

MARKET BULLETIN

REF: Y5076

Title	Internal model validation for the 2018 YoA
Purpose	To inform the market about a request for a 3 year targeted validation plan
Type	2018 YoA validation plan submission
From	Richard Rodriguez, Lloyd's Actuary, Market Reserving and Capital Contact: +44 (0)207 327 5235, Richard.Rodriguez@lloyds.com
Date	24 March 2017
Deadline	Submission of the plan to Lloyd's by 23/06/2017
Related links	https://www.lloyds.com/the-market/operating-at-lloyds/solvency-ii/information-for-managing-agents/guidance-and-workshops/model-validation

With validation now being well embedded in internal models, Lloyd's expects managing agents to follow a more targeted approach for the 2018 YoA and beyond.

This is to encourage validation efforts to focus on particular areas of the internal model at different times. This will potentially pick up issues not identified if all areas of the internal model are always subject to the same stable level of validation. This targeted approach would supplement a standard suite of validation tests ran at least annually.

Lloyd's does not expect this targeted approach to in itself result in increased resources being devoted to validation, but rather to better deploy the existing resources.

The validation process should ensure deep-dive review of each component of the internal model is performed at least once every 3 years, with higher materiality areas being reviewed more frequently. This should be set out in a 3 year plan and submitted to Lloyd's. Further details on this plan are provided below. It should be noted that a syndicate has the option instead to run the full suite of validation tests every year including these deep-dive reviews.

In forming the plan, although the high-level risk categories will be a useful starting point to identify the scope of the deep-dive reviews, they should be further broken-down to a greater level of model granularity where appropriate e.g. insurance risk could be split into parameters, class of business, catastrophe risk, reinsurance, dependencies, risk margin etc.

The 3 year targeted validation plan will be subject to the following conditions:

- 1) The output of the model and underlying risk categories must be validated every year. Therefore Lloyd's would expect a minimum level of validation of all material components of the model annually.
- 2) Annual validation of parameters is to be carried out based on materiality. The materiality of parameters should be assessed every year to identify any requirement for enhanced validation. Parameters that are deemed not material should be validated as part of the planned deep-dive reviews.
- 3) Validation of modelling methodology to be carried out over a 3 year time period. Unless there is a change in the methodology itself or a material change which may impact the methodology there is no requirement to validate the methodology every year.
- 4) Appropriate level of validation should be carried out for every major model change. Additionally, consideration should be given to whether accumulation of minor model changes, even if below the threshold for major model change, would trigger enhanced validation. Refer to the guidance on [internal model validation](#) and [major model change](#) for details of appropriate validation tests.
- 5) An appropriate level of enhanced validation to be carried out under exceptional circumstances in either the external environment (e.g. Brexit, change in Ogden rate) or internal environment (e.g. significant organisational changes)
- 6) The level of validation should be assessed following any major risk profile change.
- 7) Should key Expert Judgements no longer be considered appropriate (for example through falsifiability criteria being met) the level of validation would also need to be reviewed.
- 8) Validation findings may indicate that areas not currently scheduled for a deep dive require an increased level of validation.
- 9) The plan should provide full details of the tests expected to be performed annually. Reverse stress tests and P&L attribution must be performed on at least an annual basis as currently. Stress and scenario tests and backtests should also be carried out annually for material drivers of the internal model.

Lloyd's would expect the three year plan to be reviewed by the managing agent every year to ensure its continued appropriateness and updated to reflect the significant events noted above. It is also expected that the board would have sight of the plan on an annual basis.

No change in the structure of the validation report or governance process is expected as a result of this proposed validation plan. Lloyd's will still expect an annual validation report to be produced alongside the SCR and this will still need to include the four key confirmation statements of validation being in compliance with the validation policy, conducted with sufficient independence, that the internal model is reliable and that all material components and risks have been tested.

The annual validation report should include reference to the three year plan to describe how the validation activities carried out over the past year were consistent with the plan, but would not necessarily need to include the entirety of the plan itself.

The deep-dive reviews performed during the validation cycle should be provided to Lloyd's on an annual basis along with the validation report in September, as these will form part of Lloyd's validation review process. The pre-agreed 3 year validation plan may be amended to incorporate previous validation findings. Lloyd's should have sight of the revised plan before it is implemented.

To allow Lloyd's to assess the reasonableness of the plan, every syndicate is required to submit their 3-year plan for validation of the internal model to SCRReturns@lloyds.com by 1pm 23 June 2017. It is acceptable to provide plans at a managing agent level, given the scope of validation is defined for each syndicate (including SPAs). Lloyd's will subsequently provide feedback within 4 weeks of receiving the plan. Syndicates not using an internal model for capital setting purposes are not required to submit a plan to Lloyd's.

The plan should include:

1. The suite of validation tests that will be performed on an annual basis.
2. The additional "deep-dive" validation that would be performed over each of the next three years.
3. Commentary explaining the rationale for the different areas being tested, referencing the materiality of those areas, previous validation findings and internal/external stakeholder feedback if appropriate.

The plan should be at a level of detail to enable Lloyd's to understand: the tests performed, the components and risk types being tested, the approximate timing of the validation activity and the individual/teams responsible, including use of external resources if this is deemed to be appropriate. Qualitative reviews would need to include a brief summary of the scope of the work.

There will be a market workshop held in May and revised validation guidance issued which will include reference to the three year plan.

Please contact myself or Adhiraj Maitra (+44 (0)20 7327 5679, Adhiraj.Maitra@lloyds.com) for any queries.