

# Navigating the SFC's consultation paper on general principles for model risk management

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# Introduction

On 14 July 2025, the Securities and Futures Commission (SFC) released a consultation conclusion for the Financial Resources Rules (FRR) and a consultation paper on draft amendments to the FRR accompanied by guidelines for the Internal Models Approach (IMA) for market risk charge calculations and general principles for model risk management.

In this consultation paper, the SFC for the first time formally introduced requirements on Model Risk Management (MRM) – a completely new area in its regulatory history – laying out detailed governance and control requirements on MRM, which have been benchmarked to similar principles published by regulators of other international financial centres<sup>1</sup>. Notably, building on prior SFC expectations for applications such as the Standard Initial Margin Model (SIMM), these MRM requirements explicitly extend to such use cases, ensuring comprehensive model risk oversight across relevant frameworks.

The following summarizes the key takeaways of MRM, how Licensed Corporations (LCs) can do to comply with MRM requirements and how EY could help you in the next.

<sup>1</sup> 2011, The Office of the Comptroller of the Currency's (OCC), SR 11-7 Supervisory Guidance on Model Risk Management (<https://www.federalreserve.gov/boarddocs/srletters/2011/sr1107.htm>); 2021, OCC Comptroller's Handbook booklet-Model Risk Management 2021 (<https://www.occ.treas.gov/news-issuances/bulletins/2021/bulletin-2021-39.html>); 2023, PRA SS1/23 Model Risk Management principles for Banks (<https://www.prarulebook.co.uk/guidance/supervisory-statements/ss01-23--model-risk-management-principles-for-banks>).

# Regulatory lens: EY's key takeaways

## 1 Scope

### ■ **Covered-LCs:**

- LCs engage in OTC derivative (OTCD) dealing or clearing; or
- LCs are approved by the SFC to use an alternative approach to calculate capital charges.

### ■ **Covered models:** Models used in trading-related activities, capital charge calculation, valuation and risk management.

- Other LCs may also refer to these general principles in managing major financial models used in their operation.

### What it means to you?

- MRM is now a firm-wide fundamental and mandatory requirement for LCs that engage in OTCD or are approved by the SFC to use internal models or latest Basel capital standards to calculate FRR risk charges.
- Upon being identified as a covered-LC, your firm should complete self-assessment of existing MRM framework against the general principles in this consultation paper and prepare remediation plans to address any identified shortcomings.

## 2 Five key principles

The SFC sets out five key MRM principles - key regulatory highlights are summarised here.

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### **Principle 1: Model identification and inventory**

- **Model definition:** The SFC provides a broad definition of "model" by referencing the concept set out in OCC's 2021 MRM Handbook<sup>2</sup>. In general, a model includes any quantitative approach which applies qualitative judgment to generate quantitative results and typically consists of three components: an information input component, a processing component and a reporting component.
- **Firm-wide model inventory:** A covered-LC should maintain firm-wide model inventory, especially for all covered models.
- **Non-covered model management:** A covered-LC should establish appropriate controls on other models and quantitative approaches that are not classified as models.

### What it means to you?

- With the model definition, covered-LCs should identify all covered models based on the SFC's requirements.
- Once all in-scope models are identified, covered-LCs should establish model inventory and capture the necessary information for each model throughout its life cycle. For example,
  - Model scope, inputs, outputs, its limitations or restrictions on its intended use
  - Model owner, developer and unit responsible for model validation, revalidation and periodic review
  - Model direct or material dependencies
  - Model status: active or decommission, major version or minor version (model fine-tuning)
- To allocate MRM resources efficiently, tier each model's materiality by the LC's risk exposure, level of business activities and complexity of the models - using model exposure, impact on business decisions, and regulatory requirements as the key considerations.

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### **Principle 2: Model development and use**

- **Model development:** A covered-LC should ensure conceptual soundness of the model and assess the data quality, carry out adequate testing (e.g., sensitivity analysis) for model performance.
- **Model implementation:** A covered-LC should make sure the model is designed and implemented for its intended use.
- **Model monitoring:** A covered-LC should perform ongoing model monitoring to assess effectiveness and performance over time, and evaluate whether adjustment, redevelopment or replacement of the model is necessary.

### What it means to you?

- Covered-LCs should exercise robust control over model development, implementation and ongoing monitoring with the model owner, developer and users engaged in these stages.
- Covered-LCs should establish standards for model design, model selection, model implementation, model performance measurement, and ongoing monitoring to ensure fully alignment with the SFC's requirements.

<sup>2</sup> The Office of the Comptroller of the Currency's (OCC) Comptroller's Handbook booklet-Model Risk Management. Page 2, <https://www.occ.treas.gov/news-issuances/bulletins/2021/bulletin-2021-39.html>

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### Principle 3: Model validation, revalidation and periodic review

#### ■ Validation coverage:

- Model validation should be conducted before model go-live or any material changes of model.
- Model revalidation should be conducted on an ongoing basis, to track model limitations and identify new items.
- Periodic review should be conducted at least annually to determine whether model works as intended and review if any needs to call for additional validation activities.

#### ■ Model validation unit: model validation unit must be independent of both model development and model use, armed with authority to challenge model developers and users. It must possess the requisite technical knowledge and expertise, as well as significant business familiarity, and have the power to reject models with severe deficiencies and to recommend approval or remedial actions.

### What it means to you?

- Three types of validation are required by the SFC, which brings a higher requirement for the model validation unit. Covered-LCs should distinguish among the three validation types and reasonably assign model validation resources based on the model tiering.
- Independence is a key requirement and covered-LCs whose model validation unit is not truly independent must restructure it without delay so the unit could challenge the model developers and users as well as provide recommendations for model approval when any model issues and deficiencies are identified.

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### Principle 4: Governance, policies and controls

- **Governance framework:** An effective governance framework should be established with clearly defined roles and responsibilities of all relevant parties, and controls for model risk.
- **Board accountability:** The Board is ultimately responsible for firm-wide MRM, as well as approval and review of firm-wide policy.
- **Documentation:** Adequate documentation is mandatory to demonstrate effective MRM, covering firm-wide MRM policies and procedures, model development documentation, validation reports, and other model risk management activities.

### What it means to you?

- Although not every model is a "covered model", the SFC mandates a firm-wide MRM framework. Therefore, covered-LCs need to extend the MRM governance across the entire firm, promptly establish the firm-wide MRM framework with clearly defined roles and responsibilities, and formulate the firm-wide MRM policies and procedures.

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### Principle 5: Use of vendor models

- **Vendor model selection:** A covered-LC should adopt a selection process as stringent as that for internal model development to ensure suitability during vendor selection and due diligence stage.
- **Documentation requirements:** Obtain adequate documentation of chosen vendor models and include relevant information in the model inventory.
- **Vendor model management:** Model testing results should be obtained and evaluated, and ongoing performance monitoring based on model use cases should be conducted.

### What it means to you?

- Covered-LCs must obtain sufficient information on all vendor models and apply the same rigor as for internally developed ones, demonstrating strong oversight of these critical components within the firm-wide MRM framework.

# SFC minimum compliance

If a covered-LC is considering applying for Type 11 license, the following materials should be prepared to prove readiness to meet the SFC's MRM requirements.

Documents	Required information
<b>Firm-wide MRM policies and procedures</b>	<ul style="list-style-type: none"><li>■ Governance structure</li><li>■ Roles and responsibilities of all relevant parties</li><li>■ Model definition, inventory, and tiering</li><li>■ Model life cycle steps and management</li></ul>
<b>MRM committee term of reference (if applicable)</b>	<ul style="list-style-type: none"><li>■ Objective</li><li>■ Requirements for meeting frequency and proceedings</li><li>■ Composition, duties and responsibilities</li></ul>
<b>Model risk management report</b>	<ul style="list-style-type: none"><li>■ Overview of the firm-wide MRM status and model status</li><li>■ Relevant approval records</li></ul>
<b>Model inventory</b>	<ul style="list-style-type: none"><li>■ Either in manual (e.g., Excel) or systematized (e.g., tool/system) format</li><li>■ Covered model list</li><li>■ Key model elements (e.g., model ID, model name, and model tiering)</li></ul>
<b>Model development and use policy and standard</b>	<ul style="list-style-type: none"><li>■ Implementing control mechanisms to create audit trails throughout the process, enabling validation of reporting outputs to ensure the quality and accuracy of the outcomes.</li><li>■ Establishing a well-defined escalation process for addressing identified issues, fostering a culture of accountability and continuous improvement in reporting practices.</li></ul>
<b>Model validation policy and standard</b>	<ul style="list-style-type: none"><li>■ Policies and standards (e.g., validation scope and frequency, requirements on validation finding and results)</li><li>■ Documentation (e.g., validation report, finding summaries, validation results)</li></ul>
<b>Other relevant records / materials</b>	<ul style="list-style-type: none"><li>■ Policies and standards (e.g., report data management)</li><li>■ Documentation (e.g., working files and scripts for model development, model validation/revalidation/periodic review, and ongoing monitoring)</li><li>■ Supporting materials (e.g., meeting material and meeting records)</li></ul>

# How can EY teams help?

Services	Descriptions
<b>Gap analysis &amp; remediation</b>	Extensive experience of assessing firms' capabilities against diverse regulatory requirements, including those from SFC, PRA and OCC, and knowledge in model governance and model risk management across various financial institutions, such as commercial banks, investment banks and security firms.
<b>MRM Platform</b>	The ability to set up an overall model management platform or support its design to automate and standardize the MRM process at different levels of sophistication and automation.
<b>Model governance frameworks &amp; policies</b>	Extensive implemented experience in establishing firm-wide model risk governance framework, policy and procedures framework that are able to consider interactions between LC and related activities at the overall group level.
<b>Model development &amp; validation documentation standards &amp; templates</b>	Standardized templates and documents for model development and validation help centralized, firm-wide management of key model life-cycle processes. Pilot model validation to provide worked examples in the LC environment to facilitate successful adoption of the new MRM framework.
<b>Training &amp; education</b>	Extensive experience of conducting training and education programs for all levels of the firms and different business lines including the front office, risk management, finance and internal audit teams, with different customization and modulation based on specific needs of the firm.



## Authored by



**Miki Liu**

Manager  
Financial Services Risk Consulting  
Ernst & Young Advisory Services Limited  
Tel: +852 2675 2992  
Email: Miki.MQ.Liu@hk.ey.com

## Contact points



**Sky So**

Partner  
Financial Services Risk Management  
Ernst & Young Advisory Services Limited  
Tel: +852 2849 9217  
Email: Sky.So@hk.ey.com



**Oliver Zhang**

Partner  
Financial Services Risk Consulting  
Ernst & Young Advisory Services Limited  
Tel: +852 2849 9275  
Email: Oliver.H.Zhang@hk.ey.com



**Stephanie Cheng**

Senior Manager  
Financial Services Risk Management  
Ernst & Young Advisory Services Limited  
Tel: +852 3471 2714  
Email: Stephanie.SY.Cheng@hk.ey.com



**Sue Chen**

Senior Manager  
Financial Services Risk Consulting  
Ernst & Young Advisory Services Limited  
Tel: +852 3189 4096  
Email: Sue-S.Chen@hk.ey.com



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