

## **Five Practical Lessons for an Insurer’s Internal Model Approval Process**

In order to obtain the PRA’s approval for the use of an internal model to calculate capital requirements, and insurer must meet certain requirements. These are set out in the Solvency 2 directive and Delegated Acts.

The requirements are broadly the same whether the insurer applies for a partial or full internal model, and they cover the statistical quality of the model and data, calibration, validation, profit and loss attribution, documentation and use test.

This note seeks to go beyond the regulatory requirements to identify practical lessons for insurers based on Crescendo Advisors’ experience of supporting insurance clients. These lessons would be relevant to an insurer before and during the pre-application phase.

### **Context**

The lessons we have distilled must be seen in the wider context of internal models. Firstly, the regulators define an Internal Model as being much wider than merely the model code and the statistical approaches underpinning it. The regulatory definition includes data, calibration, model governance and model usage.

Secondly, the challenge that internal model approval represents for the PRA as illustrated by the often-quoted dictum that “all models are wrong, but some are useful”. This can be seen through:

- the PRA concerns with model drift – defined as a growing gap between models result and results from standard formula ([SS15/16](#), July 2018);
- the PRA interest in understanding how the Internal Model would be used in the business.

The other aspect to bear in mind is that by granting model approval, the PRA foregoes the comfort of understanding the calculation of the capital requirement and the relative transparency of the Standard Formula. Inevitably, there will be cases where the Standard Formula does not provide an appropriate measure of the risks and the PRA will be more comfortable with the measure of risks and capital requirement provided by the Internal Model.

### **Lesson 1: The approval process would be longer than anticipated**

This is the trickiest lesson and perhaps the most difficult lesson to internalize at the beginning of the process.

There are many unknowns about how the process will develop.

At the same time, it is worth noting that if PRA supervisors are not comfortable with the explanations received, they will ask further questions. The PRA’s limited technical resources may be spread across several insurers, and this can mean that the PRA resources are not available when further explanations are submitted.

## **Lesson 2: Develop the right attitude to PRA scrutiny**

The Internal Model approval involves a degree of regulatory scrutiny that insurers are unlikely to have experienced before they start the process. The PRA might not be familiar with the approach adopted for the model, which in turn may affect the level of scrutiny. Accept it and respond positively. In any case, it is wiser not to engage in intellectual sparring with the PRA – remember lesson 1.

## **Lesson 3: Evidence business ownership of the internal model**

This is very important and something that the PRA will be testing indirectly throughout the process, start to finish.

While business ownership of the internal model will be clarified early in the process, it must also be evident to the PRA from the insurer's engagement at all levels. The PRA will focus initially on the technical aspects of the model and is likely to form a view about the evidence of ownership in parallel.

## **Lesson 4: Board engagement and understanding**

The PRA does not expect Board members to become technical experts on the internal model. However, it does expect a general understanding of how the model operates, consistent with the Board's oversight role. The Board is expected to oversee the development and internal model application process. The PRA will expect to see evidence of Board training and oversight of the Internal Model, and of the Model's use in developing Board thinking.

## **Lesson 5: Model governance must be prioritised**

Model governance may appear to be an issue mainly relevant after the model is approved. However, model governance needs embedding to be effective and this requires the business adjusting to different ways of assessing and measuring risks. Recognising this, the PRA will require evidence of appropriate model governance before the application is submitted.

Finally, developing and operating appropriate plans and coordinating effectively between the various stakeholders is a vital component. However, it is important to remember that good programme governance is unlikely to compensate for shortcomings in respect of Lessons 1-4 above.

Crescendo Advisors has experience of supporting insurers' internal model approval process. Acting early on these lessons will increase the likelihood that crucial pre-application process is no longer than it needs to be.

## Team

**Isaac Alfon** founded Crescendo Advisors after more than 20 years in financial services, regulation and consulting.

Isaac has a track record for delivering solutions that are pragmatic and support business objectives and aspirations, whilst being consistent with regulatory requirements.

He was Enterprise Risk Director at Bupa Group and had senior risk roles with Prudential and Aviva and with regulators – the FSA and HM Treasury.

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Shirley is the previous Chair of the National Pharmacy Association Insurance Company where she led a significant turn-around in financial stability and sustainability while preparing for Solvency II. She worked with Swiss Re where she spearheaded the recognition in the Basel 2 process of insurance as a mitigant of operational risk.

Shirley also had senior roles in Aon and Marsh where she led their work on operational risk for financial institutions.

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