

# Validating your IFRS 17 program

October 2018



# Introduction



IFRS 17 represents the most significant change in accounting standards in over 20 years. It introduces new liability measurement models with robust risk and discount calculations. Significant parts of the model require ongoing updating and revision to reflect emerging experience and changing economic circumstances. The standard's operational impact is particularly significant. Insurers have to compile, organize, and assess additional policy data, project more granular cash flows, and develop new disclosures and presentations that are completely unlike the ones they've used previously.

Considering these daunting changes, we expect that senior management and board members will demand that the company's IFRS 17 program undergo rigorous testing and validation. Fortunately, over the last several years, there have been significant enhancements in model risk management that insurers can use to address this demand. Supported by regulatory guidance and their own experience and practical learnings, insurers have established comprehensive model validation procedures and capabilities. Applying them in an organized and effective combination with development testing and audit can significantly enhance the quality of IFRS 17 published results.

# Understanding the differences and commonalities between development testing, validation and audit

Establishing clarity regarding the different activities and roles of development testing, validation and audit will be helpful in understanding how they can best be coordinated. The chart below provides a comparison of the three different review activities in a number of areas. Some key differences are as follows:

## Development testing

Development testing is a common component of effective program development. The most widely recognized element of this testing is the use of alternative, checker calculation routines to test the accuracy of the calculations for the new program initiative. Generally this type of testing occurs whether or not the new program initiative is implementing third-party provided

software or software the insurer has developed and coded. The checker calculations likewise can be third-party or in-house. If third-party, then the tester typically chooses a tool that enables him to independently and openly confirm the calculations' accuracy.

While the main focus is on testing the calculation routines, sometimes the work also revisits the conceptual soundness of the model. In other words, is the calculation actually addressing the model's objective in a sound and proper manner?



Because development testing is conducted in the midst of development activity, which includes ongoing updates and enhancements, the accuracy of model documentation needs careful consideration. Model documentation often is not completed until all updates and enhancements to the calculations are complete and there needs to be careful alignment of model development and accounting development in order to avoid two different IFRS 17 implementation “islands.” Once the documentation is completed, it will be necessary to reconnect the test with the correct model version and ensure that 1) changes to that version also have been tested, and that 2) the documentation of the model provides a clear and accurate record of the final version.

### Validation

Validation is more comprehensive than development testing. It covers all aspects of a model program from input through calculations, to output presentation, and then usage. Validation identifies any upstream models that supply input; overall model risk

management (MRM) program should validate those models, too.

Validations typically follow a prescribed standard testplan. This promotes comparability across models. Furthermore, from the perspective of aiding error detection, starting with a comprehensive list of tasks rather than the model as presented enables discovery of not only errors in what is present but also helps uncover what might be missing.

Insurers need to articulate in their accounting policy how they interpret and translate IFRS 17 principles and guidelines in the context of their business circumstances.

Conceptual soundness is a key consideration in validation. This is particularly important for IFRS 17. IFRS 17 presents many of its most challenging aspects as principles and guidelines rather than prescribed rules. Insurers need to articulate in their accounting policy how they interpret and translate these principles and guidelines in the context of their business circumstances. The validation’s conceptual soundness review covers

this. Needless to say, an error in interpretation will lead to an error in the outcome, regardless of whether the development test showed the calculator was accurate or not.

Lastly, we note that validation is very focused on both documentation of the model, which is required to conduct an effective validation, and the validator’s documentation of the validation process and its outcome. This also can serve as input documentation to the audit review. Accurate documentation of the model is especially important for IFRS 17 because documentation of the results are required for disclosure purposes. Furthermore, many of the underlying assumptions and inputs will require ongoing updates to reflect current experience and economics. A clear record of the process that generates these assumptions will improve the efficiency and accuracy of subsequent updates.

Documentation of the validation also can aid model accuracy, especially interim documentation provided during the validation process, because it can form a punch list of needed enhancements (as we discuss below).



## Audit

Auditing financial statements is perhaps the most widely recognized of the three review activities. Its focus is on suitability of output and consistency with generally accepted accounting principles. However, an audit, like validation, also has broad coverage and a comprehensive mandate, including reviewing conceptual soundness,

The high degree of independence demanded of the external auditor disconnects the audit team from the development team. This constrains its use as an effective source of development feedback. Furthermore, the audit typically occurs too late in the process to make enhancements while development is in progress. As we noted before, IFRS 17 requires a significant degree of interpretation and translation of principles and guidelines. A misalignment of interpretation between the developer and auditor late in the process can lead to significant time and resource pressures to make the necessary design changes.

## 6 PwC Validating your IFRS 17 program

	<b>Development testing</b>	<b>Validation</b>	<b>Audit</b>
<b>Typical timing for activity</b>	Started once development has commenced Conducted throughout development process	Parts can be conducted when development is in progress Often finalized after development is complete and before program is implemented	Conducted during year leading up to published financial results, potential quarterly obligations Dry run results (year ending 2020) also need to be audited
<b>Deadline for completion</b>	Fit within overall development timetable and target	Self-imposed by insurer	Prior to public release of audited financial information
<b>Standards governing activity</b>	Often ad hoc, at discretion of developer Sometimes guidelines at company level or recommended by third party program providers	Emerging industry guidelines defined by common practice Some professional guidance, e.g. actuarial professional bodies Some general regulatory guidance, e.g. SR 11-7 Some program specific regulatory guidance, e.g. for SII internal model validation	Well defined by professional accounting organizations
<b>Principal areas of review emphasis</b>	Calculation accuracy is primary focus, conceptual soundness and input sometimes also considered	Comprehensive, covering input, conceptual soundness, calculations, output and upstream and downstream connectivity	Broad mandate but primary focus on suitability of output, other program aspects considered in context of impact on output
<b>Role of documentation</b>	Methodology and calculation expectations typically determined through discussion with developer (rather than via review of comprehensive documentation) Documentation is typically not fully developed before testing commences	Target is to have comprehensive documentation in place in order to conduct and support validation Adequacy of documentation is assessed and reported on as part of validation IFRS 17 has specific disclosure requirements that need to be addressed in the documentation	Better documentation makes for a more efficient audit, but audit needs to proceed regardless of whether documentation is robust or not IFRS 17 has specific disclosure requirements that need to be addressed in the documentation
<b>Review goal</b>	Affirming that calculation programing is accurate	Minimizing risk of program error	Confirming output is consistent with accepted accounting practice
<b>Documentation of findings</b>	Typically informal and ad hoc	A key deliverable of validation engagement Typically follows a predefined format designed to ensure validation is a comprehensive assessment	Information provided to management and board in format best suited to circumstances and findings Professional rules governing work papers supporting audit opinion
<b>Outcome/formal opinion</b>	Typically conducted as part of ongoing program development effort, progress reported along with other program development activities Formal report, either during development or at conclusion is not typical	Validation report typically identifies shortcomings needing correction and timeframe for resolution Interim findings can be presented to developer and corrections reviewed by validator External validator could present a formal opinion of validation	Formal "pass" opinion issued by auditor
<b>Feedback loop</b>	Ongoing and ad hoc, part of development cycle	Comprehensive "punch list" of improvements recommended can be issued as validation is in progress	Focus is on pass/fail; independence precludes detailed instructions on how to fix shortcomings
<b>Functional area responsible</b>	Program developer	Model risk management, part of risk function headed by CRO	External auditor
<b>Staffing for activity</b>	Part of program development staff	MRM staff or independent internal or external personnel supervised by MRM	External auditor
<b>Board level oversight</b>	Indirectly as part of program development oversight	Risk committee of the board	Audit committee of the board

## Coordinate to improve effectiveness and cost efficiency

The three review processes fit neatly into a three lines of defense model. The model owner does development testing (first line), the risk function is responsible for validation (second line), and internal and external audit are the third line. Without impinging on the necessary separation and independence of these three activities, a validation testplan corresponding to IFRS 17 can provide an effective road map for coordinating the three review processes. Companies can avoid duplication of effort by planning ahead how the reviews will take place and how those involved can use specific components of each of the three review processes. Working together can also improve the effectiveness of each processes' review.

A validation testplan corresponding to IFRS 17 can provide an effective road map for coordinating the necessary review processes.

The validation plan describes calculation testing requirements. Model development also typically specifies a recalculation testplan, but there can be considerable variation relating to coverage and specified detail of requirements. In any event, management should use the calculation test plan developed for validation in planning development testing. In a typical validation, the validator will verify that the developer has confirmed the calculation accuracy via an alternative calculator. The validation testplan likely will provide guidance on the nature of this testing. Knowing what the validator expects can guide the developer in the formulation of their development tests. Otherwise, the developer may need to redo tests, adding costs and delay to the process.

The validation plan and documentation of its process and outcome also can form an effective guide for audit focus areas. A clear record of the testing process conducted by the developer and independently by the validator can guide the auditor in determining if any additional testing is needed.

## Spacing out the validation

For an important, high risk model, the validation process, like all three review activities, is likely to unfold over several months. For a new program implementation, validation activities often occur during model development. With some advance planning, validation activities can occur over a set period of time in order to improve development and validation effectiveness.

For example, as we noted previously, assessing conceptual soundness is a key element of validation and audit review. This is particularly important with IFRS 17. This assessment can occur ahead of many other validation activities. Considering the follow-on implications of an error in conceptual soundness, we recommend early attention to this element.

For new models especially, we often have found it useful to issue an interim report on validation findings. Such a report can provide guidance to the developer on where the model needs improvement. A good punch list will distinguish between improvements that would be “nice to have” and those fixes that are essential to reducing the model’s error risk.

## What should insurers do now?

We recommend three actions that insurers can take now.

- Connect with your MRM team. Model risk departments usually plan in advance for the models that will need validation or revalidation in the coming year. Given the importance of and high risk associated with IFRS 17 implementation, planning for its validation should already be in progress.
- Working with your MRM team, identify program documentation needs early on and communicate those needs to the third-party vendors that supply key model components. Ensure that all participants recognize that documentation of the model and the review process are critical to achieving your collective goal.
- Ask your MRM team to outline the validation testplan and identify opportunities for coordinating development testing and validation. A cooperative effort between development, validation and audit review can minimize the risk of model error and promote the effectiveness and efficiency of IFRS 17 preparation and compliance.





# For more information

## Henry Essert

Insurance Risk & Capital Services Leader  
PwC US  
+1 (646) 471 4400  
henry.essert@pwc.com

## Jules Krijgsman van Spangenberg

Actuarial Senior Manager  
PwC Netherlands  
+31 088 792 6711  
jules.krijgsman.van.spangenberg@pwc.com

## Graham Hall

Actuarial Senior Manager  
PwC US  
+1 (212) 671 8471  
graham.hall@pwc.com

[www.pwc.com/insurance](http://www.pwc.com/insurance)