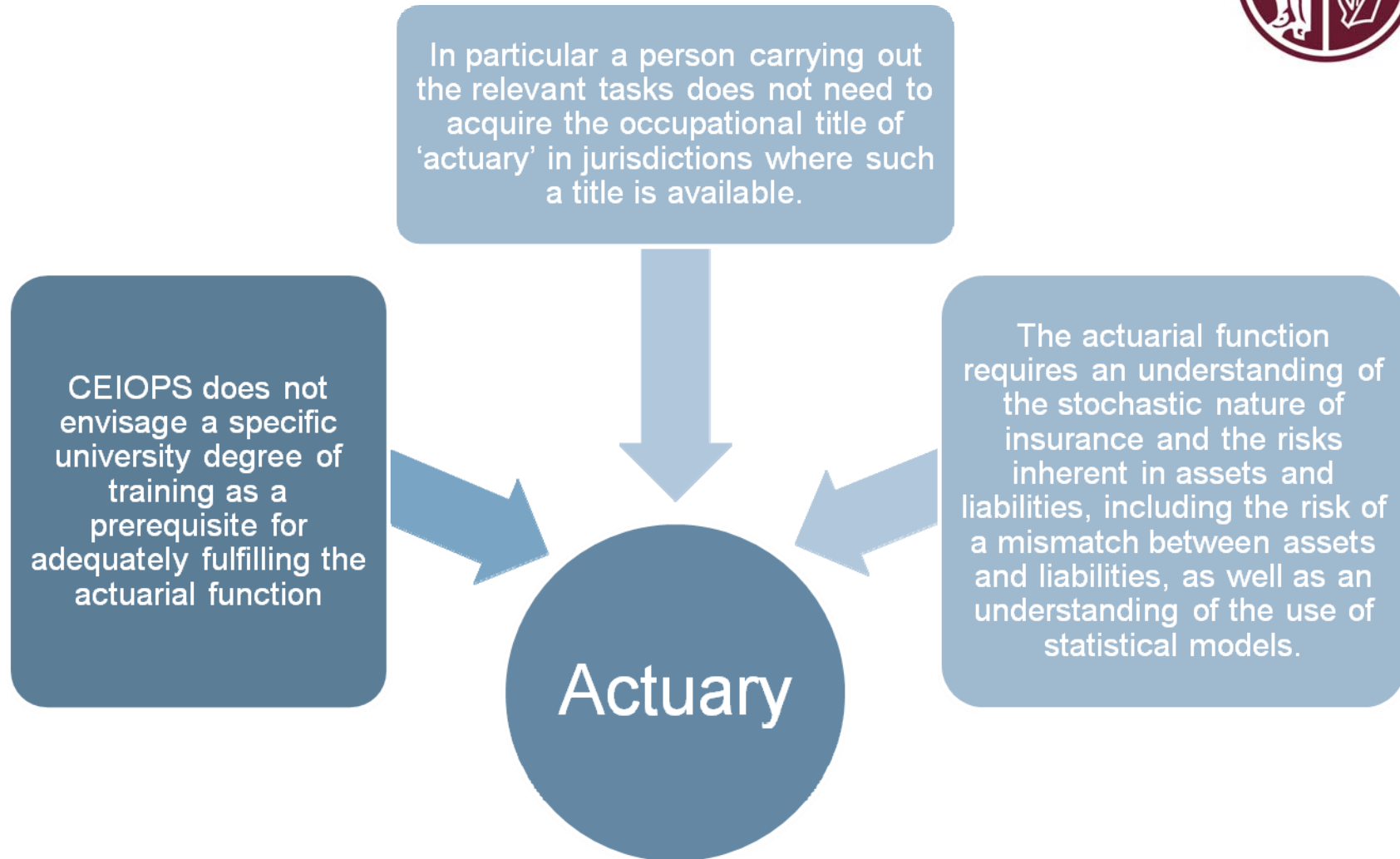
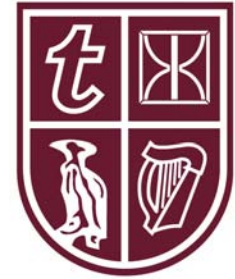


- The advice addresses 3 areas:
 - Development of European Actuarial Guidelines
 - Tasks to be undertaken by the Actuarial Function
 - Reporting by the Actuarial Function

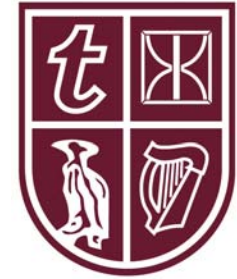
- But first ... when is an actuary not an actuary?

When is an actuary not an actuary?

- Explanatory text



European Actuarial Guidelines

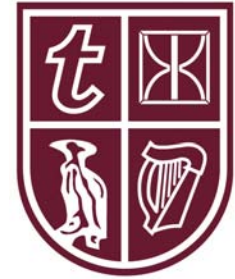


3.328 ... European actuarial guidelines shall be developed. CEIOPS shall issue such European actuarial guidelines with respect to the actuarial methodologies and techniques to be used in determining technical provisions ...

3.329 The process of developing ... guidelines shall be transparent and include the approval/endorsement by CEIOPS of the guidelines developed by the relevant expert groups and professional bodies, following a period of consultation.

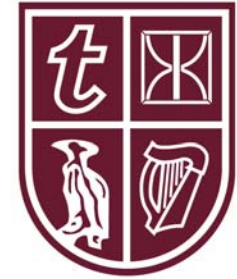
3.330 The process ... shall involve participants with appropriate knowledge and experience of actuarial issues and shall represent in balanced proportions the insurance industry, the actuarial profession and the academic community.

European Actuarial Guidelines



- The explanatory text refers to technical standards.
- The Groupe Consultatif developed a comprehensive paper titled *“Professional Standards for the Actuarial Function under Solvency II”* which it submitted to CEIOPS at end September espousing:
 - Public Interest Standards
 - Qualification Standards
 - Ethical Standards
 - Governance Standards
 - Communication Standards
 - Technical Standards
 - Interpretative Standards
 - Technical Implementation Standards
- The Groupe Consultatif is meeting CEIOPS in mid December to discuss.

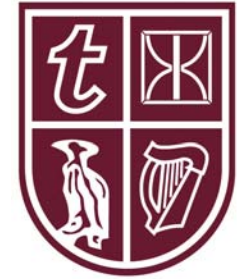
Tasks to be undertaken



3.332. In coordinating the calculation of the technical provisions the actuarial function shall at a minimum:

- a) Apply methodologies and procedures to assess the sufficiency of technical provisions ensuring that their calculation is consistent with the underlying principles;
 - b) Assess the uncertainty associated with the estimates;
 - c) Produce judgement whenever this is needed, making use of appropriate information and experience of the persons that are in charge of the function;
 - d) Ensure that problems related to the calculation of technical provisions arising from insufficient data quality are dealt with appropriately and that, where it is impracticable to apply common methods of calculating technical provisions because of insufficient data quality, the most appropriate alternatives to common methods are found, taking into consideration the principle of proportionality;
- ... continued overleaf

Tasks to be undertaken



- e) Ensure that homogeneous risk groups for an appropriate assessment of the underlying risks are identified;
- f) Consult relevant market information and ensure that it is integrated into the assessment of technical provisions;
- g) Compare and justify any material differences among the estimates for different years; and
- h) Ensure that an appropriate assessment of options and guarantees embedded in liabilities is provided.

Tasks to be undertaken



- Other points addressed, which relate to technical provisions:

Access to resources and systems that provide relevant information

Refine best estimate calculations based on past experience

Sets out points to consider when assessing data

Consider appropriateness of methodology to specific lines of business

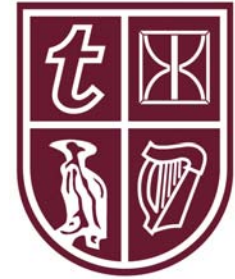
Address degree of uncertainty around future actual outcomes when reporting to the Board

Consider when a case-by-case approach is necessary

Consider appropriateness of model to specific lines of business including how it is managed & what data is available

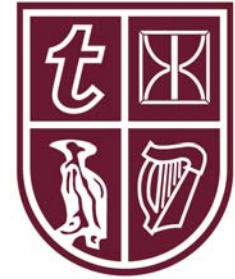
Clearly state any concerns around sufficiency of technical provisions

Tasks to be undertaken



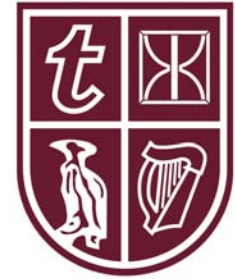
- Underwriting
 - Opinion required on adequacy of premium rates
 - Similar to current life Appointed Actuary requirement
 - Opinion should include consideration of inflation, legal risk, change of mix, anti-selection and adequacy of no claims bonus systems.
- Reinsurance
 - Opinion required on
 - adequacy of reinsurance arrangements
 - Expected cover under stress scenarios
 - Adequacy of calculation of technical provisions arising from reinsurance
- Actuarial Function must be objective and independent

Actuarial Function Reporting



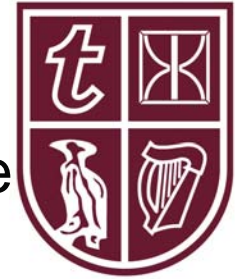
- Must provide written report to Board at least annually
 - Document tasks undertaken.
 - Clearly state any shortcomings identified.
 - Make recommendations as to how deficiencies could be remedied.
- Explanatory text points of interest
 - CEIOPS does not intend to prescribe report structure or content.
 - A full or partial integration of the Actuarial Function and the Risk Management Function is permitted.

Agenda



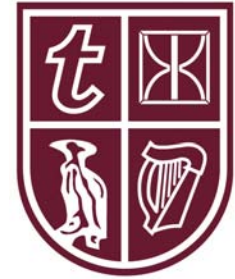
- **Governance**
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Concluding Remarks



- Governance requirements as important as quantitative requirements
- A lot of work required in order to be ready for implementation
 - Review organisational structure & responsibilities
 - Develop & document various written strategies, policies & procedures and plans required
 - Review outsourcing arrangements
 - Develop and embed risk management system into the organisation
 - ... including ORSA
- On an ongoing basis
 - Review written strategies, policies & procedures and plans
 - ORSA process

Concluding Remarks



- The role of actuaries is specifically recognised in the Level 1 text
 - Danger that actuaries are pigeon-holed to discharge specific tasks.
- ... but the Actuarial Function can be partially or fully integrated with Risk Management Function
 - Big opportunity for actuaries to become risk managers.
- Development of European Actuarial Guidelines
 - The devil will be in the detail
 - Role of local guidance remains to be seen

Concluding Remarks

- Questions?

