

## FSA interim report on IMAP data review findings

September 2012



The FSA's interim report on the findings of its on-going data review of firms in the internal model application process identifies 10 key findings that firms should consider.

### INTRODUCTION

On the 13 September 2012, the Financial Services Authority (FSA) published a report setting out its interim findings on the quality of data used by UK firms in the internal model approval process (IMAP).

This report results from the FSA's on-going 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.

To assist you in digesting this report, Milliman has prepared this short summary of the content of this document.

### GENERAL COMMENTS

While the FSA has stated that most firms "*are moving in the right direction...towards compliance with the Solvency II requirements on data used in their internal models*" it has identified ten specific areas where it believes firms are either struggling, or failing, to meet the required standards. At this stage, the evidence is largely based on non-life firms, with many life firms still to be reviewed. However, the findings will be applicable to all firms.

These findings are mapped to the five sections of the FSA's 'External Review of data management', published in July 2011.

### APPROACH TO MANAGING DATA

While all firms considered in the review had established a data policy, the FSA commented that there was a lack of consistency in the interpretation and application of the policy across the firm.

### IMPLEMENTATION OF THE DATA POLICY

Three challenges were identified in relation to the implementation of the data policy:

**I. Most firms underestimated the time required to embed the data governance framework into business as usual (BAU)**

This resulted in many firms having to recruit additional resources to manage BAU data governance activities. In many cases, internal data quality reporting remained under the responsibility of the project workstream with considerable inconsistencies in the metrics reported on, and how they were used in BAU.

Specifically, the report notes that firms were not always able to articulate what the terms "accurate", "complete" or "appropriate" meant in practice and hence were unable to assess data quality effectively – by way of an example, the FSA highlighted the ability of underwriting teams to assess the materiality of data errors in catastrophe exposure data as an issue.

The FSA has commented that it expects firms to have a consistent process to measure, analyse and monitor data quality in BAU. Where firms are relying on on-going, and often complex, IT implementations to support data governance, they should either provide assurance that the existing system of data governance is adequate or provide details of the materiality of any gaps and when these will be addressed.

**II. Most firms found it difficult to assign data ownership as part of their governance model**

The FSA notes that while ownership of, and accountability for, the data is not specifically covered in the Solvency II Directive, the assignment of ownership of individual data items

between producer and consumer roles, as seen in many firms, can help ensure the various stakeholders are aware of their responsibilities for maintaining data quality.

**III. Many firms struggled with ensuring a consistent interpretation and application of group-wide policy and standards**

This is an area where the FSA has commented it will look to ensure consistency, both in the adoption of standards, and in the metrics used for monitoring and escalation – although it notes the processes at solo level may be different. Where a self-certification based governance mechanism is used, firms should ensure there is a strong process for challenging and auditing these self-assessments.

#### UNDERSTANDING OF THE DATA USED

Three challenges were identified in relation to the identification and documentation of the data used in the internal model, with many firms going beyond the requirements of the Solvency II Directive:

**IV. Many firms confused the term “data directory” with “data dictionary”**

While a data dictionary is defined as a centralised repository of information, the data directory under Solvency II is intended to ensure good governance over data quality. This should include documentation on which data is used in the model, where it comes from and what its specific characteristics are.

The FSA has commented that firms should consider and document all data items relevant to the internal model at an appropriate level of granularity for on-going maintenance and use.

**V. 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**

The FSA has commented that it expects firms to perform an assessment of proportionality and materiality of data error and will look for firms to justify the use of any materiality criteria and to ensure that this justification is consistent with other internal model policies.

Where such an assessment had been performed by firms, these varied from broad

reasonableness to more thorough sensitivity testing. Despite this, the report notes that materiality was generally not assessed consistently, particular across groups or large organisations, with the FSA highlighting, in particular, that firms did not consider:

- Risk modules or products that could become material in the future due to changes in risk profile or the business model;
- The combination of individual impacts resulting from a data error;
- Static and reference data items;
- Key data items under stress scenarios; or
- Instances where data error made a material item appear immaterial.

**VI. Nearly all firms struggled with an efficient classification of data within the data directory**

The FSA has commented that efficient data classification requires assigning each data item to exactly one class such that each item is covered only once. Ideally, this should be done in relation to a common risk, impact, control method, or other characteristic relevant to data governance.

#### CONTROLS OVER DATA QUALITY

Two findings were identified in relation to inadequately designed or ineffective controls over data quality:

**VII. Nearly all firms had difficulty in demonstrating the effective operation of data quality checks.**

This resulted from lack of evidence of controls and inconsistent reporting of issues highlighted through the checks.

The FSA has stated it believes it is critical that firms are able to articulate the nature of data quality checks and any resulting actions, stressing there is a difference between evidencing a control (e.g. through a log) and documenting it (i.e. explaining how to operate the control). Firms should ensure the use of any assumptions or expert judgement, and any limitations identified during the collection, processing and application of the data, are suitably tested, challenged, documented and validated.

**VIII. 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.**

The FSA has stressed that the responsibilities and controls around any data and associated quality controls from outsourcing arrangements should be specified and monitored. Use of such data, or any third party model, does not exempt firms from any of the tests and standards relating to internal models, as set out in Articles 120-125 of the Solvency II Directive.

**IT ENVIRONMENT, TECHNOLOGY AND TOOLS**

Two final issues were identified in relation to the IT environment, technology and tools used in the internal model:

**IX. Compliance with existing end user computing policies and standards was found to be inadequate or non-existent for many firms.**

Many firms were implementing complex IT systems without a clear definition of user requirements, design, testing and appropriate controls for effective operation in BAU. In particular, the use of end user tools such as spreadsheets (often with no controls) was found to be widespread.

The FSA has commented that where tools, such as spreadsheets, are material to the internal model data flow they will be looking for appropriate controls for data quality including reasonableness checks, input validations, peer reviews, logical access management, change and release management, disaster recovery and documentation.

**X. Few companies had considered the controls and processes needed to operate new or revised IT infrastructure in BAU**

In relation to this, the report stresses that any planned significant IT change post submission should be discussed with the firm's usual FSA supervisory contact.

**SUMMARY**

The FSA's interim report highlights ten specific areas where firms in the IMAP process are either struggling, or failing to provide sufficient evidence in relation to the governance surrounding the quality of data and data processes used in their internal models.

While the FSA makes it clear that the contents of this report do not consist of general guidance under the Financial Services and Markets Act 2000, it does reflect the FSA's current thinking on internal models.

Although the results in this report apply specifically to firms in IMAP, the issues and challenges identified here are also likely to be relevant for the development of requirements for firms intending to use the standard formula under Solvency II. As such, all firms may wish to take these findings on board.

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## CONTACT

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