EU RISK-FOCUSED FRAMEWORK OF INSURANCE SUPERVISION AROUND DATA AND MODELS

NAIC Third-Party Data and Models Task Force
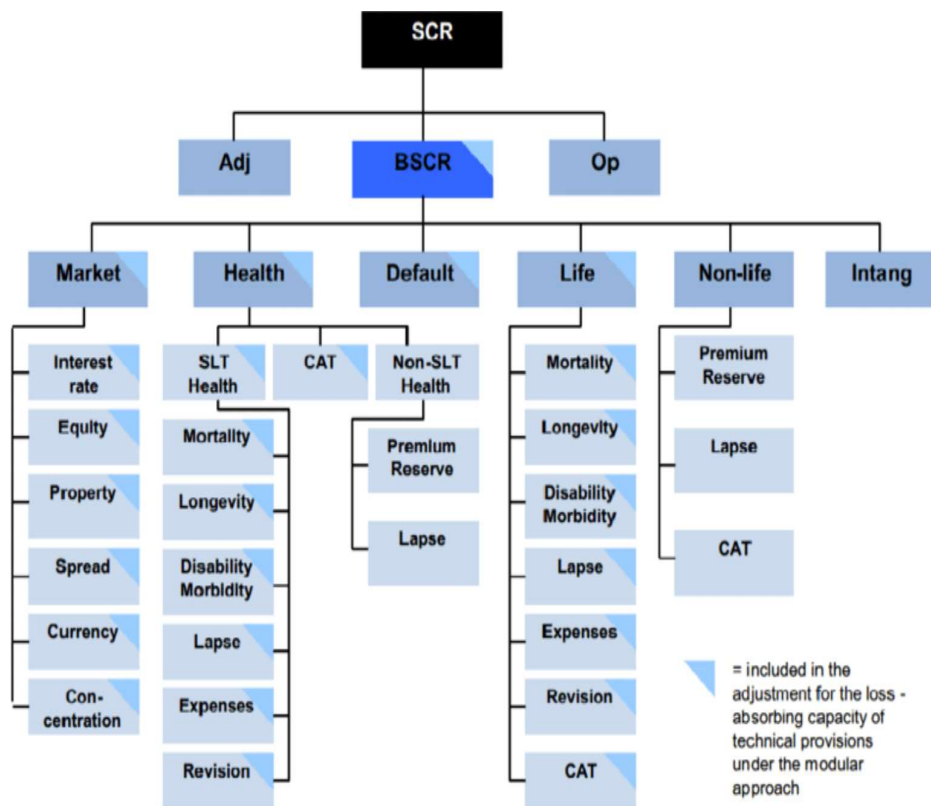
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11 September 2024

eiopa
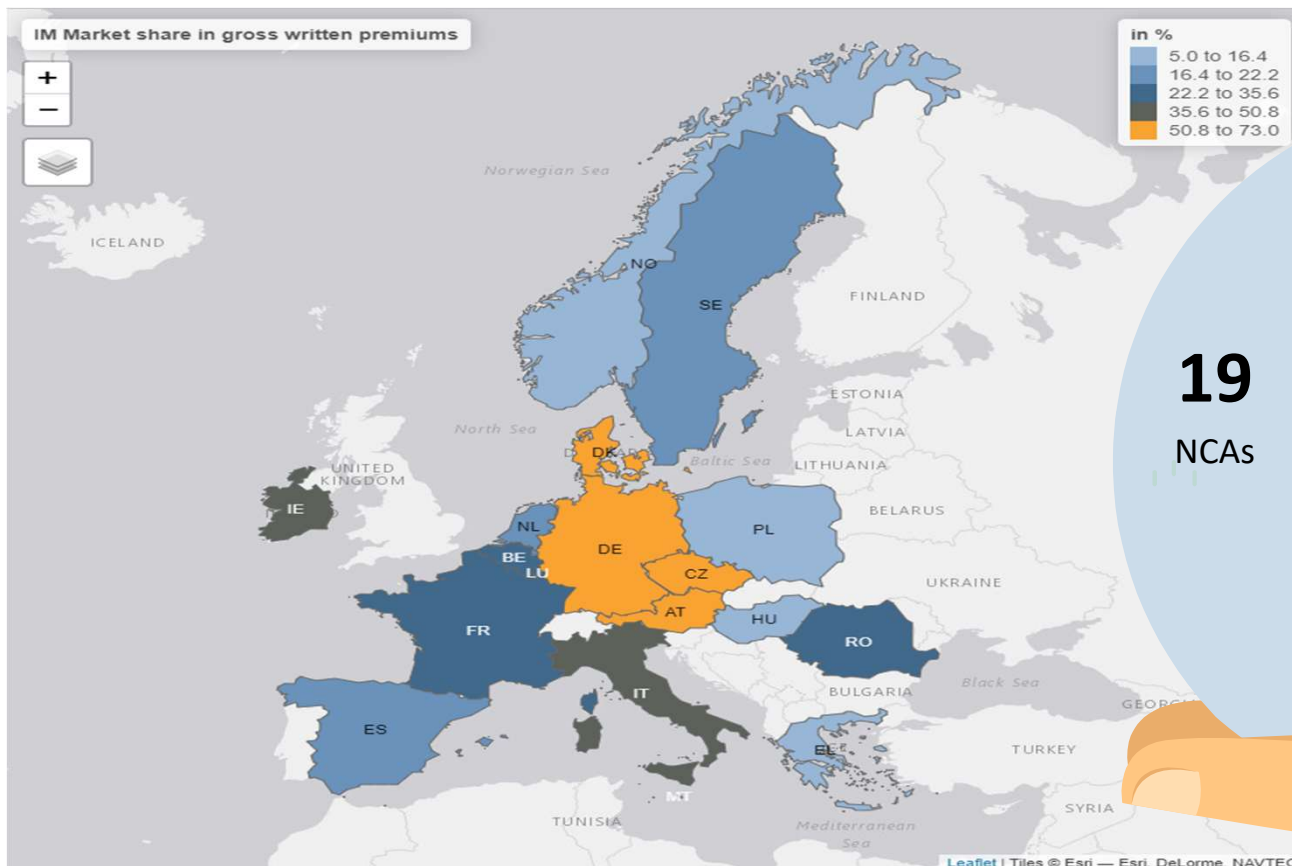European Insurance and
Occupational Pensions Authority
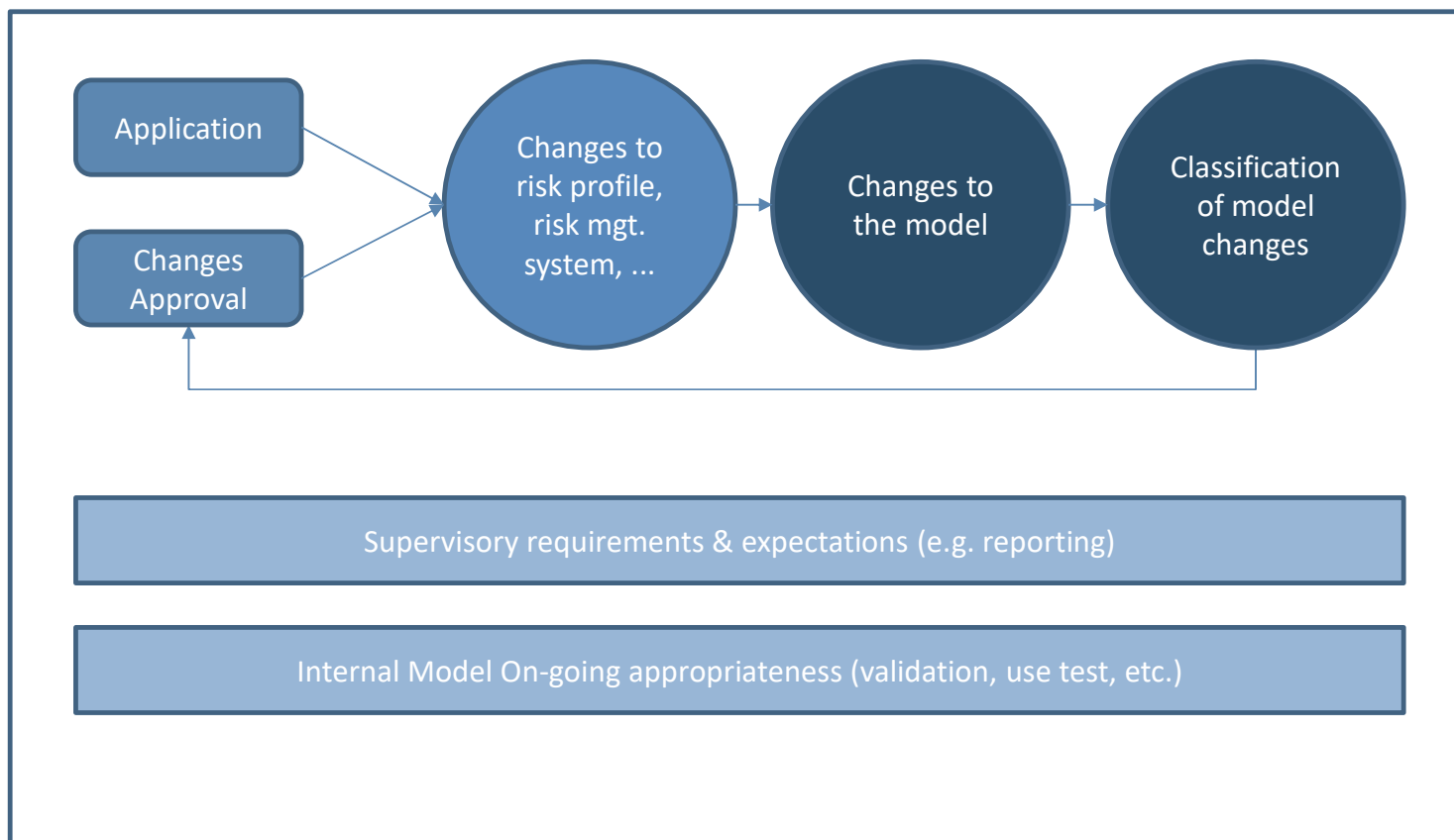
SOLVENCY II FRAMEWORK AND PRUDENTIAL SUPERVISION

- To calculate their capital requirements, insurers can use a given **Standard Formula** or, alternatively, opt to use a so-called **Internal Model** (IM), **subject to prior authorisation** by national supervisors (NCAs). Both approaches are subject to the same principles of Solvency II.

- National supervisors may only authorise Internal Models that fulfil **several legally defined requirements** with the purpose to ensure that the models are suitable for calculating risks adequately.

- Internal Model authorisations are issued concerned supervisors after consulting the college of supervisors. EIOPA is part of the colleges, provides **technical assistance** and has a **mediation** role in case of disagreement.

- The **use of models for prudential purposes varies** between Internal Models and standard formula.

OVERVIEW ON THE INTERNAL MODEL MARKET

19 NCAs

33 Group IMs

147 Solo IMs

53% Market Share

IM Market share in gross written premiums

in %
5.0 to 16.4
16.4 to 22.2
22.2 to 35.6
35.6 to 50.8
50.8 to 73.0

SIMPLIFIED LIFE CYCLE AND ONGOING SUPERVISION OF AN INTERNAL MODEL

CENTRE OF EXCELLENCE FOR CATASTROPHE MODELLING AND DATA

Expertise, studies, tools and data

In its capacity as a centre of excellence for catastrophe modelling and data, EIOPA is providing European supervisors and insurers with expertise, studies, tools and data to enable them to effectively assess, monitor and supervise these catastrophe risks.

The centre of excellence allows national and European public authorities to gain a common understanding of catastrophe risks, take preventive measures and address the insurance protection gap.

Lastly, it helps improve public awareness of risks related to catastrophes.

Focus areas

ℹ️ **Raise awareness about catastrophe risk**

By organising public events and providing tools to enhance risk awareness and understanding of prevention measures

🌐 **Bring an EU-wide perspective to catastrophe risk**

By collecting EU-wide information and by providing advice

◁ **Facilitate knowledge sharing**

By sharing expertise with supervisors and by facilitating exchange between supervisors and model providers

Enable open access to insurance data related to catastrophes

By facilitating access to more and better data

⚠️ **Foster better catastrophe risk assessment, adaptation measures and innovation**

By promoting easy-to-use open-source models
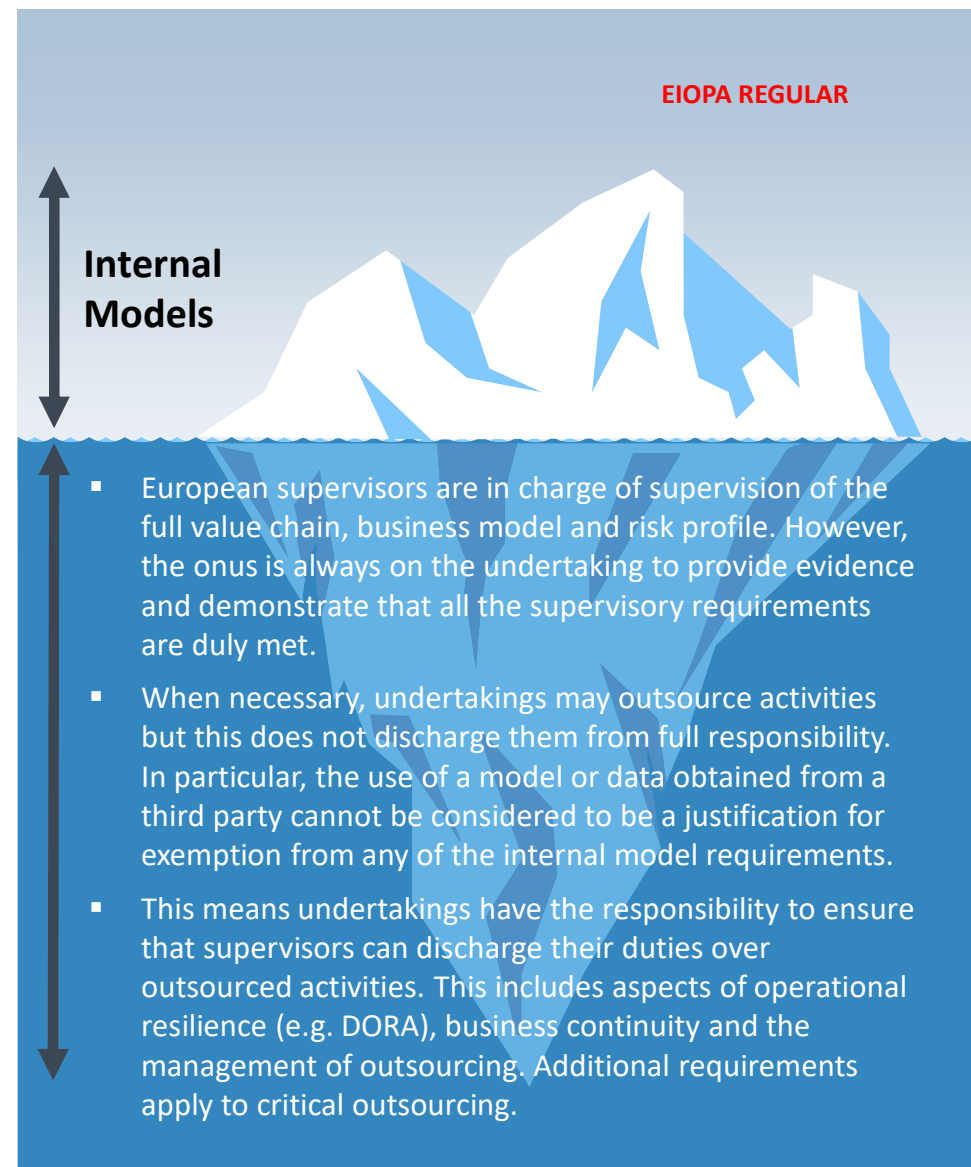
EUROPEAN (WIDE) ACTIVITIES

- In the area of Internal Models, EIOPA leads various initiatives (Non-exhaustive):

    - European wide **comparative studies** are a **joint effort of the European supervisory community** and promote a common supervisory culture and consistent supervisory practices across the European Union (EU) Member States and the European Economic Area (EEA) in order to **ensure a high, effective and consistent level of supervision** of internal models. These studies provide the supervisory community with an overview of the modelling approaches used in the EEA markets and tools relying on various indicators that support them in analysing and comparing internal model assumptions and outcomes. Supervisory Handbook (not public): Dedicated chapters developed for frontline supervisors on European level (continuous development).

    - **Expert networks on internal models (ENW4):** Continuous exchange on supervisory topics relating to internal models and building of capacity.

    - Internal Model (IM) specific **country field visits**, gather IM best supervisory practices, provide EIOPA's expertise , and identify areas for improvements.

    - **Technical assistance** to support NCAs e.g. throughout the approval process (e.g. targeted training, good practices, expert opinions, benchmarking, etc.).

- EIOPA's different initiatives provided NCAs with essential transversal insights into supervised Internal Models and help to improve supervisory convergence. In particular, EIOPA's work has led to changes in Internal Models and recommendations are followed up by NCAs.

EIOPA study	Reports
Market and Credit Risk Comparative Study (MCRCS)	2022 2021 2020 2019 2018 2017
Non-Life Underwriting Risk Comparative Study in Internal Models (NLCS)	2016 to 2020
Study on Diversification in Internal Models	2019

EXAMPLE FROM INTERNAL MODEL SUPERVISION: THIRD PARTIES AND THE USE OF VENDOR MODELS

- **Catastrophe model landscape**: Many internal models covering catastrophe risk use the intellectual property of cat model vendors to calculate, e.g., their capital requirement. In some cases, they obtained direct licenses with vendor model providers and developed models to fit their respective risk profile. In other cases, undertakings procured some aspects of the calculations (e.g. catastrophe scenario data to calibrate hazard models) as a service from third parties (e.g. brokers).

- **SII approach:** Brokers and model vendor providers are part of the outsourcing chain as critical outsourcing. Therefore, supervisory powers extend to the outsourcing of this kind (e.g. with the rights for supervisors of onsite inspections all along the chain outsourcing links and the requirement of exit plans for an orderly oversight of prudential supervision).

Internal Models

- European supervisors are in charge of supervision of the full value chain, business model and risk profile. However, the onus is always on the undertaking to provide evidence and demonstrate that all the supervisory requirements are duly met.

- When necessary, undertakings may outsource activities but this does not discharge them from full responsibility. In particular, the use of a model or data obtained from a third party cannot be considered to be a justification for exemption from any of the internal model requirements.

- This means undertakings have the responsibility to ensure that supervisors can discharge their duties over outsourced activities. This includes aspects of operational resilience (e.g. DORA), business continuity and the management of outsourcing. Additional requirements apply to critical outsourcing.

Thank you!