LLOYD’S MINIMUM STANDARDS
MS1 – UNDERWRITING MANAGEMENT

JULY 2014
MS1 – UNDERWRITING MANAGEMENT

UNDERWRITING MANAGEMENT PRINCIPLES, MINIMUM STANDARDS AND REQUIREMENTS

These are statements of business conduct required by Lloyd’s. The Principles and Minimum Standards are established under relevant Lloyd’s Byelaws relating to business conduct. All managing agents are required to meet the Principles and Minimum Standards. The Requirements represent the minimum level of performance required of any organisation within the Lloyd’s market to meet the Minimum Standards.

Within this document the standards and supporting requirements (the “must dos” to meet the standard) are set out in the blue box at the beginning of each section. The remainder of each section consists of guidance which explains the standards and requirements in more detail and gives examples of approaches that managing agents may adopt to meet them.

UNDERWRITING MANAGEMENT GUIDANCE

This guidance provides a more detailed explanation of the general level of performance expected. They are a starting point against which each managing agent can compare its current practices to assist in understanding relative levels of performance. This guidance is intended to provide reassurance to managing agents as to approaches which would certainly meet the Principles and Minimum Standards and comply with the Requirements. However, it is appreciated that there are other options which could deliver performance at or above the minimum level and it is fully acceptable for managing agents to adopt alternative procedures as long as they can demonstrate the Requirements to meet the Principles and Minimum Standards.

DEFINITIONS

AFR: actuarial function report

Benchmark Premium: The price for each risk at which the managing agent is expected to deliver their required results, in line with the approved Syndicate Business Plan.

Catastrophe Modelling: (also known as cat modelling) is the process of using computer-assisted calculations to estimate the losses that could be sustained due to a catastrophic event such as a hurricane or earthquake.

Delegated Authority: all forms of business where underwriting and claims authority has been delegated to another entity (e.g. binding authorities, consortia, lineslips etc.).

ERM: Enterprise Risk Management

ILW: Industry Loss Warranty

KPIs: Key Performance Indicators

LCM: Lloyd’s Catastrophe Model

LCR: Lloyd’s Capital Return

LITA: Lloyd’s Internal Trading Advice
**Lloyd’s Returns**: this will include, but not be limited to: Broker Remuneration Return; LCM Submissions; PMDR; QMB; RDL; RDS; Related Parties Return; SBF; Self-Assessment of Compliance versus Lloyd’s Underwriting and Claims Standards; Syndicate Business Plan; Syndicate Reinsurance Programme Return; Xchanging Claims

**ORSA**: Own Risk and Solvency Assessment

**PBQA**: pre-bind quality assurance

**PMDR**: performance management data return

**QMA**: Quarterly Monitoring Return – Part A

**QMB**: Quarterly Monitoring Return – Part B

**RARC**: Risk Adjusted Rate Change

**RDL**: Realistic Disaster Scenario (Light)

**RDS**: Realistic Disaster Scenario

**Related Party**: A related party shall mean:
1. Another syndicate managed by the same managing agent or a service company coverholder that is part of the managing agent’s group.
2. Any company which has two or more directors in common with the managing agent
3. Any company within the same group as a corporate member of the syndicate which has a member’s syndicate premium limit of more than 10% of the syndicate allocated capacity
4. Any company within the same group as the managing agent

**Risk Appetite**: Is the level of risk that an organisation is prepared to accept, before action is deemed necessary to reduce it.

**ROC**: return on capital

**SBF**: Syndicate Business Forecast

**SRP**: Syndicate Reinsurance Programme

**Syndicate Business Plan**: means a business plan prepared by a managing agent in accordance with paragraph 14A of the Underwriting Byelaw.

**The Board**: Where reference is made to the board in the standards, agents should read this as board or appropriately authorised committee. In line with this, each agent should consider the matters reserved for the board under the Governance Standard in order to evidence appropriate full board discussion and challenge on these subjects.

**Ultimate Net Loss**: The Reinsurer’s gross loss less any recoveries from other reinsurance which reduces the loss to the reinsurance contract.

**Underwriting Data**: this will include, but not be limited to all data which the managing agent, Lloyd’s or other appropriate regulators require to monitor the business with regard to underwriting activities.
SECTION 1 – UNDERWRITING STRATEGY & PLANNING

Principle: The managing agent has an effective process for developing, challenging and approving the annual Syndicate Business Plan which of itself forms part of the long-term strategy for each managed syndicate.

UW 1.1 Syndicate Business Plan

Managing agents shall each year prepare and submit a Syndicate Business Plan, and an appropriate strategy document relating to each syndicate managed or to be managed.

The Syndicate Business Plan shall:

- set out the parameters within which the syndicate(s) will carry out underwriting on behalf of the managing agent; and
- include information relating to any association or current or proposed underwriting transaction which may give rise to a conflict of interest and a statement confirming that it has systems and controls in place for managing any such conflicts of interest fairly in accordance with applicable Lloyd’s and PRA/FCA requirements, such information to be made available to the members of the relevant syndicate (or to their members’ agents).

Managing Agents shall ensure that for each managed syndicate there is a written Own Risk and Solvency Assessment (ORSA).

Syndicate Business Plan

For the avoidance of doubt the Syndicate Business Plan consists of the Syndicate Business Forecast (SBF) and the annual business plan narrative (Form 990). The SBF collecting the quantitative information required from the managing agent about their proposed underwriting whilst the business plan narrative is appended to this and represents qualitative information to support the SBF. Both documents need to be read together in order to understand any managing agent’s future underwriting plan.

Instructions for completion of the Syndicate Business Plan is issued annually. The latest version can be found by clicking on the attached link:

[A link to the CMR business plan instructions can be found in the Appendix at the end of this document]

Underwriting Strategy

To support the business planning process, it is expected that each managing agent will have a written underwriting strategy which:

- Explains how it will deliver the targeted returns over the underwriting cycle, to appropriate levels of detail for each syndicate (including gross premium and losses, and key business assumptions) over a three year horizon;
- Identifies the managing agent's strengths and weaknesses; and
- Identifies any significant external factors that either support or inhibit the managing agent's strategy.
Lloyd’s would also expect that managing agents’ strategic and business plans are aligned with the LCR submission for the same year of account and also with the forward looking assessment as set out in the Own Risk & Solvency Assessment (ORSA). All plans should take account of the latest published Franchise Guidelines. These can be found by clicking on the attached link:

[Link to the Franchise Guidelines can be found in the Appendix at the end of this document]

Own Risk and Solvency Assessment (ORSA)

For further information on this documentation please refer to the Risk Management Standard. This can be found by clicking on the attached link:

[Link to Governance Standard can be found in the Appendix at the end of this document]

Potential Evidence

- Syndicate Business Plan;
- ORSA;
- Underwriting Strategy; and
- LCR.

UW 1.2

Business Planning Process

Managing agents shall have an effective process for developing, challenging and approving the annual Syndicate Business Plan for each managed syndicate.

Managing agents shall ensure that:

- the board has responsibility for the Syndicate Business Planning process and approval of the Syndicate Business Plan;
- a nominated director is responsible for managing the process;
- development of the Syndicate Business Plan involves elements which are both appropriate and consistent year on year;
- the Syndicate Business Plan is subject to rigorous challenge by appropriate staff with significant issues documented, prior to being submitted to the managing agent's board;
- the actuarial function provides an opinion on the overall underwriting policy and adequacy of reinsurance arrangements as part of their annual report to the managing agent's board; and
- the effectiveness of the Syndicate Business Planning process is kept under review by a nominated director with recommendations made to the managing agent's board regarding any required changes.

Ownership of the Business Planning Process

The managing agent's board is responsible for the business planning process and approval of the Syndicate Business Plan. Lloyd's expect a director to be nominated by the board to take responsibility for implementation and operation, ensuring that both the director and supporting staff have adequate time and the requisite skills and experience to manage and execute the process effectively. The managing agent's assessment of the adequacy of existing resources and its plans to address any resource shortfalls are likely to include people, processes, systems, skills, operating 'culture' and networks.
The process of business planning shall itself be subject to continuous review and improvement. The effectiveness of the process shall be kept under review by the nominated director with recommendations made to the managing agent's board regarding any required changes.

Developing the Managing Agent’s Syndicate Business Plan

The managing agent’s Syndicate Business Plan will typically contain the following elements:

- A defined risk appetite, both gross and net of reinsurance;
- Each syndicate’s risk accumulations, as included within the LCR. These risk accumulations should be within the existing Franchise Guidelines issued by Lloyd’s, other than where exceptions have been previously granted by Lloyd’s;
- A projected percentage return on capital (ROC) that is reasonable, both gross and net of reinsurance, for each syndicate class of business - capital projections should be on the same basis as the relevant LCR;
- The forecast ultimate loss ratios at an appropriate level of detail. (Ideally, defining the attritional, large and catastrophe loss components);
- A proposed reinsurance programme defined in terms of limit, cost and reinstatement. (Ideally, also setting out, security by rating tier, recoveries assumed and any other features deemed to be material by the managing agent);
- All material assumptions by each major category of underwriting;
- An explicit consideration of the resources required to execute the plan.
- The content may include the following, depending on the categories of underwriting:-
  - Renewal ratio in terms of both policy count and premium;
  - Anticipated risk-adjusted premium and exposure volume change:
  - New business volume written with both policy count and premium, with the rate adequacy assumed to apply;
  - Anticipated changes in loss experience, including claims inflation;
  - For each major category of underwriting, attritional, large and catastrophe loss definition and allocation, together with associated reinstatement premiums inwards and outwards, as well as profit commissions and other loss sensitive acquisition expenses;
  - A review of historical data for each syndicate class of business; and
  - Underwriting year expectations, based on quarterly progressions.

Challenge and Approval

An effective process will ensure that the managing agent’s board actively tests the key assumptions and targets in the annual business plan, keeps the plan under review at least quarterly and approves any material amendment. The Syndicate Business Plan should undergo rigorous challenge by appropriate staff before being submitted to the managing agent’s board. This will allow the reasonableness of the business plan to be checked at many stages of its development, so that issues are identified and addressed early.

Challenges would typically include stress and scenario testing. The managing agent's board will normally consider the content and outcome of the challenges as part of their review process, prior to considering approval of their business plan.

The actuarial function report (AFR) is required to give an opinion on the underwriting policy and adequacy of reinsurance arrangements of the syndicate. Whilst this is retrospective, it forms part of the process for consideration of past experience in setting current plans. This does not imply consideration of each individual contract, but of the underwriting in general and should form part of
the board assessment of underwriting. More detail can be found in Lloyd’s guidance on the AFR which can be found by clicking on the attached link:

[Link to AFR guidance can be found in the Appendix at the end of this document]

Potential Evidence

- List of committees and how they relate to each other and the managing agency board
- Minutes of committees and the managing agency board;
- Information provided to the managing agency board and committees;
- Strategy & business plan documentation as seen by the managing agency board;
- Risk Appetite;
- Terms of reference for the various committees involved in managing the syndicate;
- Actuarial function report; and
- ORSA.

UW 1.3

Business Plan Implementation & Monitoring

Managing agents shall ensure that the annual Syndicate Business Plan is implemented, followed and kept under regular review for each managed syndicate.

Managing agents shall ensure that:

- any amendments to the Syndicate Business Plan are approved by the board and its implementation and operation is under the day-to-day control of a nominated director(s);
- approval is requested in advance from Lloyd's for any material deviations from the Syndicate Business Plan and revised SBF / capital returns are submitted to Lloyd's as required;
- progress against the annual Syndicate Business Plan is reviewed at least monthly by a nominated director(s);
- KPIs are identified and monitored at least quarterly, including review by the managing agency board, with actions taken where appropriate to address variances from the Syndicate Business Plan;
- at required intervals prescribed data returns are prepared and submitted to Lloyd's; and
- the output of the Syndicate Business Planning process, both initially and on an ongoing basis, is integral with other processes operated by the managing agent.

Implementation and Review

Lloyd’s expect that progress against the business plan will be reviewed monthly by the nominated director(s) and quarterly by the managing agent’s board to ensure that the business plan objectives remain reasonable, progress is monitored against plan and that significant variances are followed up. It is envisaged that there will be a clear process for all relevant staff to be advised of agreed business plan targets including income.

Material Deviations from the Syndicate Business Plan

All material deviations from the Syndicate Business Plan shall be advised to Lloyd's for approval prior to being implemented. A revised SBF and LCR may be required to be submitted to Lloyd's to reflect the deviation. Material deviations may vary from managing agent to managing agent. It is
recommended that you speak to the Syndicate Underwriting Performance (SUP) team executive whenever changes are being considered to determine whether this constitutes a material deviation.

**Key Performance Indicators (KPIs)**

KPIs identifying whether business performance is progressing in line with the business plan should be identified. It is expected that a written record will be kept of performance against these criteria and this will be reviewed at least quarterly, with actions taken where appropriate to address variances from plan.

Managing agents are expected to select measures of performance which will allow them to assess progress against their strategy and business plan. In selecting these measures, consideration should be given to KPIs which assess progress at an aggregated level (e.g. current vs. prior year loss ratios at portfolio level - using techniques such as 'Bridge Analysis') and at an individual risk level (e.g. weighted average premium rate adequacy for year to date). The PMDR is an essential tool for Lloyd’s review of agent’s ratings of risk and market movements. This may be used by the agent as part of the KPIs.

**Linking the Lloyd’s Business Plan to Related Processes**

The Syndicate Business Plan and its output, both initially and on an on-going basis, shall take account of and be integral with other processes operated by the managing agent including:-

- Financial Reporting;
- LCR review;
- Exposure management;
- Reinsurance purchase;
- Reserving;
- Underwriting and Claims Management; and
- SBF.

This will allow the Syndicate Business Plan to be part of the managing agent's whole business process, so that any consequent effects of plan changes are considered within all of the related processes above.

**Potential Evidence**

- Minutes of committees and the managing agency board;
- Correspondence with Lloyd’s re any material deviations;
- Monthly reports reviewed by the nominated director;
- Quarterly reports to the board of relevant KPIs; and
- Relevant reports made to Lloyd’s.
SECTION 2: UNDERWRITING & CONTROLS

**Principle:** The managing agent has effective systems and controls over each managed syndicate’s underwriting.

**UW 2.1 Underwriting & Controls Framework**

Managing agents shall have an effective underwriting systems and controls framework in place for each managed syndicate.

**Managing agents shall ensure that:**

- there is a nominated director responsible for underwriting systems and controls;
- for each managed syndicate there is an appropriate written Underwriting Policy and Underwriting Procedures;
- underwriting is aligned to the strategy, approved Syndicate Business Plan and Underwriting Policy/Procedures;
- underwriters’ terms of reference / authorities are in writing, properly authorised and reviewed annually to reflect his / her experience and knowledge and align to the Syndicate Business Plan;
- risks that are outside of the underwriter’s agreed level of authority are referred to an appropriate individual;
- for each managed syndicate the underwriting systems and controls framework take account of the pricing policy, exposure management information and the syndicate's reinsurance arrangements;
- there are requirements to achieve Pre-Bind Quality Assurance (PBQA), including Contract Certainty; and
- underwriting addresses external regulatory requirements.

**Effective systems and control**

Effective systems and controls are essential for the delivery of the managing agent's strategic and Syndicate Business Plans. To facilitate this, it is expected that the managing agent's board will nominate one director to be responsible for the managing agent's underwriting systems and controls and ensure that the nominated director and supporting staff have the requisite skills, experience and available time to manage and execute the controls effectively.

Reference to 'effective systems and controls' should be interpreted as widely as necessary for the effective management of each syndicate. Controls are seen broadly to sit under two headings:

- **Prevention controls** - These include, for example, written authorisation and proactive management of each individual's underwriting authority and of any variances to prescribed procedures/authorities; and
- **Detection controls** - These include, for example, internal audit reviews, peer review processes and independent reviews.

Managing agents’ controls would normally reflect the levels of value and the degree of risk within their underwriting activities.
Underwriting Policy and Underwriting Procedures

It is expected that managing agents will have documented systems and controls for the effective management of each syndicate – Underwriting Procedures.

The managing agent's underwriting controls will ensure that underwriting is aligned with their strategy, approved business plan and Underwriting Policy / Procedures. The Underwriting Policy and supporting documentation will typically include the following elements for each syndicate:

- line guide details by class of business;
- a process for authorising material deviations from the business plan or line guide requirements;
- approach to fronting business for other insurers;
- approach to multi-year policies; and
- approach to ensuring that Contract Certainty is achieved.

The Underwriters’ Terms of Reference and Authorities

It is expected that each underwriter's terms of reference and authority should be written, properly authorised and reviewed annually to reflect his / her experience and knowledge and to ensure alignment with the Syndicate Business Plan. It would be good practice for each underwriter to signify agreement by signing his / her authority details.

Risks that are outside of the underwriter's agreed level of authority must be escalated to another individual with the appropriate level of authority and this process should be clearly defined and understood.

Pricing Policy

Managing agents need to have a clear expectation of pricing levels and an audit trail to show how pricing will deliver the projected results within the approved business plan and how pricing will be managed over the relevant underwriting cycle.

For further information please refer to the Pricing and Rate Monitoring Standard which can be found in Section 4 of this document.

Exposure Management Information

The managing agent's underwriting controls are expected to ensure that underwriting activities take account of their updated aggregate exposure management and assessment information and that:

- Aggregates are managed within the parameters of the approved business plan; and
- Appropriate reinsurance coverage is in place.

For further information please refer to the Exposure Management Standard which can be found in Section 5 of this document.

The Syndicate’s Reinsurance Arrangements

Managing agents need to have effective controls in place to ensure that underwriting takes account of the syndicate's reinsurance arrangements and that there is clarity on who can purchase outwards reinsurance (treaty and facultative).
For further information please refer to the Reinsurance Management and Control Standard which can be found in Section 6 of this document.

**Pre-Bind Quality Assurance (PBQA) Including Contract Certainty**

PBQA procedures should be in place, with clear accountability for their operation and a review process to ensure that they remain appropriate to the managing agent’s specific business requirements.

Features of an effective process are likely to include a risk based approach to the PBQA process taking into account:

- Class of business;
- Size of line;
- Brokers’ wordings performance;
- Type of wording – bespoke or complex, use of standard terms;
- Individual underwriter’s knowledge and experience of the territories/ class of business / wordings experience;
- Availability of specialist wordings/ legal knowledge of insurance contract law;
- Assessment of the leader’s capability, where following; and
- Ensuring that reinsurance slips have appropriate reinsurance conditions and clarity regarding underlying/associated wordings.

There should be continuing assessment of the quality of slips, including wordings, with reporting to the appropriate committee within the managing agent and feedback to underwriters which includes items such as:

- Identification of claims issues arising from wordings e.g. coverage disputes;
- Identification of issues arising from lack of experience;
- Output from internal audit process;
- Customer complaints;
- Independent review of the quality of a sample of wordings on a risk based approach;
- An assessment/ vetting of the performance of leaders for each class of business against the in house PBQA procedures;
- Any issues regarding reinsurance slip conditions or underlying/associated wording; and
- Feedback from Lloyd’s review process.

**Available tools/ information**

When considering their required procedures, Lloyd’s strongly suggests to managing agents that they consider the following sources of assistance regarding placement activity, accessible anywhere in the world via lloyds.com or via the London Market Group website where noted.

- Contract Certainty principles and guidance notes, all via the London Market Group website: [Link to London Market Group Website]
- The Market Reform Contract (MRC) template and guidance documents addressing open market, lineslips and delegated authority business. There is no requirement to use either the generic template or extensive guidance on slip content, although it should be noted that these were developed by market practitioners, largely to satisfy the need for contract certainty. Available via lloyds.com and the London Market Group website.
- The Lloyd’s Wordings Repository (of model clauses & wordings) – a readily available source of model wordings and a home for managing agents who want to retain their own wordings safely and securely, with international access via lloyds.com. This can be found at the following link: [Link to the Lloyd’s Wordings Repository can be found in the Appendix at the end of this document]
• Lloyd's QA Tools – a source of checks against which slips can be reviewed which can be found at the following link: [Link to Lloyd’s QA tools can be found in the Appendix at the end of this document]

• Crystal for extensive Lloyd's tax and regulatory information held at country level available which can be found at the following link: [Link to Crystal can be found in the Appendix at the end of this document]

In addition managing agents can decide to utilise other resources such as:

• Specialist wordings / legal personnel with the appropriate skill, knowledge and experience; and
• Use of commercial software products to compare wordings.

Contract certainty in the placement of business in overseas territories

These notes are not intended to replace or revise the requirements that Lloyd’s already places upon managing agents involved in local underwriting carried out by coverholders, or service companies.

Lloyd’s recognises that London placement practices are not necessarily transferable to overseas territories. Where existing Lloyd’s tools/guidance can be used to good effect Lloyd’s recommends that as good practice. Where managing agents operate alternative approaches which can be demonstrated to be effective Lloyd’s has no concerns.

Managing agents operating in overseas markets are encouraged to adopt Lloyd's subscription business processes where risks are co-insured, to assist in the delivery of contract certainty, and for greater process efficiency for all parties. Lloyd's is not seeking the imposition of all Market Reform Contract (MRC) London market procedures 'across the board'.

The differences between procedures operated in the Room and in overseas territories will need to be reflected within slips. A selection of these are highlighted below:

• Coding: managing agents will need to have regard to the inclusion of relevant coding needed for Lloyd’s processing, followers and the completion of bordereaux returns. UMRs on subscription risks would assist co-insurers in the management of their portfolios;
• Bureau services: there should be no reference to XIS/ XCS or any bureau services in slips within territories where these services are not applicable; and
• Settlement Due Dates: where bureau services are not operating, it should be clear that Settlement Due Dates specify the requirements of the insurers concerned.

The London market agreement on what constitutes an insurer’s evidence of cover will need additional consideration within overseas territories. It is expected that there will be clear and written agreement as to what will be issued to the Insured and whether the insurer regards that as its evidence of cover.

It is expected that all managing agents will be monitoring the standard of contracts being entered into where risks are being accepted in overseas territories by syndicates, or entities to whom they have delegated their authority.

It can be expected that Lloyd’s will, in the first instance, make requests to the managing agent's risk and compliance team for evidence of the extent to which slips meet contract certainty and the managing agent's own risk-based procedures. Thereafter, specific enquiries may be made within overseas territories, working with the managing agent’s leadership team.

External Regulatory Requirements

Managing agents are expected to have controls in place to ensure that regulatory requirements and the scope of Lloyd's market licences are clearly understood and that risks are written within those requirements.
Lloyd’s supplies extensive tax and regulatory information, by territory, within Crystal. Managing agents will need to monitor requirements in the territories where they operate and are encouraged to liaise with Lloyd’s Internal Trading Advice (LITA) or Lloyd’s local managers regarding any issues or concerns.

Crystal can be found at the following link:

[Link to Crystal can be found in the Appendix at the end of this document]

**Guidance on Competition Law and the European Commission Business Insurance Sector Inquiry**

As set out in Lloyd’s Market Bulletin Y4153, Lloyd’s wishes managing agents to conduct insurance business at Lloyd’s in full compliance with European and UK competition law - further information is provided in the bulletin.

The Lloyd's market fully supports the BIPAR High Level Principles which follow:

- The intermediary shall, based on information provided, specify the demands and needs of the client as well as the underlying reasons for any advice.;
- Before placing a risk, an intermediary will review and advise a client on market structures available to meet its needs and, in particular, the relative merits of a single insurer or a multiple insurer placement.;
- If the client, on advice of the intermediary, instructs the latter to place the risk with multiple insurers, the intermediary will review, explain the relative merits and advise the client on a range of options for multiple insurer placement;
- Intermediaries will expect insurers to give careful independent consideration to the option requested;
- In the case of a placement of a risk with a lead insurer and following insurers on the same terms and conditions, the previously agreed premiums of the lead insurer and any following insurers will not be aligned upwards should an additional follower require a higher premium to complete the risk placement. Indeed, the intermediary should not accept any condition whereby an insurer seeks to reserve to itself the right to increase the premium charged in such circumstances; and
- During the placement of the risk, the intermediary will keep the client informed of progress.

**Potential Evidence**

- Underwriting Policy:
- Underwriting Procedures;
- Underwriting Guidelines for specific classes of business;
- Underwriting Authority statements; and
- PBQA procedures including Contract Certainty.
Underwriting & Controls Audit and Review

Managing agents shall have effective systems and controls in place to audit and review underwriting for each managed syndicate.

Managing agents shall ensure that:

- they keep (or have the right to access) all relevant information in respect of each risk underwritten including the slip and the placing documentation;
- there is regular exception reporting to identify potential variances or control failures and these are investigated and escalated as appropriate;
- a representative range of risks underwritten by the syndicate is reviewed and assessed regularly by an appropriately qualified Independent Reviewer;
- underwriting decisions are the subject of an appropriate Peer Review process; and
- underwriting controls are subject to regular and appropriate internal audit review.

Retention of all relevant information

Each managing agent is expected to be able to produce all relevant information regarding each risk written to satisfy audit purposes and to allow the proactive review and management of each risk.

Where underwriting authority is delegated and aggregated returns are received by the managing agent it is expected that data at individual risk level will be available to the managing agent to ensure that underwriting controls are working effectively.

Relevant information would include slips and placing information, as well as the rationale for risk acceptance, terms and pricing.

Testing of underwriting controls

Managing agents are expected to test that underwriting controls are working effectively and to produce written reports to demonstrate this at least quarterly, with any variances or control failures highlighted and addressed. The findings from control testing should be shared with relevant underwriting teams and actions relating to variances agreed and monitored. It is expected that the key findings would also be shared with the managing agent's board. Testing should ideally include consideration of reinsurance programmes, systems for modelling risks and aggregating exposures and the records supporting pricing. These reports will normally be built up from the writing of each risk, to enable detailed analysis of identified issues.

Independent Review

The role of the Independent Reviewer is to provide the Managing Agency Board and management with regular (at least quarterly) reports to provide independent assurance as to the extent to which the syndicate's strategies and pricing/underwriting policies are being applied correctly and consistently based on the review of a selection of risks written recently by the underwriters. Please refer to feedback and guidance on a) Peer and Independent review and b) Terms of Reference for Independent Review which can be found at the following link:

[Link to Peer and Independent can be found in the Appendix at the end of this document]
Peer Review

The scope of managing agents’ peer review activities should reflect the scale and complexity of their portfolios. Consideration will normally be given to review of all significant underwriting decisions. This could extend to quotations, acceptance of new business, endorsements and renewal terms.

Please refer to feedback and additional guidance on Peer and Independent review which can be found at the following link:

Potential Evidence

- List of Exception reports including detail on frequency;
- Exception reports from the underwriting system;
- Terms of reference for Independent Reviewer(s) and names of reviewers for each class of business;
- Independent Reviewer(s) reports;
- Peer review process and comments for individual risks;
- Internal Audit plan and reports; and
- Information provided to the managing agency board and committees.
SECTION 3: DELEGATED AUTHORITY

Principle: The managing agent has effective systems and controls wherever underwriting authority has been delegated to another entity.

UW 3.1
Strategy and Procedures for Delegated Authority
Managing agents have a clear strategy and procedures for writing and managing delegated authority business.

Managing agents shall ensure that:
- strategy and procedures are clearly documented and agreed by the board;
- strategy and procedures are regularly reviewed and updated as required; and
- there are appropriate controls and resources (both systems and individuals) for management of delegated authority.

It is expected that managing agents will have written strategy and procedures, agreed at board level, for managing delegated underwriting contracts. The ultimate responsibility for the delegated underwriting strategy and procedures rests with the board and its approval of such should be formally documented. It is however accepted that it is common for the managing agency board to provide authority to nominated committees or individuals for the design, review and agreement of specific elements of the strategy and procedures. In such circumstances the scope of authority provided to committees and / or individuals should be clearly documented. These procedures should, be applied consistently to all syndicates managed by the managing agent with appropriate modifications to meet a syndicate’s individual requirements and they should be regularly, reviewed, at least annually, and updated whenever necessary.

The competencies needed for managing delegated underwriting arrangements are different to those needed for other methods of acceptance. Managing agents will need to satisfy themselves that they have the controls and resources (both systems and individuals with suitable experience and skills) to enter into and manage delegated underwriting arrangements effectively taking into account the:

- number of Coverholders and branch offices;
- number of contracts which a syndicate leads or follows;
- extent of delegation;
- volume of income;
- classes of business;
- level of exposure (e.g. catastrophe exposure); and
- geographical distribution.

Further information on internal resourcing can be found in section 6.2 of the Code of Practice for Delegated Underwriting.
Due Diligence of Coverholders

Managing agents shall carry out thorough due diligence of Coverholders to which it proposes to delegate authority.

Managing agents shall ensure that:

- due diligence is conducted at inception and renewal and maintained throughout the life of the binding authority;
- due diligence is sufficient to assess the Coverholder’s suitability for delegated underwriting;
- full due diligence is undertaken where the syndicate has a lead position and a risk based approach where in a follow position;
- they have obtained prior approval from Lloyd’s for new Coverholders;
- where a broker acts as an intermediary, it has the appropriate resources to administer and service the binding authority;
- where a binding authority is not arranged via a broker, prior approval is obtained from Lloyd’s to “deal direct” and appropriate controls and resources are in place for direct dealing; and
- only authorised personnel take the final decision on entering into a new Coverholder relationship or binding authority.

Managing agents should conduct appropriate due diligence of their Coverholders at inception and renewal and throughout the life of a binding authority. Maintaining due diligence throughout the life of the contract is about ensuring that information held on Coverholders remains up-to-date and acceptable. This is particularly important in relation to Coverholder details which may change during the life of a binding authority, including but not limited to professional indemnity coverage, financials, ownership and compliance questionnaires.

The due diligence conducted must be sufficient to assess the Coverholder’s suitability for delegated underwriting. Where a managing agent is a lead on a binding authority full and complete due diligence must be undertaken. A risk based approach may be taken where a managing agent follows. A risk based approach does not mean that it is acceptable for no due diligence to be undertaken. A follow managing agent must always make their own decision as to the suitability of the Coverholder. It is important that Atlas is kept up-to-date as part of the due diligence process.

When assessing a new Coverholder and conducting due diligence the lead managing agent will need to take into account, as a minimum, the information required to be provided in the Lloyd’s Coverholder application. They should also consider the suitability criteria for an approved Coverholder as set out in paragraph 6 of the Requirements made under the Intermediaries Byelaw. Further information on Coverholder due diligence can be found in Part 4 of the Code of Practice for Delegated Underwriting.

Where a Coverholder will be / is writing risks in multiple territories it is important that the managing agent has considered the tax and regulatory implications of this and assured itself that the Coverholder has the requisite knowledge and processes to ensure all tax and regulatory requirements for each territory can be met. It is recommended that Crystal is used to assist in this. The managing agent should also monitor the Coverholder to ensure the requirements are met on an ongoing basis.

Where a binding authority is arranged by a broker the managing agent should be satisfied that the broker has the necessary resources and knowledge to administer and service the binding authority.
effectively. This is particularly important where a managing agent is working with a broker with limited experience in binding authorities.

Where a binding authority is not arranged through a broker the managing agent must obtain prior approval from Lloyd’s to “deal direct” with the relevant Coverholder. If a managing agent wants to “deal direct” they should ensure they have the controls and resources necessary to carry out all aspects of administering a binding authority that would normally be handled by a broker including document production and premium and claims handling (including payment of local taxes).

Managing agents should have written procedures for these processes.

Managing agents should ensure that only authorised personnel take the final decision on entering a new Coverholder or binding authority relationship once all procedures to assess the suitability of the Coverholder have been completed. Authorised personnel means the personnel within the managing agent who have been authorised to make such decisions. Guidance on the expected seniority of such authorised personnel is provided in Part 4 of the Code of Practice for Delegated Underwriting.

### UW 3.3

**Binding Authorities**

Managing agents shall have binding authorities in place with each Coverholder to which it delegates authority

*Managing agents shall ensure that the binding authority:*
  - clearly defines the conditions, scope and limits of authority;
  - is in place prior to inception;
  - is agreed, signed and dated by authorised representatives of the Coverholder and lead underwriter;
  - is a direct contract with each party who will bind insurances and/or issue documents;
  - achieves Pre-Bind Quality Assurance (PBQA), including regard to contract certainty expectations;
  - achieves contract certainty on all certificates to be issued by the Coverholder;
  - requires the Coverholder to report on document issuance annually as a minimum; and
  - matches permissions on Atlas and is registered on the Binding Authority Registration system (BAR).

The requirements above would apply to all other forms of contracts of delegation where applicable and should be adhered to in conjunction with all other Lloyd’s minimum standards where applicable which may include the claims minimum standards.

Managing agents should ensure there is a clear and complete contract in place prior to inception of all binding authorities. This should comply with Contract Certainty and pre-bind quality assurance (PBQA) and meet all relevant requirements set out in paragraph 10 of the Requirements made under the Intermediaries Byelaw. One way to achieve this is to use the LMA model binding authority wordings. The binding authority should be signed and dated by the Coverholder to whom authority is delegated and by the lead underwriter prior to inception.

Managing agents should ensure that they have a direct contract with each party who will enter into contracts of insurance and/or issue documents. So where there is a series of wholesale or retail producers in a chain who will enter into contracts of insurance and/or issue documents the managing agent should ensure they have a direct contract with each party in the chain. Sub delegation is not permitted (other than for Service Companies) per the Intermediaries Byelaw.
To satisfy Contract Certainty requirements with regard to the timely delivery of insurance documents managing agents should require each Coverholder to confirm that insurance documents have been issued within required timescales. The form and frequency of this return should reflect the managing agent’s assessment of risk, while ensuring that returns are received at least annually from each Coverholder. In addition to being issued in a timely manner all certificates issued under binding authorities should also satisfy all other requirements under contract certainly, the Intermediaries Byelaw and the binding authority.

Managing agents should ensure they only enter into binding authorities which are within the permissions granted to the relevant Coverholder on Atlas. All binding authorities should be registered on BAR and all details on BAR must match the permissions granted on Atlas.

Further information on binding authority contracts can be found in Part 5 of the Code of Practice for Delegated Underwriting.

UW 3.4
Management and Monitoring of Delegated Authorities
Managing agents shall proactively manage binding authority contracts once incepted

Managing agents shall ensure that:

- there is regular monitoring of compliance with the conditions of the binding authority;
- performance of the binding authority and Coverholder is monitored by appropriately skilled and experienced personnel;
- there is a clearly documented procedure in place for independent (internal or external) audit of Coverholders, and others to whom authority is delegated;
- there are clearly documented procedures in place to monitor on-going compliance by the Coverholder, and others to whom authority is delegated, with Lloyd’s requirements and local requirements;
- there are clearly documented procedures in place to address irregularities that are identified at a Coverholder, including notification to Lloyd’s;
- there are clearly documented procedures in place for non-renewal and termination of binding authorities; and
- there is appropriate management oversight of DA business including regular reporting of KPIs to the managing agency board.

The requirements above would apply to the management of contracts of delegation where applicable.

Managing agents should monitor the performance of all Coverholders to whom they have delegated authority. To monitor performance, managing agents should specify what information the Coverholder is required to provide, and its frequency, within the binding authority. Performance monitoring of binding authorities will usually include consideration of:

- the type, class, volume and quality of business accepted under the binding authority and a comparison of performance against the Coverholder’s initial plan
- changes in market conditions and the binding authority’s profitability
- how the Coverholder administers and operates the binding authority (including keeping to service standards)
- significant changes to the Coverholder’s or broker’s circumstances
other problems or potential issues (for example those that may have been revealed by any
audit or underwriting visits, complaints or potential litigation or regulatory issues)
Methods for obtaining the relevant information may include bordereau or other reports, underwriting
visits and audits.
Managing agents should develop and implement a policy which governs their approach to the use of
independent (internal or external) audit of entities to which they delegate authority. This policy will
normally address:

- the frequency of audits based on the managing agent’s risk assessment of the entity;
- the scope for review to be determined in the terms of reference for the auditors;
- the identification of appropriately skilled auditors able to fulfil the terms of reference; and
- the identification of key audit recommendations and their implementation.

Further information on Coverholder audits can be found in section 6.4 of the Code of Practice for
Delegated Underwriting. Lloyd’s also produces a Coverholder audit scope for use by managing
agents which can be found at the following link:

[Link to Coverholder Audit Scope can be found in the Appendix at the end of this document]

Managing agents should have specific procedures in place to ensure ongoing adherence by a
Coverholder to relevant Lloyd’s requirements and local regulations. It is recommended that the QA
tool and Crystal is utilised to assist in this.

Managing agents need to have clearly defined procedures, including notification to Lloyd’s, to be
implemented in the event that irregularities, such as fraud or dishonesty or other improper conduct,
is identified at a Coverholder.

Managing agents are expected to deal with non-renewal or termination of a delegated underwriting
contract in an appropriate manner, including putting procedures in place to deal with the run off.
Further information on non-renewal and termination can be found in Part 9 of the Code of Practice
for Delegated Underwriting.

Managing agents are expected to have a process to monitor their own management of delegated
underwriting arrangements including regular reporting of key performance indicators (KPIs) to the
managing agency board and committee(s) as appropriate.

UW 3.5
Managing Conduct Risk in Delegated Authorities
Managing agents shall recognise and manage the Conduct Risk posed by delegated
authority and be able to evidence that conduct issues are assessed, monitored and
managed

Managing agents shall ensure that:
- they have appropriate procedures in place to address the Conduct Risk posed by delegated
  underwriting;
- assessment and monitoring of Conduct Risk can be evidenced; and
- relevant data is collected for effective monitoring of Conduct Risk and to meet relevant regulatory
  reporting requirements.
Conduct Risk means the risk that a managing agent (or its agents) will fail to pay due regard to the interests of Lloyd’s customers or will fail to treat them fairly at all times. Managing agents should ensure that they have procedures in place to address the Conduct Risk posed by delegated underwriting and that the assessment and monitoring of conduct risk can be evidenced. Focus areas for Conduct Risk assessment may include, but are not limited to, product design, financial promotions, product distribution, barriers to switching products, claims handling and complaints handling. Managing agents should be able to demonstrate how they have satisfied themselves that the Conduct Risk presented by any binding authority is being appropriately managed.

Some territories require specific data reporting relating to Conduct Risk. Where this is the case managing agents should ensure the relevant data is being collected and that it is being provided to the relevant regulator. Managing agents should also ensure they are receiving any data they deem appropriate for effective monitoring of Conduct Risk and that the data is being analysed.

Further information on Lloyd’s expectations with regard to the management of Conduct Risk will be available in the Lloyd’s Conduct Risk Minimum Standards and the Code of Practice for Delegated Underwriting.

[Link to Code of Practice can be found in the Appendix at the end of this document]

Further information on Delegated Underwriting

More detailed information on Lloyd’s expectations of Managing Agents can be found in the Code of Practice for Delegated Underwriting and the intermediaries byelaw which should be read in conjunction with this guidance. The Code and byelaw should also assist Managing Agents with how to meet the minimum standards. There is also a Service Companies Code of Practice which should be referred to when delegating underwriting and claims authority to a service company.

[Link to Service Companies Code of Practice can be found in the Appendix at the end of this document]

Potential Evidence

- Atlas records;
- Binding Authority Registration system;
- Coverholder application documentation;
- Coverholder audit process/procedures;
- Coverholder audit tracking of recommendations & reports;
- Delegated Authority procedures;
- Delegated Authority staff structure chart;
- Delegated Authority strategy;
- Details of systems used to manage Delegated Authority business and bordereaux;
- Due diligence checklist;
- Evidence of conduct due diligence;
- Internal & external Audit reports of Delegated Authority business;
- Minutes of committee meetings;
- Management information relating to Delegated Authority business;
- Placing slips for binding authorities;
- Terms of reference for relevant committees;
- Renewal list for binding authorities;
- Responsibilities and processes questionnaire;
• Samples of coverholder audit reports;
• Samples of coverholder certificates; and
• Service company procedures.
SECTION 4 – PRICE AND RATE MONITORING

Principle: The managing agent has appropriate pricing methodologies and effective rate monitoring processes

UW 4.1
Price and Rate Monitoring Framework
Managing agents shall have an effective pricing and rate monitoring framework in place for each managed syndicate.
Managing agents shall ensure that:
• there is a nominated director responsible for pricing and rate monitoring procedures;
• for each managed syndicate there is a direct link between the written Risk Appetite at portfolio and class level and pricing parameters;
• for each managed syndicate there is a demonstrable and transparent written Pricing Policy which provides a clear expectation of pricing levels and explanation on how pricing will deliver the projected results within the Syndicate Business Plan and how pricing will be managed over the relevant underwriting cycle; and
• for each managed syndicate there are appropriate written Pricing Procedures.

Clear Ownership
Lloyd’s expects the managing agent’s board to nominate one director to be responsible for the managing agent’s pricing and rate monitoring procedures. The nominated director and supporting staff will need to have the requisite skills, experience and available time to manage and execute the process effectively. The managing agent’s board shall be provided with a report comparing the outcome of the pricing and rate monitoring processes against the Syndicate Business Plan targets, at least quarterly.

Risk Appetite and Pricing Parameters
It is expected that for each managed syndicate Risk Appetite would be articulated at portfolio level and cascaded to each class of business. This articulation/cascade of Risk Appetite would flow through into the detail of coverage to be provided and coverage which is to be excluded.

The Risk Appetite, including profit and Return on Capital (ROC) requirements should then be reflected in the process of setting pricing parameters.

Depending on actual pricing margins achieved versus the margins assumed in the Syndicate Business Plan, Risk Appetite would be adjusted during the year as appropriate. For example, if a managing agency establishes mid-year that there is insufficient price adequacy for a specific class of business or territory, they may decide to discontinue writing business in that class or territory.

Pricing Policy
Managing agents shall ensure that there is a demonstrable and transparent written Pricing Policy which provides a clear expectation of pricing levels and explanation on how pricing will deliver the projected results within the Syndicate Business Plan. In addition, Lloyd’s will want to understand how managing agents will manage their pricing if their approach to the underwriting cycle conflicts with the Syndicate Business Plan/strategy. The Pricing Policy should reference the following topics:
- Syndicate Risk Appetite and Strategy and how this links to pricing;
- Responsibility for the Pricing Policy;
- How pricing is to be calculated for each class of business;
- Expectation of pricing levels and escalation requirements;
- Benchmark Premium – how calculated and used by underwriters;
- Risk Adjusted Rate Change (RARC);
- Management of pricing;
- Monitoring of pricing including PMDR information supplied to Lloyd's;
- Audit and review of pricing;
- Information provided to the managing agency board and syndicate committees regarding pricing and rate change; and
- Agreed definitions within the Pricing Policy.

Pricing Procedures

It is expected that managing agents will have their systems and controls for the effective management of pricing and monitoring of rate change for each syndicate set out in writing – Pricing Procedures.

Potential Evidence

- Information provided to the managing agency board and committees;
- Pricing Policy;
- Pricing Procedures; and
- PMDR information.

UW 4.2

Pricing Methodology

Managing agents shall have appropriate pricing methodologies for each managed syndicate. Managing agents shall ensure that:

- there are appropriate pricing methodologies which are transparent and consistent for each class of business;
- Benchmark Premiums are supported by relevant experience / exposure data within a structured process / model;
- all relevant elements used in the pricing of individual risks are captured together with the methodology and evaluation;
- the pricing process demonstrates the expected loss ratio for each risk and the key rating factors being used with their relative value where appropriate;
- models are reviewed at least annually and re-calibrated as appropriate by personnel with relevant experience, (such as actuaries) in line with planned loss ratios;
- the pricing for attritional / large losses and cat losses is explicit;
- the rationale for the pricing of each risk is recorded by the underwriter; and
- there are written guidelines in place to assist the underwriter in using the process / model.

Appropriate Pricing Methodologies

Managing agents are expected to have appropriate pricing methodologies which are transparent and consistent for each class of business. This is to ensure that the syndicates they manage generate
sufficient premiums in the aggregate to achieve the planned levels of profitability in the Syndicate Business Plan.

A transparent and consistent pricing process will capture all the relevant elements of the pricing calculation, the methodology used and the evaluation carried out. It will be able to demonstrate:

- The expected loss ratio for each risk (calculated at individual risk, portfolio or other appropriate level) over time; and
- The key rating factors being used, with the relative value applied to each of these as appropriate.

An appropriate pricing methodology will be dependent upon a number of factors including the historical record of the syndicate(s) managed, the size of the managing agent, the experience of the underwriters, the availability of relevant loss and exposure data, the complexity of the class of business and the speed at which pricing calculations need to be carried out.

In considering pricing methodology, all of the elements of the pricing calculation are expected to be included. For example:

- expected loss cost;
- CAT load, internal expenses;
- profit and acquisition costs;
- the actual price charged; and
- the resultant level of profit anticipated.

The “expected loss ratio for each risk” would normally be projected at an individual risk level. It is recognised that this is not always possible. Where loss ratios are projected at portfolio or another level, managing agents should be able to explain the rationale.

**Benchmark Premiums**

Benchmark Premium is based on the Gross Net Ultimate Loss Ratio in the Syndicate Business Plan. A statement that there is 100% Benchmark price indicates that the premium achieved is expected to deliver the Syndicate Business Plan loss ratio.

Benchmark Premium should be easy to calibrate to syndicate’s own definition and is an absolute measure of the expected gross net underwriting profitability of a risk. There should be alignment between the managing agent’s pricing methodologies and the calculation of Benchmark Premiums.

Benchmark price information is required by Lloyd’s for new and renewed business.

For further information on Benchmark Premiums / price please refer to the PMDR section on lloyds.com which can be found at the following link:

[Link to Lloyd’s PMDR can be found in the Appendix at the end of this document]
Review of Models

Managing agents should ensure that there is an annual documented decision on whether review of individual pricing models is required. Where a review is required, any re-calibration is undertaken by personnel (with relevant experience, such as actuaries).

It will be necessary for managing agents to re-calibrate tools, models and methodologies to ensure that they are able to calculate Benchmark premiums in line with planned loss ratios.

Pricing for Attritional and Large / Cat Losses

The pricing for attritional and large losses should be determined separately and explicitly from the pricing for cat losses and the pricing of individual cat perils where included.

Rationale for Pricing

There needs to be a rationale for the pricing of each risk, even if the rationale applies across a portfolio or homogenous group of risks.

Written Guidelines

Written guidelines will assist the underwriter in using the pricing process / model and recording rate change. These should include:

- Description on how the model output should be interpreted for each class of business (i.e. the actions to be taken when the price is above, similar to or below the price offered);
- The requirements for escalation (e.g. when a risk needs to be referred to an appropriate individual for a second opinion or sign-off);
- Any requirements for line size utilisation / grading dependent on price adequacy; and
- How to assess RARC or record appropriate information to ensure that this can be provided to Lloyd's as part of PMDR.

To support the written guidelines, Lloyd's advocates that managing agents hold regular underwriter meetings to discuss the pricing of a selection of risks, with key agreed actions being recorded as part of the underwriter's rationale for the pricing of the risk.

Potential Evidence

- Pricing tools and models; and
- Written Guidelines.
Managing agents shall have effective price adequacy and rate change management and monitoring in place for each managed syndicate

Managing agents shall ensure that:
- there is a nominated director with responsibility for assessing and calculating the impact that pricing movements, new business and non-renewed business may have on the syndicate loss ratios;
- for each managed syndicate there is measurement of the difference between the actual premium charged against the Benchmark Premium established by the managing agent;
- for each managed syndicate there is measurement for renewal business of pricing movements from the previous year in accordance with Lloyd's requirements (RARC);
- there are written guidelines in place with regard to the quantification of pricing movements to ensure consistency of approach between underwriters;
- there is appropriate analysis of the impact of non-renewed business on the current portfolio; and
- at required intervals, prescribed data returns are prepared and submitted to Lloyd's.

Effective Rate Monitoring Processes

The use of an effective price adequacy and rate monitoring process represents sound business practice, enabling managing agents to manage syndicates in a well informed and prudent manner. In particular, it enables the managing agent to:

- Assess rate adequacy;
- Monitor pricing movements;
- Assess the impact that such pricing movements may have on the syndicate's loss ratios;
- Review and amend the syndicate underwriting strategies and the Syndicate Business Plan;
- Make informed decisions on reserving strategy;
- An effective rate monitoring process is likely to contain the following:
  - It records the various elements of the pricing calculation for each risk (calculated at individual risk, portfolio or other appropriate level);
  - It monitors the difference between the Benchmark price and the actual price at suitable levels (e.g., per risk, risk code, class of business) and allows the business to act on variances in pricing margins and exposure accepted compared to approved plan;
  - In respect of renewals, it monitors pricing movements against the previous period(s) of insurance;
  - It provides written guidance for underwriters, setting out how they are to record and quantify pricing movements so as to ensure consistency of approach between underwriters;
  - It incorporates a regular review process to ensure that the input data is accurate, consistent and reliable; and
  - It allows the actuarial and business planning functions to analyse separately the various elements of any premium, policy cover and exposures as well as external factors such as inflation.

Impact of Pricing Movements

It is important that managing agents have processes in place to ensure that there is assessment of the impact of pricing movements, new business and non-renewed business on syndicate loss ratios and the current portfolio.
Managing agents should be regularly testing the assumptions made in their SBF to ensure that they are on track to meet plan and can make appropriate corrections or amendments as necessary. The premium bridging analysis which forms part of the SBF submission (form 183) provides a useful summary of how the plan was developed.

With regard to the non-renewed analysis, managing agents should determine an appropriate approach in this regard which may focus on larger accounts, the aggregate impact of non-renewing a number of smaller accounts, accounts with prior year achieved premiums significantly above or below Benchmark Premium.

**RARC (Risk Adjusted Rate Change)**

To calculate RARC, the following steps need to be undertaken:

- Estimate how much the underwriter could have charged a year ago for this year’s policy on this year’s terms & conditions and expected loss costs
- The relative difference between the ‘as if’ price and the actual price achieved is called Risk Adjusted Rate Change (RARC)
- RARC therefore equates to:

\[
\text{Price charged this year} - \text{Price charged for this year’s coverage last year} \\
\text{Price charged for this year’s coverage last year}
\]

RARC always contains elements of expert judgement and subtle different views within an organisation often exist e.g. how to deal with claims inflation.

Syndicates are required to complete all the rate change fields at the granularity required. Therefore, the risk adjusted rate change fields 180, 190, 200 and 210 are expected to be completed for all renewed risks. If however the rate change is unknown for any risk, there must be a process in place to record an ‘N/C’ response in all these fields. An aggregated exposure change may not be recorded in field 200 with 180 and/or 190 being always reported as zero. Zero defaults in any of the rate change fields are not acceptable. For further information on RARC, including examples, please refer to the PMDR section on lloyds.com which can be found at the following link:

[Link to Lloyd’s PMDR can be found in the Appendix at the end of this document]

**Data Returns**

For the avoidance of doubt, the Franchise Board will use performance management data gathered from managing agents for the purposes of effective and efficient prudential supervision but it will not use such data for the purposes of instructing managing agents as to the pricing of individual risks in any given instance.

**Potential Evidence**

- PMDR information;
- Written Guidelines; and
- Evidence of the analysis of the impact of non-renewed business on the current portfolio.
UW 4.4
Price and Rate Monitoring Audit and Review

Managing Agents shall have effective systems and controls in place to audit and review pricing and rate monitoring for each managed syndicate

Managing agents shall ensure that:

- all relevant pricing and rate monitoring information is recorded by underwriters with regular internal reviews and checks for data quality;
- Personnel with relevant experience (such as actuaries) periodically check that pricing models are being used appropriately;
- terms of reference for Independent Reviewers include a requirement to review pricing and rate monitoring to ensure consistency of approach with stated policies of the syndicate; and
- the board is provided with a report, at least quarterly, which compares the outcome of the pricing and rate monitoring processes against the Syndicate Business Plan targets.

Reviewing Pricing Activity

It is expected that a process of review will be in place to ensure that the managing agent’s pricing methodologies are being adhered to.

Independent Review

The role of the Independent Reviewer is to provide the Managing Agency Board and management with regular reports, in line with their Terms of Reference to provide independent assurance as to the extent to which the syndicate’s strategies and pricing/underwriting policies are being applied correctly and consistently based on the review of a selection of risks written recently by the underwriters.

Please refer to feedback and guidance on a) Peer and Independent review and b) Terms of Reference for Independent Review which can be found at the following link:

[Link to Peer and Independent Review can be found in the Appendix at the end of this document]

[Link to Guidance on Terms of Reference for Independent Review can be found in the Appendix at the end of this document]

Board Reports

Managing agents may wish to share the monthly Lloyd’s PMDR feedback and quarterly Lloyd’s Performance Information Pack with the board as part of their reporting on pricing and rate monitoring against the Syndicate Business Plan targets.

Potential Evidence

- Terms of reference for Independent Reviewer(s);
- Independent Reviewer(s) reports; and
- Information provided to the managing agency board and committees.
SECTION 5 - EXPOSURE MANAGEMENT

Principle: The managing agent has effective systems and processes to record, monitor and assess its underwriting exposures

UW 5.1 Exposure Management System and Controls Framework

Managing Agents shall have effective systems and controls for managing exposure for all classes of business

Managing agents shall:

- have effective, documented policies and procedures in place for managing exposure;
- ensure that policies are agreed by the board, and aligned to the articulated risk appetite, Own Risk and Solvency Assessment (ORSA), Syndicate Business Plan, underwriting controls and capital setting process;
- include within policies and procedures:
  - risk appetite statements that specifically include exposure and, where applicable, catastrophe risk;
  - procedures for risk recording, loss estimation, control and monitoring;
  - clear identification of responsibility for ensuring that all relevant, material, quantifiable exposure and Catastrophe related risks identified are represented in the internal model;
  - clear identification of responsibility for systematically considering exposure related risks that may not yet be explicitly represented in the internal model, including emerging risks;
  - the managing agent’s approach to catastrophe risk, including how it is represented in the internal model; this shall be consistent across exposure management, underwriting, capital modelling and business planning;
  - the methodology for validating exposure management tools; and
  - managing the use of external models for exposure management.

Lloyd’s expects all managing agents to have appropriate documentation to effectively manage exposure. There is no specific set list of documentation titles that an agent should hold but there are a number of areas that an agent will be expected to cover in their exposure management documentation as discussed below. The level and detail into which the agent will address these areas should be proportionate to the risk involved. There is no requirement for process documentation to be signed by the Board.

Managing agents will have defined the level of exposure and risk (howsoever expressed) that they wish to assume; and that exposures and/or loss potential can be routinely monitored relative to the stated risk appetites.

There are many ways to express risk appetites. Common methods relating to exposure and loss potential include:

- probabilistic loss estimate (e.g. 1-in-100 OEP no greater than x);
- deterministic loss estimate (e.g. for scenario 1, losses no greater than x); and
- aggregate exposure (e.g county-level aggs for country 1 no greater than x).

The key point is that exposures and/or loss estimates must be capable of being monitored and reported in the same terms as the risk appetite.
‘Catastrophe Risk’ does not just mean natural catastrophes affecting property. It includes any class for which major non-independence events could occur.

Exposure managers are expected to understand how the material outputs have been used in the internal model and to be comfortable that any amendments made are appropriate. However, Lloyd's understands that not all emerging risks can be included in capital modelling, especially if the facts are still unclear and the level of risk uncertain, in such cases the risks may be handled through other means such as use of appropriate policy wording or sublimits.

Whilst the models should be consistent across the agency this does not mean that the internal model has to include all the complexity of pricing models, but that the core assumptions within each model should be consistent. Where complexity is omitted from the model it should be tested to ensure that this is not a material omission.

The documentation should additionally cover selection, validation (including approach, roles and responsibilities, frequency, and escalation of challenges made) and change of external catastrophe models and other loss estimation techniques.

**UW 5.2**

**Materiality, Risk Recording for Exposure Management and the Internal Model**

Managing agents shall have clear processes for recording and considering all material accumulations of underwriting exposures and loss potential, and ensure appropriate representation within the internal model

Managing Agents shall:

- define and clearly articulate what levels of exposure and/or loss potential are considered material;
- have a process of risk ranking that reflects risk appetite and controls; and that clearly identifies the key risk data, exposure data and loss potential in assessing materiality; and
- ensure that data is obtained when risks are underwritten, and entered promptly into a robust risk recording system capable of capturing and storing risk and policy information, from which data can be extracted in a timely manner, with appropriate adjustment to give a complete risk profile;
- ensure that there is appropriate monitoring and reporting of both in-force and planned exposures against catastrophe risk appetite and other controls;
- have robust systems and processes whereby data outputs from Exposure Management systems and assessments of Non Modelled Risks are incorporated into the Internal Model; and
- ensure that Internal Model change management processes apply to Exposure Management.

Solvency II guidance specifies that data should be “accurate, complete and appropriate”.

[See internal model data standards for further detail on data requirements].

Lloyd's would expect all risks to be identified – even if approximately. The principle is that there should be no “gaps” in the agent’s view of the risks they have on the books.

The requirement for completeness in the context of risk-recording for exposure management will be strongly linked to materiality both of exposure and loss potential. For example, if US Hurricane is a very material catastrophe risk, data-capture would be expected to be sufficiently detailed to allow appropriate loss-modelling. This may include capturing street-level geo-coding and key building characteristics. Methods of loss-estimation for a less material region/peril may not benefit from this level of data-capture, and the requirement could be commensurately reduced.
Similarly, gauging “appropriateness” may involve deciding that loss-modelling techniques for a particular accumulation risk are not yet sophisticated enough to incorporate some characteristics of the insured risk. Therefore, it may be appropriate not to capture them.

Conversely, the available exposure-data may not be sufficiently detailed to be considered “accurate, complete and appropriate”, and insured (or other) values may require adjustment to make up for data deficiency.

Systems and processes, including data-capture, which may be appropriate when materiality is low, may not be when it is higher. Example actions would be to include appropriate adjustments / loading and managing agents need to have a plan on how to address these.

Managing agents should note that planned exposures’ means foreseeable movements in exposure levels in the near future, for example as a result of known corporate intentions including acquisitions, disposals or mergers, growth in classes that is in the plan (e.g. an intention to write international property).

When catastrophe risks are material, a syndicate’s Internal Model may rely heavily on outputs from exposure management systems, whether exposure-based or estimates of losses, in representing accumulation risk. Exposure management outputs may include stochastic losses, exposure data, deterministic loss scenarios, etc. There may also be outputs from the process of systematically considering ‘non-modelled risks’. The processes whereby these various outputs are incorporated into the Internal Model should be documented. Where the exposure management and capital modelling functions are performed by separate teams, the respective responsibilities of both teams for data-transfer, knowledge-transfer and peer-review should be considered and defined.

Possible ‘disrupters’ of the process can include new lines of business, new types of exposure and emerging understanding of risk. While these cannot always be foreseen, a close working relationship between exposure management and capital modelling will have the best chance of understanding them if and when they occur.

**UW 5.3**

**Exposure Management Methodologies for Loss Estimation and Assessment**

Managing Agents shall use appropriate loss estimation techniques for each managed syndicate.

*Managing agents shall ensure that:*

- exposure and loss potential are assessed using one or more documented, validated methodologies or models;
- the assessment / modelling is carried out by appropriately skilled and experienced personnel;
- there are formal processes to communicate material uncertainty to nominated committees and the board;
- following a material event, they review and adjust their existing models and underlying assumptions as appropriate;
- any external model used meets generally accepted and regulatory requirements for an internal model; and
- when outsourcing the operation of a catastrophe model (or other loss-estimation technique) responsibility for understanding the model, including selection, validation and change, remains with the managing agent.
The methods used in exposure management need to be (and can be shown to be) valid, robust, appropriately consistent and properly understood. This applies both to understanding exposures and estimating loss potential. The methodologies or models may be internally developed or externally sourced. The requirement for them to be documented, validated and understood remains the same.

Where differing methodologies in use or under consideration produce varying views of loss potential, the reasons for the variances should be investigated and understood. Lloyd's would encourage multiple views of risk to avoid over optimising to any one set of model assumptions.

Methods may differ depending on relative materiality of accumulation risk, or for other reasons. However, methods should generally be consistent within categories or classifications of materiality, as should levels of validation.

The communication of uncertainty is an emerging area of discipline and expect market practices to evolve. We encourage senior management awareness and understanding of the potential for uncertainty in reported exposures and (particularly) loss estimates. Uncertainties could include: data, key model parameters, available scientific consensus, in-model randomness, and omissions from the model.

Lloyd's understand that each event has unique characteristics, single events rarely invalidate models. Events may highlight data deficiencies or errors in assumptions which can be improved going forward – they may highlight areas of hazard that are omitted and indicate they are more material than thought. Before Cat modelling firms provide formal updates we’d expect firms to be making approximate adjustments if material and re-calibrate models as necessary as soon as practicable.

When using an external model, whether internally or outsourced, agents should ensure that professional standards apply in the selection, validation and use of these models. All outsourced modelling should be adjusted if necessary so it is aligned to the agent's own view of risk.

**UW 5.4**

**Internal and External Review and Reporting of Exposure Management**

Managing agents shall regularly review exposure and loss potential in line with exposure management policies and procedures, and report to the board and Lloyd’s as required.

**Managing agents shall:**
- have systems and processes for appropriate and regular reporting of exposure and loss potential to a nominated committee and the board;
- ensure formal, evidenced sign-off of exposure-management reports at the appropriate level, including regular challenge and testing of assumptions independently of the exposure management function by individuals who have sufficient knowledge and experience;
- regularly review their exposures against Lloyd's thresholds and seek Lloyd's approval for any actual or foreseeable exceedances;
- produce Lloyd's exposure management returns, as required;
- ensure that recording practices and processes should be regularly audited as appropriate by suitably experienced personnel, and that the audit findings are documented and evidenced; and
- ensure that they meet the requirements of the Data Protection Act.
The Board and senior management should be aware of exposure and loss potential; they should be able to relate these to cat-risk appetite and other controls; they should be able to discuss and consider exposures in the context of the wider business; and they should be appropriately aware of actual or potential exceedances against plan. The following may be helpful in considering appropriate frequency and detail of reporting to the Board:-

- the materiality of exposure to accumulation risks, for example different region/perils for property catastrophe;
- how much the portfolio is likely to be changing at different times during the year;
- levels of exposure and loss potential relative to cat-risk appetite; and
- recent loss experience.

The Board can delegate responsibility for receiving more frequent reports to a nominated committee. Such a delegation should generally be in writing. Its terms of reference, or other procedural documents, should include exception reporting and escalation procedures. Reporting should include reference to risk-appetite statements. There should be evidence that the Board and nominated committee have considered and discussed reported exposures, including the process of challenging and testing assumptions. In terms of frequency, the expectation for Board reporting is at least six-monthly. Annual is unlikely to be enough. Examples of evidenced sign-off include meeting minutes of a nominated committee or the Board.

There should be a defined, documented process for regular challenge and testing of exposure assumptions, including identifying the role(s) which have this function. The process should specify responsibility for evidenced sign-off of challenge, and how this is reported. “Sufficient knowledge and experience” for independent review and challenge can come from a number of sources, including underwriting (“why has the RDS gone up so much in the last six months?”) and capital modelling (“why is there an assumption of no dependency between these classes of business?”). Where a managing agent uses an external catastrophe model, the process of model validation will itself involve challenge and testing of assumptions; documentation of this process would constitute evidence of challenge.

The agent should ensure that the controls on exposure and loss potential are understood and taken seriously at all levels; that senior management are made aware of potential breaches as soon as possible; that there are processes for dealing with potential breaches; and that appropriate remedial actions follow actual exceedances. Materiality of an actual or potential exceedance will indicate what level of reporting and remedial actions, if any, may be required. There should be evidence of notification and discussion. Examples of early warning of potential breaches could include specific reporting when levels of exposure or loss potential are at x% of a threshold.

Recording exposures correctly, in the context of a managing agent’s business, is fundamental to managing them. A key control is for managing agents’ internal audit or oversight functions to regularly review the processes for recording exposures. Where a managing agent’s internal audit or oversight team does not have the necessary experience to fulfil this function, it should be outsourced. The audit should include the annual self assessment against minimum standards. Conversely, the self-assessment against exposure management minimum standards should take account of the audit findings.
SECTION 6 – REINSURANCE MANAGEMENT & CONTROL

Principle: The managing agent has effective controls in place to manage all aspects of the outwards reinsurance protections for each managed syndicate, including placement, loss recovery and counterparty risk.

UW 6.1
Reinsurance Strategy & Planning
Managing agents shall have a clear and comprehensive Reinsurance Strategy and Purchasing Plan for each managed syndicate

Managing agents shall ensure that the Reinsurance Strategy and Purchasing Plan:
- is clearly documented and agreed by the board;
- is subject to regular review and challenge;
- takes into account the syndicate's underwriting strategies and appetite for retained insurance risk;
- reflects the nature, scale and complexity of the syndicate's reinsurance arrangements and business protected;
- includes a clear strategy for the selection and approval of all reinsurance counterparties;
- recognises the potential financial, business and contractual risks and potential conflicts of interest;
- considers Lloyd's and other appropriate external regulatory and accounting requirements and guidelines; and
- has a clearly defined approach to using non-standard reinsurance or alternative risk transfer arrangements, including prior approval from the board, Lloyd's and the managing agent's auditors if these approaches are to be used.

The ultimate responsibility for Reinsurance Strategy and Purchasing Plan approval rests with the board and this should be formally documented. It is however accepted that it is common for the managing agency board to delegate authority to committees or individuals for specific elements of the plan formulation, review and agreement. In such circumstances the scope of authority provided to committees and/or individuals should be clearly documented.

A syndicate’s Reinsurance Strategy should be reviewed by the board regularly. We would recommend every 3-5 years.

A syndicate’s Reinsurance Purchasing Plan should be reviewed annually.

The documented Reinsurance Strategy should outline the syndicate’s philosophy, business drivers and objectives for the purchase of reinsurance. It should outline how the Reinsurance Strategy supports the risk appetite of the syndicate both per loss and in aggregate, and how this influences the scale, breadth and attachment of the reinsurance purchased. We would expect key considerations to be expressed within the Reinsurance Strategy and Purchasing Plan documents where appropriate, examples of such include but are not limited to:

- The proportion of risk to be ceded;
- The proportion of income to be ceded;
- The setting of retention levels (monetarily / probabilistically) ; Per Risk, Cat, Aggregate (both initial and in excess of the reinsurance protections);
- The setting of “From Ground Up” and programme limits (monetarily / probabilistically); Per Risk, Cat, Aggregate;
- The setting of horizontal covers, such as reinstatements, aggregate limits etc.;
• Defining the acceptable and unacceptable types and forms of reinsurance cover and structure;
• Defining contract wording minimum requirements, e.g. what the acceptable and unacceptable levels of gap in cover are, and the associated exclusions, restrictions & limitations, and legal construction;
• Defining core / essential and non-core / non-essential reinsurance protections; and
• Defining whether the reinsurance protection is designed to protect profitability / earnings, capital, reputation etc., or a combination of all.

The Syndicate Business Forecasts (SBF) submission for each managed syndicate should include details of the syndicate reinsurance strategy and plan for the planned year of account (YOA), and include details of key features and all material assumptions and dependencies, in accordance with the published SBF instructions.

The content and level of detail within the documented Reinsurance Strategy and Purchasing Plan should reflect the level of structural and coverage complexity, financial materiality and breadth and diversity of the business protected. It should be tailored for each syndicate managed.

The Reinsurance Strategy and Purchasing Plan should include reference to reinsurers, intermediaries and collateral providers and:

• Outline what is required from the relationship with reinsurance counterparties, e.g. technical support, pure capacity etc.;
• Outline the business model features of acceptable reinsurance counterparties, e.g. structure, strategy, traditional markets versus non-traditional etc.;
• Consider the potential risks associated with over reliance or financial dependency on individual reinsurance entities or groups;
• Consider the minimum level of acceptable financial strength of counterparties including a clear definition of how this should be assessed; and
• Outline acceptable levels of counterparty concentration levels, per loss, per event, and in aggregate.

The documented Reinsurance Strategy and Purchasing Plan should identify and quantify any potential risks or material dependencies inherent within the approved Strategy or Purchasing Plan.

The acceptance of these risks and dependencies by the board shall be clearly documented along with the rationale for acceptance and the risk management / mitigating actions to be taken.

The Reinsurance Strategy and Purchasing Plan should cater for all relevant regulator and Lloyd's byelaws, guidelines, and operating & reporting requirements, it being accepted that these will be subject to change from time to time.

Lloyd’s guidelines and byelaws associated with outwards reinsurance currently include, but are not limited to, the following topics:

• Minimum net retained lines / exposures;
• Using reinsurance to enable aggressive arbitrage;
• Undue reinsurance counterparty concentrations;
• The use of shared reinsurance contracts;
• Matching reinsurance for Multi-year policies (greater than 18mths);
• Reinsurance placed with Related Parties;
• Reinsurance placed with other syndicates managed by the same managing agent;
• Lloyd’s prior approval of non-standard reinsurance or alternative risk transfer arrangements; and
• Lloyd’s prior approval of any Qualifying Quota Share reinsurance arrangements.

Further details can be found at the following links:

[Link to Lloyd’s Market Bulletins can be found in the Appendix at the end of this document]

All such arrangements require prior approval from the board, Lloyd’s and the managing agent’s auditors. The auditors sign off should include confirmation regarding compliance with applicable accounting and regulatory requirements.

It is accepted that there currently is not a globally accepted list or definition of “non-standard” reinsurance. Lloyd’s currently consider a reinsurance contract as “non-standard” if it falls within the following working definition:

“Any reinsurance contract or financial instrument which has been deemed as reinsurance by the managing agent but which is not directly based on the principle of indemnity or is based on a contract wording which has limited or no demonstrable risk transfer mechanism.”

If a contract falls into this definition then the managing agent would need to be able to:

• Clearly demonstrate that the recovery under the contract is based on the principle of indemnity; and
• Provide confirmation that the managing agents auditors have confirmed that the reinsurance contract conforms to applicable accounting and regulatory requirements.

If the above cannot be demonstrated and confirmed then the arrangement will not be considered or treated as reinsurance by Lloyd’s.

It is worth noting that in general terms Lloyd’s consider the form and structure of reinsurance contracts to fall into one of the following broad categories:

• ‘traditional’;
• ‘non-traditional’ (Lloyd’s would consider non-traditional reinsurance products to include products such as ILW’s and other parametric or indexed covers which have a primary trigger which is not the Reinsured’s Ultimate Net Loss, but which also have an indemnity based trigger within the contract.); and
• ‘non-standard’, as defined above.

**UW 6.2**

**Reinsurance Strategy & Plan, Implementation & Monitoring**

Managing agents shall ensure that the Reinsurance Strategy and Purchasing Plan are followed, implemented and kept under regular review for each managed syndicate

*Managing agents shall ensure that:*

• existing and planned reinsurance protections are consistently and appropriately considered within the business planning, exposure management, accounting and capital setting processes;
• any material amendments to the Reinsurance Strategy and Purchasing Plan are approved by the board and its implementation, operation and review is the responsibility of a nominated director(s); and
• approval is requested in advance from Lloyd’s for any deviations to the syndicate’s planned or actual reinsurance arrangements that would materially impact the syndicate’s Syndicate
Business Forecast and / or capital requirements.

A common understanding of the existing and planned reinsurance protections should be held by all appropriate business functions. In particular those involved in calculating or estimating the benefit and risks associated with the syndicate’s reinsurance protections.

The opinion and calculated benefits and risks associated with the syndicate’s reinsurance protections across the various business processes should be consistent, with any variance documented and rationalised.

If any material terms, conditions, restrictions and exclusions are not explicitly catered for in the modelling or calculation of any benefits and risks, then these should be highlighted and the impact of this approach should be clearly documented.

If the method of calculating or estimating the benefit arising from reinsurance protection(s) has been simplified in any business process so that it no longer fully reflects the actual structure and coverage of the reinsurance contract, this method and any associated assumptions should be clearly documented and appropriately validated and tested by the managing agent.

Material amendments to the Reinsurance Strategy, Plan and existing reinsurance arrangements

Please refer to guidance provided under UW 6.1 regarding board approval and delegation of authority. It is accepted that multiple directors may have responsibility for different aspects of the implementation, operation and review of the syndicate’s Reinsurance Strategy and Purchasing Plan.

Any board pre-agreed variances / tolerances to the Reinsurance Strategy or Purchasing Plan are to be recorded. Approval of material amendments should be recorded in writing.

Any amendments or changes to existing or planned reinsurance which could or will materially impact or change the financial performance of the syndicate or the capital required to support open years of business should be notified to the board and Lloyd's where appropriate. This would include but not be limited to alteration, re-negotiation, repudiation, commutation, termination of reinsurance protections.
Reinsurance Controls & Risk Framework

Managing agents shall have an effective systems and controls framework to support the management of all aspects of the outwards reinsurance for each managed syndicate.

Managing agents shall ensure that:

- there is a nominated director(s) with accountability for the reinsurance systems, controls and risk framework;
- appropriate written policies and procedures are in place to allow effective management of reinsurance placements and administration, and reinsurance recoveries / assets;
- roles, responsibilities and reporting lines, including reinsurance purchasing and signing authorities, are clearly defined, approved by the board and reviewed annually;
- risks relating to existing or planned reinsurance are identified, quantified and managed appropriately, including specific consideration of counterparty risks, and shared reinsurance arrangements where applicable;
- regular analysis and review is undertaken of the effectiveness of existing and planned reinsurance protections, including specific consideration of shared reinsurance arrangements where applicable;
- compliance with Lloyd's and other appropriate external regulatory and accounting requirements are monitored and reported;
- at required intervals, prescribed data returns are prepared and submitted to Lloyd's;
- amendments to existing reinsurance arrangements are evaluated and those with a material impact on the syndicate are reported to relevant business areas, nominated director(s) and the board in a timely manner;
- reinsurance information is accurately recorded and reported; and
- outwards reinsurance contracts comply with the principles of Contract Certainty.

The roles and responsibilities for the management of the documented policies, procedures and operational systems and risk management controls relating to reinsurance arrangements should be clearly documented, with nominated director(s) assigned accountability for their effective maintenance & operation.

The content and depth of the written policies and protocols shall reflect the syndicate’s Reinsurance Strategy and cater for any Lloyd's and other appropriate external regulatory and accounting requirements and guidelines.

The sophistication of the written procedures and processes should be proportionate to the nature, scale and complexity of the reinsurance arrangements and the business and operations they are protecting.

We would expect that the procedures would include but not be limited to the following activity:

- Pre-placement administration and project management;
• Post-placement administration, reporting and compliance with contractual terms and conditions;
• Protocols and processes that ensure that reinsurance contracts do not present undue levels of liquidity risk;
• Risk and materiality based management of reinsurance debtors;
• A document management policy and procedures to ensure that all reinsurance contracts and related documentation be retained until all Reinsurers actual or potential liability under the reinsurance contract(s) has ceased; and
• The ability to identify whether a risk underwritten by the syndicate is protected by any form of reinsurance (i.e. treaty or facultative).

Related Party Protocols & Procedures

Specific Lloyd’s guidelines exist relating to reinsurance protections with Related Parties, please refer to Market Bulletin Y4534 for full details which can be found at the following link:

[Link to Market Bulletin Y4534 can be found in the Appendix at the end of this document].

In addition to the provision of an annual Related Party Transaction Declaration & Disclosure Return, as outlined in Market Bulletin Y4534, managing agents are expected to be able to demonstrate that they have effective procedures in place and documentation explaining the protocols and processes for ensuring reinsurance transactions involving Related Parties, or between multiple syndicates managed by the same managing agent, are undertaken on an “arms-length” basis in regards to (i) pricing, (ii) contract wording and (iii) terms of trade, so as to:

• avoid potential conflicts of interest;
• ensure that the suitability of the transaction for the syndicate is independently evaluated; and
• ensure that risk transfer can be demonstrated.

Roles and Responsibilities

The roles, responsibilities and authorities of the departments, committees and individuals involved in the purchase and administration of reinsurance protections and the recoveries there from, should be clearly defined and documented.

The managing agent’s board should define the level and scope of delegated authority to be granted. Each individual who has been delegated authority should have a written authority document setting out the scope and extent of the reinsurance authority they have been granted.

When delegating authority the managing agent’s board shall give consideration to the following topics:

• Whether the individual has been granted the legal authority to sign reinsurance contracts on behalf of the syndicate;
• Whether the individual has authority to negotiate and approve commutations, novations or other reduced or negotiated settlements of reinsurance recoveries; and
• Whether the individual is permitted delegate in full or in part the authority they have been granted.

It is the responsibility of the managing agent's board to ensure that those with authority to purchase reinsurance have the necessary skills and capabilities, and purchase reinsurance in accordance with the authority granted and the approved plan.
**Risk relating to existing and planned reinsurance**

As outlined in UW 6.1 the documented Reinsurance Strategy and Purchasing Plan should identify and quantify any potential risks or material dependencies inherent within the approved Strategy or Purchasing Plan. The acceptance of these risks and dependencies by the board should be clearly documented along with the rationale for acceptance and the risk management / mitigating actions to be taken.

We would expect that the following high level elements would be considered as a matter of course:

- The risks of reduced or non payment by reinsurance counterparties, be they reinsurers, intermediaries or collateral providers;
- The risk of reinsurance premiums exceeding the budgeted cost;
- The risk of operational / administrative costs exceeding the budgeted cost; and
- The risk of reinsurers withdrawing or restricting capacity.

The causes of these risks are numerous and their materiality will vary depending on the specifics of the syndicate’s reinsurance arrangements, as such we would expect the syndicate’s risk framework to be tailored to reflect the specifics of the syndicate.

The following is a non-exhaustive list of examples of the causes / risks which we would normally expect to receive consideration, within the formulation of the Reinsurance Strategy, the highlighting of dependencies / risks within the Purchasing Plan and as part of ongoing risk monitoring:

- Contract dispute;
- Contract ineffectiveness;
- Cover erosion;
- Modelled loss not covered by reinsurance;
- Breach of terms and conditions / mid-term termination;
- Reinsurance counterparty unwilling to pay / negotiated settlement / commutation;
- Inability to obtain planned cover;
- Financial failure of reinsurer;
- Reduction in value or failure of collateralisation arrangements;
- Material reductions in the level of ceding and/or profit commissions budgeted for;
- The divergence of reinsurance rates and original rates;
- Material reduction and or restriction in breadth of cover at no rate reduction;
- Costs to administer exceed the reinsurance commissions received;
- Errors, omissions, misrepresentations found in reporting and / or accounting submissions; and
- File Audits / Inspection of records.

**Counterparty Risks**

The level of exposure to reinsurance counterparties, be they reinsurers, intermediaries or collateral providers, and the financial, contractual and strategic strength of these counterparties should be regularly assessed and monitored. Any financial risks arising should be managed appropriately.

We would expect managing agents to monitor and assess the syndicate's financial exposure to reinsurance counterparties. A process should exist to allow the reporting and consideration of the level of financial exposure the syndicate has to each counterparty, be it an individual reinsurer or group of companies, intermediary or collateral providers. We would normally expect this to be evaluated in terms of the premium and exposure ceded, the face value of contracts as well as unsettled and / or modelled or expected recoveries.
The managing agent would be expected to be able to effectively monitor:

- The financial strength of its reinsurance counterparties;
- The strategic, operational and legal structure of its reinsurance counterparties and changes made to it;
- Any changes in its reinsurer’s strategic objectives that are material to the syndicate’s reinsurance arrangements; and
- The willingness and ability of its reinsurance counterparties to settle reinsurance recoveries.

We would expect risk mitigation techniques to be considered and implemented wherever viable to manage, mitigate and control the risks identified, including:

- Appropriate key risk indicators are identified and monitored at least quarterly, including review by the managing agency board, with actions taken where appropriate; and
- Any residual or retained risks borne by the syndicate have been quantified and incorporated into the syndicate’s ERM framework and catered for in the syndicate’s capital modelling, e.g. Insurance Risk, Credit Risk, Operational Risk.

**Shared Reinsurance**

Specific Lloyd’s guidelines exist relating to reinsurance protections shared with other entities, please refer to Market Bulletin Y4534 for full details which can be found at the following link:

[Link to Market Bulletin Y4534 can be found in the Appendix at the end of this document]

In addition to the content of the aforementioned market bulletin, we would highlight that whilst shared reinsurance can provide significant cost and efficiency advantages to the parties involved it also presents increased risk potential to the syndicate.

The actions / activity of the other entities could negatively influence the effectiveness of the reinsurance protection(s). The risks to the syndicate should be appropriately identified and managed, in particular the potential for contract dispute and unexpected cover erosion.

We would expect managing agents to be able to demonstrate that they monitor and evaluate the ongoing effectiveness of shared arrangements, in terms of:

- The equitability of the allocation of reinsurance premiums, both M&D's and adjustments;
- The equitability of the allocation of reinsurance recoveries post loss both within the aggregate loss itself and compared to the original cost allocation / premium paid; and
- Monitoring and managing the level of reinsurance protection cover during the contract period to ensure that it has not been inequitably eroded by other reinsured entities, due to (i) the result of actual losses, (ii) the re-modelling of potential losses, (iii) the overwriting of exposures.

**Regular review of the effectiveness of existing or planned reinsurance protections**

Effectiveness should be considered in the context of the syndicate’s:

- insurance exposures / risks;
- underwriting strategy;
- business plans;
- capital requirements; and
- regulatory requirements and obligations.

We would recommend that the analysis and review activity features, where appropriate:
• actuarial opinion;
• legal opinion; and
• regulatory opinion.

The ongoing effectiveness of Shared Reinsurance should be specifically considered – see aforementioned guidance on Shared Reinsurance.

**Lloyd's and other regulatory and accounting requirements**

As outlined in UW 6.1, all relevant regulator and Lloyd's byelaws, guidelines, and operating & reporting requirements should be considered and included as part of the syndicate's Reinsurance Strategy and Purchasing Plan. The level of compliance / adherence should be monitored on a regular basis and reported to the nominated director(s), and where appropriate to the board.

**Lloyd's data and reporting requirements**

The managing agent is expected to accurately and consistently report details of the syndicate's actual 'in-force' reinsurance arrangements, planned reinsurance arrangements and reinsurance recoverables / assets to Lloyd's in accordance with Lloyd's reporting requirements.

There are currently a number of routine scheduled reporting returns which relate to outwards reinsurance, either in full or in part, these are summarised below:

- Syndicate Business Forecast (SBF);
- Lloyd’s Capital Return (LCR);
- Syndicate Reinsurance Programme (SRP);
- Quarterly Monitoring Return – Part A (QMA);
- Quarterly Monitoring Return - Part B (QMB);
- Realistic Disaster Scenario (RDS & RDL);
- Lloyd’s Catastrophe Model (LCM); and
- Related Party Declaration & Disclosure.

The content and frequency of these returns are subject to review and change. Additional returns both routine and specific may be requested at any time.

Specific consideration should be given to the disclosure and management reporting requirements of Lloyd's and other regulators in terms of counterparty concentration levels. Specific consideration should be given to the PRA’s requirements regarding Credit Risk within the INSPRU section of the Prudential Regulation Authority Handbook.

**Amendments to existing reinsurance arrangements**

Any change or amendment to an existing reinsurance arrangement should be evaluated and the financial and operational impact established. Where possible the level of financial tolerance or measure of materiality should be agreed in advance, along with an appropriate notification / referral process.

**Reinsurance information recording and reporting**

Reinsurance information, both administration and risk reporting, should be produced and monitored regularly (we would recommend at least quarterly), and be provided to the appropriate syndicate departments, committees and individuals for review and consideration.

We would expect key information to be provided on a routine, and exception basis, to the:
- Nominated director(s) with responsibility for the implementation, operation and review of the Reinsurance Strategy and Purchasing Plan;
- Nominated director(s) with accountability for the reinsurance systems, controls & risk framework; and
- the managing agency board.

With actions taken and documented where appropriate.

**Contract Certainty**

The syndicate's minimum contractual and cover requirements should be clearly defined in advance of placement / purchase, with any pre-agreed variances / tolerances clearly documented.

At the point of the inception or renewal of a reinsurance contract we would expect it to be clear what cover is in place and how this compares to the syndicate's approved Purchasing Plan and minimum requirements. Shortfalls or gaps should be notified to the appropriate nominated director(s), and board where material.

Reinsurance contracts and supporting documentation should clearly set out the conditions of cover, and wherever possible;

- Be drafted and reviewed taking into account technical, legal, accounting and underwriting input;
- Be in place prior to inception / renewal;
- Identify and quantify any variances, gaps or shortfalls in cover compared to the syndicate's requirements; and
- Be reviewed and signed by authorised personnel.

**UW 6.4**

**Reinsurance Controls & Risk Framework, Audit and Review**

Managing Agents shall audit and review the effectiveness of the systems and controls in place to manage outwards reinsurance for each managed syndicate

**Managing agents shall ensure that:**

- the reinsurance control and risk framework is subject to regular and appropriate internal audit review;
- there is regular exception reporting to identify potential variances or control failures and these are investigated and escalated as appropriate;
- a representative range of reinsurance protections purchased on behalf of the syndicate are checked regularly to ensure consistency of approach with the documented reinsurance policies & procedures;
- a representative range of risks underwritten by the syndicate are checked regularly to ensure that they comply with any reinsurance terms and conditions which may apply; and
- a representative range of claims are checked regularly to ensure that reinsurance recoveries are made appropriately.

We would recommend that routine reviews of the reinsurance control and risk framework be undertaken at around 2-3 year intervals. The actual frequency is down to the managing agent to decide, but should reflect:
- The scale of materiality / dependency the syndicate has on outwards reinsurance;
- The complexity of the reinsurance arrangements in place;
- The materiality of any change in reinsurance arrangements, procedures, personnel or responsibilities; and
- Whether previous reviews and / or actual experience has identified weaknesses in the control and risk framework.

We would recommend that regular exception reporting to identify variances and control failures should be undertaken at least twice yearly.

The volumes and frequency of reinsurance protections checked back to the reinsurance policy and procedures should be proportionate to the volume of reinsurance contracts purchased. It should include both treaty and facultative protections. We would recommend that this should be undertaken at least annually.

The volumes and frequency of risks written that are checked against reinsurance terms and conditions should be proportionate to the volume of risks written and the volume of reinsurance contracts purchased. It should include both treaty and facultative reinsurance protections. We would recommend that this should be undertaken at least annually.

The volumes and frequency of claims checked to ensure reinsurance recoveries are made appropriately should be proportionate to the volume of reinsurance recoveries and the volume of reinsurance contracts purchased. It should include both treaty and facultative reinsurance protections. We would recommend that this should be undertaken at least annually.
EXAMPLES OF DOCUMENTARY EVIDENCE PERTINENT TO ALL REINSURANCE MINIMUM
STANDARDS THAT LLOYD’S MAY REQUEST FROM TIME TO TIME:

- Outwards Reinsurance Strategy document(s) at whole account or class of business level;
- Outwards Reinsurance Purchasing plan(s) at a whole account or class of business level;
- Presentations made to the managing agent board in respect of outwards reinsurance and
  the associated minutes;
- Organisational structure charts;
- Operational process flow charts;
- Referral procedures;
- Reinsurance Policy and Procedure manuals;
- Risk appetite statements;
- Terms of Reference, agenda and minutes from committee meetings;
- Authority documents;
- CVs for key personnel;
- Reinsurance structure and pricing evaluation reports;
- Capital setting methodology documentation, validation reports and output reports;
- Reinsurance placement debrief reports;
- Exposure management modelling methodology documentation, validation reports and
  exposure reporting;
- Actual v plan monitoring reports;
- Operational reinsurance reporting;
- Exception reporting;
- Reinsurance schematics / pictorials;
- Sign-off procedures and records for Lloyd’s returns;
- Risk reporting;
- Syndicate’s ORSA;
- Reserving and pricing policies;
- Outwards reinsurance recovery plans / targets for current financial year;
- Reinsurance counterparty assessment and acceptance criteria;
- Bad Debt and Write-off policies;
- Security Committee terms of reference, agendas, reports and minutes;
- Terms of Business Agreement documents;
- Reinsurance contract wordings;
- Collateral agreement wordings;
- Trust account contracts;
- Letters of Credit;
- Internal audit reports;
- A syndicate’s Underwriting Management Minimum Standards Self-Assessment (SA) and
  associated internal reports and findings; and
- Copies of correspondence with the PRA and other regulators.
SECTION 7 – UNDERWRITING DATA QUALITY

Principle: There are effective systems and controls for managing, recording and reporting underwriting data to management and to Lloyd’s.

The data standards fall under two categories – underwriting data standards and internal model data standards. It should be noted that there are three data standards with requirements that apply consistently across both underwriting and internal model data (UW 7.1 = MDI 6.1, UW 7.2 = MDI 6.2 and UW 7.4 = UW 6.3 respectively) and although there is consistency in the wording of both the standards and requirements, guidance is different to reflect the different subject matter. There are also additional data standards that are specific to underwriting (UW 7.3) and internal model (MDI 6.4, MDI 6.5 and MDI 6.6). The standards are presented in this way to differentiate that there are two distinct areas of data.

These Data Quality Standards are primarily about the information managing agents and Lloyd’s use to support the other Underwriting Management Standards (as well as Claims Management) and should be read in conjunction with these other Standards which also reference data and reporting i.e.:

- Underwriting Strategy and Planning;
- Underwriting and Controls;
- Delegated Authority;
- Price and Rate Monitoring;
- Exposure Management; and
- Reinsurance Management and Control.

The focus is very much on enabling the management of underwriting performance versus the Syndicate Business Plans both within the managing agent’s business and in returns to Lloyd’s. These Data Quality Standards also need to consider where the same data is being used for other purposes as part of the business operations.

UW 7.1

Data Governance Framework

Managing agents shall ensure that they have appropriate data governance structures and procedures in place for underwriting.

Managing agents shall:

- appoint a nominated director(s) with accountability for oversight of the governance framework for underwriting data;
- have appropriate written policies and procedures in place to allow effective management, recording and production of underwriting data, which are reviewed annually;
- ensure that policies are agreed by the board;
- ensure that the data governance framework allows for the regular and appropriate reporting of underwriting data for executive management, the board and Lloyd’s; and
- ensure that roles, responsibilities and reporting lines, for the management of underwriting data are clearly defined, approved by the board and reviewed annually.
The data governance framework should capture the structures and procedures, including triggers for escalation, to support the quality of underwriting data. Managing agents should have a framework in place which shows clear oversight of the quality of underwriting data, responsibilities and accountabilities and ensuring the necessary management information is produced to determine whether the syndicate is meeting strategic plans, Syndicate Business Plans, budgets and forecasts etc.

The data governance framework should set the tone and provide appropriate oversight of the implementation of the data policy with regard to underwriting data necessary for sound decision making. In addition it should ensure appropriate, accurate, complete and timely reporting to support required governance and management decision making processes together with prompt detection of issues.

Lloyd’s expects managing agents to ensure that written data policies and procedures and standards are kept under regular review, at least on an annual basis. These documents should include the responsibilities and accountabilities of the various stakeholders across the managing agent and the quantity and quality of data metrics reported to management.

**UW 7.2**

**Systems and Processes**

Managing agents shall have systems and processes in place to record relevant underwriting data and use the output for reporting to management and to Lloyd's.

*Managing agents shall have systems and processes in place:*

- to record underwriting data which is sufficient in granularity and coverage to appropriately monitor underwriting performance against strategic plans, Syndicate Business Plans, budgets and forecasts;
- with relevant data from models and forecasts built into the data infrastructure for the production of underwriting data returns to Lloyd's; and
- to meet other appropriate external regulatory requirements and guidelines.

Managing agents should ensure that they have systems, modelling tools and analysis methodologies in place to meet the requirements of the business. It is important that systems and processes relating to underwriting data can produce timely and accurate returns to executive management, the board and ultimately to Lloyd’s and external regulators in the required format.

Relevant data from models and forecasts, i.e. to calculate risk adjusted rate change, benchmark price etc. must be part of the data infrastructure to allow for data integrity and accuracy to be achieved on Lloyd's underwriting data returns.

Lloyd’s expects managing agents to give due consideration to IT systems with regard to underwriting data so that the quality and integrity of the data and its processing is not compromised.

Personnel will need relevant skills and experience to ensure that there is:

- familiarity with systems, processes and tools;
- recognition of market groups within the Lloyd’s market and external service providers who could assist with data solutions; and
- consideration of any tools / techniques suggested by Lloyd’s.
Managing agents shall ensure that underwriting data reported internally and in returns to Lloyd’s and other external regulators is appropriate, accurate, complete and produced in a timely manner.

Managing agents shall:
- ensure that the executive management team and the board receive regular and appropriate underwriting data reports, including those produced by Lloyd’s, to enable management to monitor underwriting performance;
- comply with Lloyd’s instructions for the preparation of underwriting data returns;
- ensure underwriting data returns are appropriate, accurate, complete and submitted on time;
- identify key owners specifically for the production of Lloyd’s underwriting data returns;
- have a schedule in place for underwriting data reporting time frames; and
- ensure that internal Management Information is consistent with that reported to Lloyd’s and other external regulatory returns.

The KPIs within executive reports should show whether business performance is progressing in line with the strategic plans, Syndicate Business Plans, budgets and forecasts. There should be sufficient information to provide clarity on the current position and the likelihood of meeting annual targets (including historic data for comparison purposes can assist with this). Whenever there are changes to Syndicate Business Plans, these are to be reflected in the reporting.

Executive management and the board should be aware of the returns that are being issued externally to Lloyd’s and to regulators.

It is not the intention that Lloyd’s will routinely test external returns to other regulators as part of a review of Data Quality Standards, but there is an expectation that these should be capable of reconciliation to internal Management Information and Lloyd’s returns. Should an issue arise with an external regulator and testing becomes necessary, Lloyd’s expect managing agents to be able to demonstrate how the information reconciles. As part of any Self Assessment against the Data Standards, managing agents should identify where they have had any material issues arising from regulatory returns.

For the PMD return (PMDr), syndicates are required to complete all the rate change fields at the granularity required. Therefore, the risk adjusted rate change fields 180, 190, 200 and 210 are expected to be completed for all renewed risks. If however the rate change is unknown for any risk, there must be a process in place to record an ‘N/C’ response in all these fields. An aggregated exposure change may not be recorded in field 200 with 180 and/or 190 being always reported as zero. Zero defaults in any of the rate change fields are not acceptable. Lloyd’s provides clear instructions on how to complete each return. Examples can be found at the following links:

[Link to PMDR can be found in the Appendix at the end of this document]
[Link to SBF Instructions can be found in the Appendix at the end of this document]
Managing agents shall have processes in place to review the systems and controls framework ensuring underwriting data is accurate and complete.

Managing agents shall ensure that:
- there is regular exception reporting to identify potential variances or control failures in recording and producing underwriting data and these are investigated and escalated as appropriate;
- the quality of underwriting data is continuously assessed to ensure accuracy, completeness and appropriateness; and
- the systems and controls framework for underwriting data is subject to regular and appropriate internal audit review.

Throughout the production process of data, from recording to reporting, Lloyd’s expects controls to be in place to ensure accuracy and completeness of data, which can include data error reports / validation reports / exception reports etc. For example, exception reports may address larger premiums or line size, entries with unusual currencies for the syndicate, high acquisition costs, blank data fields where information would be expected to have been entered etc.

There should be a process of checking the quality of data on a timely, frequent and ongoing basis with due regard to the materiality and the potential risk associated with inaccuracies. Where data entry is outsourced, accountability and responsibility remains with the managing agent who should also have a process of quality checking.

Managing agents are expected to have an Internal Audit programme in place. Internal Audit are required to undertake regular reviews of the systems and controls for underwriting data for the production of Management Information and returns to Lloyd’s and other appropriate external regulatory and accounting returns. This programme should include:

- Data validation & consistency;
- Data completeness;
- Effectiveness of analysis procedures;
- Process of converting data to Management Information; and
- Reporting accuracy / completeness / timeliness.

Potential evidence

- Data Flows;
- Data Policy;
- Data Procedures;
- Data Exception/Validation Reports
- Information provided to the Managing Agency Board and Committees;
- Internal Audit Plan;
- Internal/External Audit Reports on data quality;
- IT Infrastructure;
- Lloyd’s Returns;
- Reports from Lloyd’s to the managing agent;
- Structure Chart;
APPENDIX – LINKS

SECTION 1: UNDERWRITING STRATEGY & PLANNING

- CMR business plan instructions:
  http://www.lloyds.com/~media/files/the%20market/communications/market%20bulletins/2014/03/y4778.pdf#search=CMR

- Franchise Guidelines
  http://www.lloyds.com/supplementalrequirements

- AFR guidance:

SECTION 2: UNDERWRITING & CONTROLS

- Crystal:
  http://www.lloyds.com/the-market/tools-and-resources/tools-e-services/crystal

- London Market Group Website:
  http://www.londonmarketgroup.co.uk/

- Lloyd’s Wordings Repository:

- Lloyd’s QA tools:

- Peer and Independent:

- Guidance on Terms of Reference for Independent Review:

SECTION 3: DELEGATED AUTHORITY

- Code of Practice – Delegated Underwriting:
• Service Companies Code of Practice:
  http://www.lloyds.com/the-market/i-am-a/delegated-authority/service-companies

• Coverholder Audit Scope:
  http://www.lloyds.com/the-market/i-am-a/delegated-authority/compliance-obligations/audit-
  scope

SECTION 4: PRICE AND RATE MODELLING

• Lloyd’s PMDR:
  http://www.lloyds.com/pmdr

• Peer and Independent Review:
  http://www.lloyds.com/~media/Files/The%20Market/Operating%20at%20Lloyds/Minimum%20

• Guidance on Terms of Reference for Independent Review:
  http://www.lloyds.com/~media/Files/The%20Market/Operating%20at%20Lloyds/Minimum%20
  standards/Minimum%20standards%202/IR%20TOR%20Guidance.pdf

SECTION 5: EXPOSURE MANAGEMENT

• None

SECTION 6: REINSURANCE

• Lloyd’s Market Bulletins:
  Supplemental-Requirements-and-Guidance

• Market Bulletin Y4534:

SECTION 7: UNDERWRITING DATA QUALITY

• PMDR instructions:
  http://www.lloyds.com/pmdr

• SBF instructions: Issued annually, latest version is here -
  http://www.lloyds.com/~media/files/the%20market/communications/market%20bulletins/2014/03/y4778.pdf#search='CMR'
MS2 - CLAIMS MANAGEMENT

CLAIMS MANAGEMENT PRINCIPLES, MINIMUM STANDARDS AND REQUIREMENTS

These are statements of business conduct required by Lloyd’s. The Principles and Minimum Standards are established under relevant Lloyd’s Byelaws relating to business conduct. All managing agents are required to meet the Principles and Minimum Standards. The Requirements represent the minimum level of performance required of any organisation within the Lloyd’s market to meet the Minimum Standards.

Within this document the standards and supporting requirements (the “must dos” to meet the standard) are set out in the blue box at the beginning of each section. The remainder of each section consists of guidance which explains the standards and requirements in more detail and gives examples of approaches that managing agents may adopt to meet them.

GUIDANCE

This guidance provides a more detailed explanation of the general level of performance expected. They are a starting point against which each managing agent can compare its current practices to assist in understanding relative levels of performance. This guidance is intended to provide reassurance to managing agents as to approaches which would certainly meet the Principles and Minimum Standards and comply with the Requirements. However, it is appreciated that there are other options which could deliver performance at or above the minimum level and it is fully acceptable for managing agents to adopt alternative procedures as long as they can demonstrate the Requirements to meet the Principles and Minimum Standards.

DEFINITIONS

Claims Business Plan: the managing agent’s documented annual plan(s) for delivery of claims-related objectives.

Claim Reserves: are contingent financial provisions based on available information, which do not necessarily indicate a coverage position or expected outcome unless and until the insurer(s) accepts coverage without reservation.

External Expert: any external organisation or person retained by the insurer (or on the insurer’s behalf) to provide services in relation to the assessment, settlement, or other resolution of one or more claims.

Syndicate Business Plan: means a business plan prepared by a managing agent in accordance with paragraph 14A of the Underwriting Byelaw.

The Board - Where reference is made to the board in the standards, agents should read this as board or appropriately authorised committee. In line with this, each agent should consider the matters reserved for the board under the Governance Standard in order to evidence appropriate full board discussion and challenge on these subjects.

TPA - is an organisation that has authority to determine claims settle and process claims on behalf of an insurer. Responsibilities can include loss valuation and the setting of reserves.
SECTION 1: CLAIMS MANAGEMENT PROCESSES

**Principle:** Managing agents shall have a claims management philosophy which is clearly documented, communicated within the managing agent and reflected in the management and organisation of the business.

**CLM1.1**

**Claims Management Philosophy**

Managing agents shall have a claims management philosophy which is clearly documented, communicated and reflected in the organisation of the business.

*Managing agents shall ensure that the claims management philosophy:*

- includes a documented Board commitment to, and oversight of, an effective claims management process and commitment, where appropriate, to fulfilling responsibilities to followers;
- includes Board commitment to adjust and manage claims on the merits consistent with Lloyd’s Claims Management Principles and Minimum Standards;
- nominates a director with specific Board responsibility for effective claims management;
- is reflected in the management of the business;
- includes regular review by the Board of the efficiency and effectiveness of the claims management process using appropriate management information;
- is communicated internally to all relevant personnel; and
- is documented and communicated to staff whose jobs involve or relate from time to time to claims handling, reserving or underwriting.

The managing agent’s claims management philosophy should reflect its commitment to effective and efficient claims management.

A claims director need not be appointed to the Board with responsibility solely for claims management, although it is likely that many managing agents will adopt this approach. Where this is not the adopted approach, reporting need not be directly between the head of claims and the Board but may be via another individual or Board appointed, senior management committee, but an individual member of the Board must have ultimate responsibility for and representation of claims management. Whatever approach is preferred, Lloyd’s will look to confirm that there is appropriate representation of the claims function at Board level and effective oversight.

Sufficient management information should be available to the Board to facilitate effective oversight of the claims function.

The claims management philosophy should be freely available to all staff who may require it and its whereabouts should be clearly communicated to all staff.
SECTION 2: CLAIMS BUSINESS PLAN

Principle: Managing agents shall ensure that planning, measurement and review of claims management performance and capabilities is appropriate and regular.

CLM2.1
Claims Business Plan
Managing agents shall prepare annually a written Claims Business Plan. Managing agents shall ensure that:
- the syndicate business plan addresses the management of claims and includes the setting of objectives and targets related to claims management;
- the Claims Business Plan is approved before the end of the prior calendar year by the Board or a delegate of the Board for that purpose;
- there is Board commitment to ensuring that claims related information and knowledge is available for, and used in, business planning and decisions; and
- the organisational structure facilitates this process.

Each Claims Business Plan (CBP) should address the management of claims, reflecting the classes of business written or proposed to be written in the Syndicate Business Plan (SBP).

The use of claims related information in the SBP development should be evident in the documents which support and demonstrate the development of the SBP (such as meeting minutes, reports and briefing papers).

CLM2.2
Performance Management
Managing agents shall ensure that measurement and review of claims management performance and capabilities is appropriate and regular. Managing agents shall ensure that:
- the Claims Business Plan includes relevant Key Performance Indicators relating to the delivery of objectives and internal performance targets for claims management;
- progress against the Claims Business Plan is reported to the Board, in writing, at least quarterly and with variances identified and subsequently addressed; and
- written criteria for the assessment of claims management performance are sufficiently broad, subject to assessment and in regular use.

No specific guidance has been written for these standards and requirements which are self-explanatory.
SECTION 3: SKILLS AND RESOURCES

Principle: Managing agents shall have appropriate claims resources, skills and management controls in each class of business written or proposed to be written.

CLM3.1

Resource Planning
Managing agents shall have appropriate claims resources and skills in each class of business written or proposed to be written.

Managing agents shall ensure that:

- there is appropriate claims resourcing, structure and succession planning for the classes of business written and adequate planning and resourcing to address business development;
- training, development and resourcing needs are identified and addressed in a timely manner as appropriate to the circumstances; and
- appropriate skills have been identified and are being developed and supported via appropriate training and development processes, which include consideration of changes in the applicable legal and regulatory environment(s).

The managing agent should have in place appropriate claims resourcing planned for the managing agent’s business mix, including any new lines of business and growth areas. This should include consideration of plans for dealing with events that can generate a high volume of claims.

Succession planning should take a risk-based approach with particular attention to contingencies and continuity in claims management. Such an approach could include creating bespoke succession plans for certain individuals, and team or class of business level succession plans.

Appropriate training and development processes should include continuing assessment of training needs and responses that address those needs as they arise, as part of a training program. Ad hoc training and training in response to legal and regulatory changes may supplement and be a part of the program.

CLM3.2

Resource Management
Managing agents shall have appropriate management control of resources in each class of business written or proposed to be written.

Managing agents shall ensure that:

- there are job descriptions for each role;
- claims staff have documented authorisation levels for settlement and reserving appropriate to the type of claim, their experience and skills; and
- individual authority levels are reviewed at least annually and adjusted as circumstances require for efficient and effective claims management.

No specific guidance has been written for these standards and requirements which are self-explanatory.
SECTION 4: CLAIMS PROCESSING

Principle: Managing agents shall ensure that claims are adjusted and processed in an accurate and professional manner and properly managed to conclusion.

CLM4.1
Claims Management Processes
Managing shall maintain processes and procedures for the management of claims.

Managing agents shall ensure that:
- any such procedures are clear, documented and shared with relevant personnel as needed to ensure effective management of claims;
- following notice and during the life of claims, they assess what actions can be taken to resolve claims on the merits and in reasonable timeframes having regard to the circumstances;
- provide an appropriate level of service to brokers or policyholders in the circumstances of the claim, including communication of actions and progress where appropriate; and
- identify, monitor and pursue, where appropriate, rights of subrogation and salvage.

Managing agents should ensure processes are in place so that claims are properly managed to conclusion on the merits, within reasonable timeframes and in a manner appropriate to the circumstances. This approach should be supported by:

- Internal standards or targets on response times; and
- Measurement in relation to management goals for matters such as response times, periodic review of claims files, and efficient resolution.

For more complex claims, Lloyd’s will look for planning and a consideration of timeframes suited to the complexity presented, with an appropriate degree of information gathering and expert advice reflected in the handling and in the content of the records.

Where a diary system is in place this should be considered as a process, requiring additional control. Where no diary system is used an explanation of how files are managed will be needed.

The managing agent should have an approach to the overall level of service it provides and a system for monitoring claims service. Managing agents may wish to consider in this regard whether to develop a program with elements such as an overall service policy and/or a training program. Service considerations include appropriate availability to brokers, communications, the obtaining of feedback, and timeliness.

The monitoring of potential subrogation and salvage opportunities should include the monitoring of individual cases and the monitoring of the overall portfolio of subrogation and salvage matters, including as to quantum, financial resources, costs, prospects for recovery and recovery rate by experience.
CLM4.2

Assistance of Claims Agreement Parties

Managing agents shall assist any other claims agreement parties to fulfill their role, within the terms of the applicable Lloyd’s Claims Scheme.

Managing agents shall ensure that:
- claims files are maintained in such a way as to ensure that relevant claims information is available to followers in a timely manner; and
- claims agreement parties ensure that appropriate procedures are in place with other claims agreement parties where decisions are likely to be required at short notice.

No specific guidance has been written for these standards and requirements which are self-explanatory.

CLM4.3

File Review

Managing agents shall ensure that there is an appropriately detailed, regular file review process.

The process for file review shall:
- be documented; and
- allow for the results to be reviewed with the relevant claims handler.

Managing agent file reviews should comprise a review of selected claims files using a documented range of criteria for evaluating performance in terms of procedure, accuracy, quality of service and timescales appropriate to the matter. Such reviews may be carried out by a peer, but are a distinct activity from the type of peer review or referral that may be undertaken for an individual decision.

A typical file review process would involve regular consideration of a number of files, including those both open and closed. A written rationale for the sampling methodology should be in place and take into account the frequency of the review, the open claim count, the mix of business written and the claims portfolio.

At a minimum file reviews should be conducted at least quarterly.

Managing agent file review criteria will usually include, as appropriate, the following, giving due consideration to the circumstances of each individual claim:
- Accuracy of adjustment;
- Compliance with authority limits;
- External Expert management;
- File management;
- Following of applicable procedures;
- Identification of and, where appropriate, follow-up on subrogation and recoveries;
- Proactive approach, achieving prompt resolution of the claim under the circumstances presented and effective problem solving;
- Reconciliation of Claim Reserves and settlements between claims file and systems;
- Accuracy and timeliness of Claim Reserves, application of the reserving philosophy;
• Service (e.g. communications, availability, timeliness); and
• Documentation of the investigation of, and approach to resolution for, the claim.
SECTION 5: CLAIMS RESERVING

Principle: Managing agents shall ensure that claims reserving* is undertaken with the goal of a consistent, timely and accurate result taking into account both possible costs and indemnity potential.

* Claim Reserves are contingent financial provisions based on available information, which do not necessarily indicate a coverage position or expected outcome unless and until the insurer(s) accepts coverage without reservation.

CLM5.1
Claims Reserving Philosophy
Managing agents shall ensure that they have a documented reserving philosophy.

The reserving philosophy shall:
- be agreed by the board;
- be communicated internally to any and all affected parties;
- provide overview guidance for assessing and determining Claim Reserves; and
- be made available to followers on request.

The reserving philosophy should provide overview guidance for determining Claim Reserves for both possible costs and indemnity across all classes of business written.

CLM5.2
Claims Reserving Practice
Managing agents shall ensure that claims reserving undertaken is consistent, timely and accurate.

Managing agents shall ensure that:
- Claim Reserves exist without prejudice to coverage and make financial provision taking into account currently available information;
- initial Claim Reserves are set as soon as practicable following first advice;
- matters where further information is required before an estimate of Claim Reserve may be made are reviewed regularly;
- reasonable steps are taken to obtain information to enable a Claim Reserve to be established and for it to be maintained up to date;
- Claim Reserves on open claims are reassessed promptly upon receipt of relevant additional information;
- Claim Reserves on open claims are reviewed at least every 12 months, and the reserve normally either actively confirmed or amended, as appropriate, based on up to date information; and
- large Claim Reserve entries are validated via an internal peer review process.

For subscription market claims, confirmation or amendment of a reserve is ordinarily reflected in the issuance of a Syndicate Claims Message (SCM) to the subscribing syndicates.

There should be in place a procedure for validating large reserve entries via an appropriate internal peer review. There should also be in place a process that includes communication of a large reserve entry to relevant departments within the managing agency.
CLM5.3
Claims Reserving Rationale
Managing agents shall ensure that the rationale for the current reserve position is available to followers (where in a claims agreement role).

Managing agents shall ensure that:
• claims agreement parties take reasonable steps to ensure that followers receive, as soon as practicable, the same reserve related information received by those claims agreement parties; and
• followers are alerted to situations where it is appropriate for them to consider independently the reserve.

For assistance with complying with these requirements please note that contact details for all managing agents are available from Lloyd’s or the Lloyd’s Market Association (LMA).
SECTION 6: USE OF THIRD PARTIES

Principle: Managing agents shall employ disciplined procurement and pro-active management procedures in the selection and use of third parties.

CLM6.1
Management of Third Parties

Managing agents shall comply with Lloyd’s and other regulatory requirements in relation to outsourcing.

Managing agents shall:

• ensure claims managed by any third party are handled in accordance with Lloyd's Claims Management Principles and Minimum Standards, as appropriate;
• determine the appropriate level of handling, reserving and settlement authority given to the third party in respect of each type of claim for which authority is delegated;
• regularly monitor the service provided by the third party and, if required standards are not met, restrict or terminate the delegation; and
• ensure that the third party, to whom authority to determine claims is delegated, is audited in respect of the arrangement normally every 12 months, or at other appropriate intervals, and that any matters arising are considered, and where appropriate, addressed.

For clarity, throughout this section reference to ‘third parties’ is intended to include both Third Party Administrators (TPAs) and coverholders.

Managing agents should ensure they are aware of the Solvency II requirements that relate to outsourcing. Furthermore they must ensure compliance with the Intermediaries Byelaw and any supporting guidance.

Managing agents should have in place both a process and control for ensuring compliance with the Lloyd’s Claims Principles and Minimum Standards (CPMS) among all third parties. It is recognised that not all CPMS will be applicable to third parties; however as a minimum Lloyd’s expects processes and controls to address points set out in the following Lloyd’s Claims Management Principles and Minimum Standards:

• CLM3.1: Resource Planning;
• CLM3.2: Resource Management;
• CLM4.1: Claim Management Processes;
• CLM4.3: File Review;
• CLM5.2: Reserving Practice;
• CLM6.2: Appointment of External Experts; and
• CLM6.3: Management of External Experts.

The documented process for the selection and appointment of third parties should include specific reference to claims consultation and sign off. The granting of delegated claims authorities to third parties should be approved by a senior representative of the managing agent’s claims team. Further guidance can be found in the Intermediaries Byelaw.

Any contract with a third party should include expected standards and service levels and performance against these standards and service levels should be regularly reported to the managing agent and reviewed.
With regard to the audit of third parties, managing agents are permitted to adopt an approach where the frequency of audit reflects an assessment of the risk that variance from expected standards and service levels may have to the syndicate. A complete register of all delegated claims authority arrangements will be required, this should include both live and lapsed agreements so that all can be monitored and audited. Where audits are not carried out every 12 months the rationale for this must be documented.

CLM6.2
Appointment of External Experts
Managing agents shall have a documented process for the selection and appointment of External Experts.

Where External Experts are used managing agents shall:
- select External Experts from an approved panel established by the managing agent and review the composition of the panel against business requirements and performance delivered;
- articulate to followers when requested the basis for selecting an External Expert for an individual claim;
- communicate and agree the goals and budget with any appointed External Expert, and, where appropriate, the approach to be taken and make available to followers appropriate information indicating what the expert is required to deliver; and
- advise the External Expert, where appropriate, that the instruction is also on behalf of any Lloyd’s followers of that managing agent on London market subscription placements.

Managing agents should have a documented process in place to facilitate the review of the composition of the approved panel.

It is accepted that at times it will be appropriate to appoint an expert who is not on the panel. Where this is the case a clear process should be in place to facilitate such an appointment.

The goals and budget agreed with any appointed External Expert should be recorded by way of a written document, which may take the form of a Terms of Engagement.

CLM6.3
Management of External Experts
Managing agents shall have a documented process for the management of External Experts.

Where External Experts are used managing agents shall:
- ensure that invoices are checked against written agreements and non-agreed variances queried and, as appropriate, rejected; and
- monitor performance against budget and ensure variances are justified.

No specific guidance has been written for these standards and requirements which are self-explanatory.

[Please refer to the Governance Standards]
LLOYD’S MINIMUM STANDARDS
MS3 – GOVERNANCE

JULY 2014
MS3 – GOVERNANCE

MINIMUM STANDARDS AND REQUIREMENTS

These are statements of business conduct required by Lloyd’s. The Minimum Standards are established under relevant Lloyd’s Byelaws relating to business conduct. All managing agents are required to meet the Minimum Standards. The Requirements represent the minimum level of performance required of any organisation within the Lloyd’s market to meet the Minimum Standards.

Within this document the standards and supporting requirements (the “must dos” to meet the standard) are set out in the blue box at the beginning of each section. The remainder of each section consists of guidance which explains the standards and requirements in more detail and gives examples of approaches that managing agents may adopt to meet them.

GUIDANCE

This guidance provides a more detailed explanation of the general level of performance expected. They are a starting point against which each managing agent can compare its current practices to assist in understanding relative levels of performance. This guidance is intended to provide reassurance to managing agents as to approaches which would certainly meet the Minimum Standards and comply with the Requirements. However, it is appreciated that there are other options which could deliver performance at or above the minimum level and it is fully acceptable for managing agents to adopt alternative procedures as long as they can demonstrate the Requirements to meet the Minimum Standards.

DEFINITIONS

CPD - Continuing Professional Development

EIOPA - The European Insurance and Occupational Pensions Authority.

FCA – Financial Conduct Authority

LMA - The Lloyd’s Market Association.

Multiple Syndicates Byelaw - This byelaw prohibits an underwriter, whether or not an active underwriter, acting as such for more than one syndicate concurrently without the consent of the Council.

ORSA - Own Risk and Solvency Assessment.

PRA – Prudential Regulation Authority

SCR – Solvency Capital Requirement is the amount of funds that insurance and reinsurance undertakings are required to hold in the European Union.

Shadow Directors – The Companies Act 2006 defines a shadow director as follows:

(1) In the Companies Acts ‘shadow director’, in relation to a company, means a person in accordance with whose directions or instructions the directors of the company are accustomed to act.
(2) A person is not to be regarded as a shadow director by reason only that the directors act on advice given by him in a professional capacity.

(3) A body corporate is not to be regarded as a shadow director of any of its subsidiary companies for the purposes of - Chapter 2 (general duties of directors); Chapter 4 (transactions requiring members’ approval); or Chapter 6 (contract with sole member who is also a director). By reason only that the directors of the subsidiary are accustomed to act in accordance with its directions or instructions.

SNP - Senior Nominated Person

SOX - The Sarbanes–Oxley Act of 2002

The Board - Where reference is made to the board in the standards, agents should read this as board or appropriately authorised committee. In line with this, each agent should consider the matters reserved for the board under the Governance Standard, in order to evidence appropriate full board discussion and challenge on these subjects.
SECTION 1 – SYSTEM OF GOVERNANCE

GOV 1.1
Effective System of Governance

Managing Agents shall have in place an effective system of governance which provides for sound and prudent management of the business.

The system of governance shall:
• be proportionate to the nature, scale and complexity of the operations of the business;
• provide for effective cooperation, internal reporting and communication of information at all relevant levels of the business; and
• include compliance with the requirements laid down in the SII Framework Directive, Articles 42 to 49.

Lloyd’s expects all managing agents to have an effective governance framework appropriate to their business in place. Under Solvency II there are a number of specific new requirements, including the internal audit, risk management and actuarial functions, as well as more general governance requirements. The principle of proportionality allows managing agents to design their system of governance in a way that meets regulatory requirements while appropriately reflecting their specific risk profile.

This guidance suggests how managing agents may evidence an effective system of governance. This is not exhaustive, but evidence of the governance framework would typically include:

• organisational structure showing accountability – i.e. board, committees, decision making bodies and required functions (actuarial, internal audit, compliance, risk management);
• personnel organisation structure / function organisational charts – i.e. resources;
• matters reserved for the board (see also GOV 3.7) including delegation to committees / decision making bodies;
• terms of reference for the board and each committee / decision making body;
• committee membership (with job title of the individual members);
• board and committee timetable – detailing dates and outline of agenda / matters to be discussed; and
• management information – summary details of the MI provided to the board, committees and decision making bodies;

The governance framework should clearly demonstrate where the following activities are being considered and decisions made:

• underwriting;
• reinsurance;
• claims;
• reserving;
• investment;
• asset liability management;
• liquidity and concentration management; and
• operational risk.
Solvency II Framework directive, Articles 42 to 49

The requirements for an effective system of governance refer to compliance with Articles 42 to 49 and further requirements and guidance relating to these are covered within other sections of the standards and guidance as below:

<table>
<thead>
<tr>
<th>ARTICLE</th>
<th>TOPIC</th>
<th>REFERENCE IN STANDARDS/GUIDANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>42</td>
<td>Fit &amp; Proper</td>
<td>GOV 4.1</td>
</tr>
<tr>
<td>43</td>
<td>Proof of good repute</td>
<td>n/a – applies to regulator</td>
</tr>
<tr>
<td>44</td>
<td>Risk Management</td>
<td>MS4 – Risk Management</td>
</tr>
<tr>
<td>45</td>
<td>ORSA</td>
<td>RM 4.1 – RM 4.4</td>
</tr>
<tr>
<td>46</td>
<td>Internal Control</td>
<td>GOV 1.3</td>
</tr>
<tr>
<td>47</td>
<td>Internal Audit</td>
<td>GOV 6.5 to 6.7</td>
</tr>
<tr>
<td>48</td>
<td>Actuarial Function</td>
<td>GOV 6.8 to 6.9</td>
</tr>
<tr>
<td>49</td>
<td>Outsourcing</td>
<td>GOV 5.1 to 5.4</td>
</tr>
</tbody>
</table>

GOV 1.2

Review of System of Governance

The system of governance shall be subject to regular internal review.

Managing Agents shall:
- monitor, and on a regular basis evaluate, the adequacy and effectiveness of their system of governance; and
- take appropriate measures to address any deficiencies.

The board is responsible for ensuring that the system of governance is internally reviewed on a regular basis and should determine the appropriate scope and frequency of the reviews, taking into account the nature, scale and complexity of the business. Whilst the frequency of review is not mandated, Lloyd’s would expect managing agents as a minimum to consider the need to conduct a review on an annual basis in line with the board effectiveness review which must be carried out annually (see Gov 3.8) and record clearly the rationale for any work conducted and/or reliance placed on a previous review.

Conducting the review

The board is also responsible for determining who within the organisation should conduct the review and should ensure that they are suitably independent. Independence does not require the reviewer to be external, but the person(s) conducting the review should be independent from the area(s) they are responsible for reviewing e.g. compliance should not be responsible for reviewing the compliance function.

Typically the approach taken to the review would be documented to ensure that there is clarity over its scope and purpose.
Follow up

Findings and conclusions from the review should be properly documented and reported back to the board. In order to allow an adequate revision of the system of governance appropriate feedback procedures encompassing at least all key functions should be established. Suitable feedback loops are necessary to ensure follow-up actions are continuously undertaken and recorded.

After the feedback reports are presented to the board, discussions on any challenge provided or improvements suggested should be documented as appropriate.

Changes to the system of governance

Managing agents should note that where changes are made to any aspect of the system of governance, it is important to assess any impact this may have on the internal model and whether a model change under the model change policy needs to be implemented. More detailed requirements and guidance relating to model change are set out in Section 5 of MS5 – Scope, Change and Use.

GOV 1.3

Internal Control System

Managing Agents shall have in place an effective internal control system.

The internal control system shall:

- include administrative and accounting procedures, an internal control framework, appropriate reporting arrangements at all levels of the business and a compliance function;
- secure compliance with applicable laws, regulations and administrative processes, the effectiveness and efficiency of operations in view of the business objectives and the availability and reliability of financial and non-financial information; and
- ensure that adequate and orderly records of the business and internal organisation are maintained.

The internal control system needs to be robust and create a strong control environment with control activities that are adequately aligned to the risks of the business and the agent’s processes. A strong control environment should ensure all personnel are aware of the importance of internal control and their role in the internal control system. This will ensure the system is fully embedded within the managing agent’s organisational culture.

Internal controls include the task of identifying and managing any areas of potential conflicts of interest appropriately. A high level of integrity is an essential part of the control environment and managing agents should therefore avoid policies and practices that may provide incentives for inappropriate activities.

A proper internal control system should include internal controls:

- at different levels of the organisational and operational structures;
- at different time periods; and
- with different levels of detail.

Specific requirements and guidance relating to the compliance function are included in GOV6.3 & 6.4.
Internal Control Policy

Managing agents are required to implement a written policy on internal control (see GOV2.4) which is approved by the board. The policy should include the means by which senior management implement the internal control system to provide for and maintain the suitability and effectiveness of the internal control system. Internal control combines the following aspects:

- control environment;
- control activities;
- communication; and
- monitoring.

The monitoring mechanisms within the internal control system should provide the board with relevant information for the decision-making process. The effectiveness of the internal control system itself should be monitored on a regular basis, so that any deficiencies of the system can be identified and rectified in a timely manner.

Record keeping

Managing agents should document their internal organisational and operational structures and keep this documentation up to date. They should also maintain adequate and orderly records of their business activities and keep them for an appropriate time frame, taking into account their own prescribed record retention periods.

GOV 1.4

Information systems and security

Managing agents shall establish information systems which produce complete, reliable, clear, consistent, timely and relevant information and shall safeguard the security of information.

Information shall cover:
- the business activities;
- the commitments assumed; and
- the risks to which the business is exposed.

Managing agents shall:
- establish and implement an approach to safeguarding the security, integrity and confidentiality of information which takes into account the nature of the information in question; and
- ensure that they meet the requirements of the Data Protection Act.

The overall information system should be documented and set out which information is to be shared, by whom, and when and allow for information to flow up and down hierarchy levels as well as horizontally between different business units where appropriate. Managing agents should be able to demonstrate that there is clear linkage between individual information systems (i.e. it should be clear how one system feeds another).

Managing agents should decide who needs to have access to these information systems for the purpose of providing input from and to their areas of responsibility and who the relevant personnel are that need to have passive access to the system so as to retrieve data for the proper discharge of their duties.
Information needs to cover all business activities and commitments assumed across the organisation, e.g. acceptance of underwriting risks, other financial commitments etc.

Data Protection Act

Managing agents should note that the use of all personal data and information is regulated by the Data Protection Act 1998
[Link to Data Protection Act 1998 can be found in the appendix at the end of the document]

GOV 1.5
Business Continuity & Contingency Planning

Managing agents shall establish, implement and maintain a business continuity policy and take reasonable steps to ensure continuity and regularity in the performance of their activities, including the development of contingency plans.

The business continuity policy shall aim to ensure, in the case of an interruption to systems and procedures:

- the preservation of essential data and functions; and
- the maintenance of business activities.

Where the above is not possible, the policy should aim to ensure:

- the timely recovery of data and functions; and
- the timely resumption of business activities.

Managing agents shall:

- identify the risks to be addressed by contingency plans based on the areas where they consider the business to be most vulnerable; and
- review, update and test their plans on a regular basis.

The aim of contingency planning is to enable the managing agent to continue the business activity at a predetermined minimum level to protect individuals and tangible property as well as other assets.

Contingency plans

Managing agents should develop and document contingency plans to ensure the business disruption and/or possible losses are limited if there is an unforeseen interruption to their systems and procedures. These might for example arise from natural catastrophes such as floods or earthquakes, from terrorist attacks, serious fires, a breakdown of the IT systems or a pandemic that affects a large number of employees. The plans should document arrangements for managing the initial incident as well as business recovery. Plans should include the following:

- defined roles and responsibilities;
- an appropriate communication strategy for all stakeholders;
- a clear set of actions and owners; and
- the process for recording information and the decisions made.

The plans should be made available to all relevant management and personnel so that every person involved knows their role in advance of any emergency situation. All staff should be made aware of
the existence of the plan and be provided with key information that would be useful to them during an incident.

As well as addressing operational business continuity, managing agents should consider other risks for which risk mitigation plans may be needed as part of their risk management system. This may include capital and solvency risk and planning, liquidity arrangements, reinsurance and outsourcing. For those risks identified, as a minimum, managing agents should ensure that they document high level risk mitigation procedures. Whilst it is not necessary that contingency planning should include every business activity, it should take into consideration all significant activities.

**Testing and review**

For all contingency planning arrangements, agents should ensure a robust exercising programme is in place to test their effectiveness. As well as the annual testing of IT capability, there should be annual exercises for crisis and incident management teams to test these arrangements. It is best practice for any workplace recovery provisions to also be tested annually and agents should look to take part in the IT Test held by Lloyd’s each year at ExCeL.

Contingency plans should be reviewed on a regular basis, updated as necessary and tested periodically. Regular review and updating ensure that the plans stay effective and suitable, and test runs provide assurance that the plans will work effectively should an emergency arise.
SECTION 2: ORGANISATIONAL STRUCTURE

GOV 2.1

Organisational structure

The System of Governance shall include an adequate transparent organisational structure.

The organisational structure shall:

- establish, implement and maintain effective decision making procedures;
- clearly specify reporting lines that ensure the prompt transfer of information to all persons who need it in a way that enables them to recognise its importance;
- allocate functions and responsibilities; and
- take account of the nature, scale and complexity of the risks inherent in the business.

Managing Agents should have a well-defined organisational and operational structure which is geared towards supporting the most important strategic goals and operations of the business. They should be able to adapt the structure to changes in their strategic aims, operations or in the environment within an appropriate period of time.

The organisational structure identifies the business processes involving material risks and sets out how they should be executed, including responsibilities and information flows, to ensure that these processes are adequately monitored and controlled. The operational structure refers to the way in which operations are organised and supports the main functions of the organisational structure (see also Section 1.1 on evidencing organisational structure).

Agents should ensure that each key function has an appropriate standing in terms of organisational structure and that their responsibilities and the authority they have to exercise their tasks are clearly set out (see also section 6.1). Diagrams and process flow charts may help represent both the organisational and operational structure more clearly but are not mandatory.

It is important that the organisational culture is one which enables and supports the effective operation of the system of governance. This requires a suitable “tone at the top” with the board providing appropriate organisational values and priorities. In order to meet the four-eyes-principle any significant decision concerning the business should be agreed by at least two persons before being implemented. Maintaining a formal schedule of matters referred to the board for decision is a practical way of demonstrating those matters which are reserved for the board (see also GOV 3.7 regarding matters reserved for full board review).
GOV 2.2

Segregation of duties

Managing Agents shall have a clear allocation and appropriate segregation of responsibilities across the organisation.

Managing agents shall ensure that:
- they employ personnel with the skills, knowledge and expertise necessary to discharge the responsibilities allocated to them properly;
- all personnel are aware of the procedures for the proper discharge of their responsibilities;
- the performance of multiple tasks by individuals and organisational units does not or is not likely to prevent the persons concerned from discharging any particular function in a sound, honest and objective manner;
- they comply with the requirements of the Multiple Syndicates Byelaw with regard to underwriters acting for more than one syndicate concurrently; and
- key operational and business processes are properly documented.

Lloyd’s does not wish to unduly restrict managing agents in choosing how to organise themselves as long as they establish an appropriate segregation of duties that in particular ensures the necessary full independence of the internal audit function and sufficient independence of the other key functions (see GOV6.1).

The duties and responsibilities within the organisational structure should be clearly defined, allocated and coordinated with each other in the managing agents’ policies, covering all important duties while avoiding unnecessary overlaps and fostering effective cooperation between functions. Policies and procedures should be clearly documented to ensure all personnel are aware of these. Required functions should be kept separate unless this would be disproportionate in which case agents need to have effective policies and procedures in place to ensure that their independence is not compromised.

An adequate segregation of responsibilities in particular ensures that the persons responsible for performing tasks are not also responsible for monitoring and controlling the adequacy of this performance. There should, however, be an organised process of communication between those responsible for operational activities and the control functions.

GOV 2.3

Conflicts of interest

Managing agents shall ensure that effective systems are in place to prevent conflicts of interest wherever possible and that potential conflicts of interest are identified and appropriately addressed.

Managing agents shall ensure that:
- procedures are established in order to ensure that those involved with the implementation of the managing agent’s strategies and policies understand where conflicts of interest could arise and how such conflicts are to be addressed; and
- they act in the best interests of syndicate members.
Lloyd’s recognises that it is not always possible to avoid conflicts of interest, and it is therefore important to ensure that any conflicts are identified and dealt with in an appropriate manner. The types of conflicts that may arise include, but are not limited to:

- internal – director’s interests;
- corporate – related parties;
- capital – third party capital; and
- group conflicts.

**Conflicts of interest policy/procedure**

To ensure that conflicts of interest are identified and appropriately addressed agents should have in place a conflicts of interest policy/procedure. The purpose of the policy should be to ensure that all conflicts of interest are declared and that decisions are taken in full knowledge of those conflicts.

**GOV 2.4**

**Required Policies**

Managing Agents shall have written policies in relation to at least risk management, internal control, internal audit and, where relevant, outsourcing.

*Managing Agents shall ensure that those policies:*

- clearly set out the relevant responsibilities, objectives, processes and reporting procedures to be applied;
- are consistent with the overall business strategy;
- are implemented;
- are reviewed at least annually;
- are subject to approval by the board; and
- are adapted in view of any significant change in the system or area concerned.

Agents should note that the policies set out above are explicitly required under the system of governance provisions of Solvency II but this is not an exhaustive list of all policies relevant to Solvency II requirements or the operational policies which Lloyd’s would expect managing agents to have in place.

This section sets out general guidance on the required policies. The following sections contain additional specific guidance:

- **RM2.3** – risk management policy;
- **GOV1.3** – internal control policy;
- **GOV6.5** – internal audit charter; and
- **GOV5.2** – outsourcing policy.

**Written policies**

Whilst specific written policies must be in place, they do not have to be separate and agents may combine these policies as they see fit in line with their organisational structure and processes. All written policies should be in line with the managing agent’s overall business strategy and should for each function or process to which they relate, clearly set out:

- the goals pursued with the policy;
- the tasks to be performed and who is responsible for them;
• the processes and reporting procedures to be applied; and
• the obligation of the relevant organisational units to inform the risk management, internal audit, compliance and actuarial functions of facts relevant for the discharge of their duties.

Policies covering key functions should also address the standing of these functions within the managing agent, including their rights and powers.

A proper implementation of the written policies requires that all staff members are familiar with and observe the policies for their respective area of activities and that formal induction and training procedures are in place. It also requires that any changes to the policies are promptly communicated to them.

Approval and review of policies

Written policies should be subject to approval by the board (or by an appropriate formal committee of the board which has delegated authority to approve policies) as should any subsequent changes, unless these are minor, e.g. correcting typographical errors.

The annual review requirement applies to all written policies which managing agents are required to have under the Solvency II framework directive. Any review of the written policies should be appropriately documented and cover:

• who conducted the review;
• any suggested recommendations; and
• actions and decisions subsequently taken by the board (or appropriate committees) in response to the recommendations.

For further requirements and guidance regarding documentation, managing agents should refer to Section 6 of MS5 – Scope, Change and Use.
SECTION 3: BOARD EFFECTIVENESS

GOV 3.1
Effective Board
A managing agent shall be headed by an effective board, which is collectively responsible for the performance of the managing agent and the syndicate(s) under management.

The role of the board shall include:

- providing leadership and setting business strategy;
- establishing a prudent and effective control framework which enables risk to be assessed and managed;
- ensuring that adequate financial and human resources are in place;
- reviewing management performance; and
- ensuring compliance with the laws, regulations and administrative provisions adopted pursuant to the Solvency II Framework Directive.

Leadership

The Board should ensure that it sets a suitable ‘tone at the top’, providing appropriate organisational values and priorities (see also GOV2.1).

Board Meetings and committees

The board should meet sufficiently regularly to discharge its duties effectively. Typically managing agents hold full board meetings on at least a quarterly basis and should ensure that these are scheduled sufficiently far in advance to allow for reasonable attendance from all directors. Where non board members attend board meetings, care should be taken to ensure that the reason for their attendance is clear and that they are not acting as ‘shadow’ directors.

The board should also have regular and robust interaction with any committee it establishes as well as with senior management and with other key functions, requesting information from them proactively and challenging it when necessary. Managing agents are responsible for determining the most appropriate committee structure for their business. Committees that are typically seen in a managing agent include the following:

- audit;
- executive management;
- investment;
- operations;
- remuneration;
- reserving;
- risk & capital;
- security & credit; and
- underwriting.

Formally established committees of the board should have clear terms of reference and delegation of responsibilities. The value of ensuring that committee membership is refreshed and that undue
reliance is not placed on particular individuals should be considered in deciding the chairmanship and membership of committees.

Committee terms of reference would typically cover the following areas:

- purpose;
- authority;
- composition;
- meeting frequency and quorum;
- responsibilities; and
- reporting arrangements.

Where the standards and guidance refer to board responsibilities it is acceptable for these to be delegated to a properly authorised board committee, unless explicitly stated otherwise. Where responsibilities are delegated in this way the board should still ensure that those responsibilities are met.

**Specific board responsibilities under Solvency II**

The responsibility for ensuring that a managing agent can continue to meet the Solvency II tests and standards lies with the board of the managing agent. The board must ensure that appropriate documentation and records are maintained to disclose with reasonable accuracy at any time the status of compliance with the requirements. The board is also responsible for notifying Lloyd’s as soon as possible if any of the conditions for compliance cease to be met.

Lloyd’s requires an annual board confirmation of Solvency II status from all agents, in a standard format as published by Lloyd’s, in order to maintain internal model authorisation.

Lloyd’s requires each managing agent to nominate a board member with Solvency II and Lloyd’s standards responsibilities known as the Standards Assurance Group Senior Nominated Person (SNP). The SNP acts as a central point of contact for Lloyd’s for matters relating to Solvency II and the minimum standards.

**GOV 3.2**

**Collective suitability of the board**

Managing Agents shall ensure that the members of the board and of each of its committees collectively possess the necessary qualifications, competency, skills and professional experience in the relevant areas of the business in order to effectively manage and oversee the business in a professional manner.

As well as ensuring the collective suitability of the board, managing agents shall ensure that each individual member of the board and its committees has the necessary qualifications, competency, skills and professional experience to perform the tasks assigned. Consideration should be given to the following:

- size of the board to ensure it is not unwieldy but has an appropriate balance of skills and experience;
- the need for a strong executive and non-executive representation;
- the need to ensure that all directors are able to allocate sufficient time to the managing agent to discharge their responsibilities effectively; and
- the need for directors to regularly update and refresh their skills and knowledge.
The board should not be so large as to be unwieldy but should be of sufficient size in order that the requirements of the business can be met and changes to the board’s composition and that of its committees can be managed without undue disruption.

Managing agents should ensure that all directors are able to allocate sufficient time to discharge their responsibilities effectively. When considering the composition of the board, managing agents should ensure that there is sufficient focus on strategy and key issues.

In addition to fitness with regard to their duties in their specific areas of responsibility, the board of the managing agent must, collectively, be able to provide for the sound and prudent management of the business. The collective knowledge, competence and experience of the board should therefore include, at a minimum, the following areas:

- insurance and financial markets;
- business strategy and business model;
- system of governance, including risk management and control;
- financial and actuarial analysis; and
- regulatory framework and requirements.

Board members are not expected to each possess expert knowledge, competence and experience within all areas of the business, but the collective knowledge, competence and experience of the board as a whole should provide for sound and prudent management of the business. Board members should, however, have at least a base level of knowledge of those areas that fall outside their own immediate area(s) of expertise. For example, all directors should be aware of the key risks the business faces and how these are managed.

**Director Responsibilities**

When allocating responsibilities, agents should have regard to the span of control of individual directors ensuring it is not excessive. Points to consider include:

- the number of direct reports; and
- areas of responsibility (e.g. wide/ranging/unassociated areas or areas outside of their areas of expertise as well as areas where there may be a conflict – eg underwriting and claims).

Individual director terms of reference will provide useful evidence of division of responsibilities.

Directors should ensure that the managing agent is fulfilling its duties of care and responsibilities under the Managing Agents Agreement on behalf of the capital providers on the syndicates which it represents, subject at all times to Lloyd’s requirements for managing agents.

**Succession Planning**

The board should satisfy itself that plans are in place for orderly succession for appointments to the board and to senior management, so as to maintain an appropriate balance of skills and experience and to ensure progressive refreshing of the board. Managing agents may wish to consider short term contingency planning as well as longer term succession planning.
Managing Agents shall ensure that the board includes a balance of executive and non-executive directors, such that no one individual or group of individuals can dominate the board’s decision taking.

All managing agent boards should include at least two independent non-executive directors. As part of their role as members of a unitary board non-executive directors should:

- constructively challenge and help develop proposals on strategy;
- scrutinise the performance of management in meeting agreed goals and objectives and monitor the reporting of performance; and
- satisfy themselves on the integrity of financial information and that financial controls and systems of risk management are robust and defensible.

Managing agents should seek to achieve an appropriate balance between executive and non-executive directors to ensure that the views of each are given sufficient weight in board discussions. Where the managing agent is part of a group, consideration should also be given to ensuring that there is a sufficient balance between any group non-executive directors and independent non-executive directors to ensure that group representatives do not dominate discussions unduly. For this purpose a group independent non-executive director would be considered independent if they also sat on the board of the managing agency.

Independent non-executive directors

The role of independent non-executive directors is important as they are able to bring a degree of objectivity to the board’s discussions and play a valuable role in monitoring executive management. Lloyd’s requires managing agents to appoint at least two independent non-executive directors to ensure that there is sufficient independent scrutiny of the executive management.

When determining whether a non-executive director can be regarded as independent, the board should consider whether the director is independent in character and judgement and whether there are relationships or circumstances which are likely to affect, or could affect, the director’s judgement.

There are a number of relationships and circumstances which should be considered when determining independence, including if the director:

- has been an employee of the managing agent or group within the last five years;
- has, or has had within the last three years, a material business relationship with the managing agent either directly, or as a partner, shareholder, director or senior employee of a body that has such a relationship with the managing agent;
- has received or receives additional remuneration from the managing agent apart from a director’s fee, participates in the company’s share option or a performance-related pay scheme, or is a member of the company’s pension scheme;
- has close family ties with any of the managing agent’s advisers, directors or senior employees;
- holds cross-directorships or has significant links with other directors through involvement in other companies or bodies;
- represents a significant shareholder; and
• has served on the board for more than nine years from the date of their first election.

Where any of the cases above apply, it is not necessarily a bar to a director being regarded as independent, but the board must be able to state the reasons why it believes the director should be considered independent, notwithstanding those circumstances.

**Appointment of non-executive directors**

Non-executive directors should be appointed for specified terms subject to re-election and should have clear terms of reference on appointment.

**GOV 3.4**

**Division of board responsibilities**

There should be a clear division of responsibilities at the head of the managing agent between the running of the board and the executive responsibility for running of the managing agent's business.

- To ensure a clear division of responsibilities the roles of Chairman and Chief Executive should not be carried out by the same individual;
- The Chairman is responsible for leadership of the board and ensuring its effectiveness in all aspects of its role;
- All directors must take decisions objectively in the interests of the managing agent and in the interests of the syndicate(s) which they manage; and
- No one individual should have unfettered powers of decision.

**Chairman and Chief Executive Roles**

The chairman is responsible for leadership of the board and ensuring its effectiveness on all aspects of its role. This includes setting the board’s agenda and ensuring that adequate time is available for discussion of all agenda items, in particular strategic issues. The chairman should also promote a culture of openness and debate by facilitating the effective contribution of non-executive directors in particular and ensuring constructive relations between executive and non-executive directors.

For the appointment of a chairman, a job specification should be prepared including an assessment of the time commitment expected, recognising the need for availability in the event of crises. Lloyd’s regards it as good practice that the Chairman should be an independent non-executive director. Where this is not the case, there will be increased focus from Lloyd’s on the degree of independence across the board as a whole.

The detail of the CEO’s responsibilities will vary between one managing agent and another, but the main responsibilities of the role include development of strategy, in conjunction with the Chairman and the rest of the board; implementation of the strategy and oversight of the day to day operations of the managing agent.

Both the Chairman and the CEO should have documented terms of reference.
GOV 3.5
Appointment of new directors

There should be a formal, rigorous and transparent procedure for the appointment of new directors to the board.
- Appointments to the Board shall be made on merit and against objective criteria;
- Managing agents shall ensure that new directors have sufficient time available to devote to the role; and
- All directors should receive induction on joining the board.

New directors

Managing agents should have clearly documented procedures for the appointment of new directors and a formal induction policy and process for induction should be in place. The search for board candidates should be conducted, and appointments made, on merit, against objective criteria (i.e. taking account of the capabilities required for the particular appointment in terms of skills, experience, independence and knowledge). (see also section 4 on fit & proper requirements).

GOV 3.6
Adequate information at Board level

The board should be supplied in a timely manner with information in a form and of a quality appropriate to enable it to discharge its responsibilities.

Managing agents shall ensure that:
- the board receives adequate information on performance and operational matters; and
- adequate board attention and focus is given to strategy and operational/business processes.

The chairman is responsible for ensuring that all directors receive accurate, timely and clear information but directors should seek clarification or amplification where necessary.

Lloyd’s would expect board reports to be written rather than verbal and care should be taken to ensure that the content and level of detail is appropriate. Board papers may be provided to board members in either hard or soft copy format and should be circulated sufficiently far in advance to enable adequate review and preparation for meetings.

The board should review strategy on at least an annual basis and set its priorities for the forthcoming year. Progress against the strategy and priorities should be monitored and reported to the board on a regular basis.

As well as development and oversight of the business strategy, the board would typically receive information on at least the following areas:

- underwriting;
- actuarial technical provisioning (through the Actuarial Function Report (see GOV6.9));
- claims;
- reinsurance;
- finance;
- compliance;
• risk management;
• IT/operations; and
• reporting from committees of the board, particularly on issues not covered by any of the above.

Where operational/business processes are outsourced to either internal or external service providers the board should retain oversight of these areas. GOV5.2 includes further detail regarding monitoring and reporting on outsourcing arrangements.

**GOV 3.7**

**Matters reserved for full board review**

Managing agents shall ensure that they have a clear schedule of matters that are required to be approved by the full board.

*Managing agents shall ensure that as a minimum the following areas are approved at the full managing agency board:*

- Long term objectives, commercial strategy and key strategic decisions;
- Risk Management & Control Framework;
- ORSA Report to be submitted to Lloyd’s;
- Syndicate’s business plan which in turn would also encompass:
  - Reinsurance programme;
  - Investment Strategy; and
  - Realistic Disaster Scenarios.
- Lloyd’s Capital Return;
- Report and Accounts;
- Major internal model changes;
- Confirmation statements as required by Lloyd’s e.g. Solvency II compliance, minimum standards compliance;
- Reserves for both financial accounting and solvency; and
- Conduct Risk Strategy.

The list above defines the items that Lloyd’s would expect to be discussed, challenged and approved by the managing agent’s full board*. It should not be regarded as a definitive list of everything that an agent may take to its full board for approval, simply a list of the minimum areas that Lloyd’s expects to be discussed and challenged at this level. Where full board discussion and challenge has been limited (it is not acceptable for this to be nil) then the agent will be expected to evidence how the full board takes comfort from the discussion and challenge undertaken through its authorised committees.

It would not be appropriate for an authorised committee to approve these items and then report the decision to the board; the full board is required to play an active role in the process. Minuted discussion and challenge should be available for review when the agent is requested to evidence full board approval.

The level of full board discussion and challenge will vary from agent to agent, dependent on the governance process for the particular subject matter. For instance, an ORSA that has been reviewed and discussed by a Risk and Capital Committee will require less board discussion and challenge.
than an ORSA that the authors have passed directly to the full board for sign off ahead of its submission to Lloyd's. For those items listed above, that are directly derived from the minimum standards, please also review the guidance attached to those standards specifically in order to further understand the expectations e.g. reserving.

*The full board refers to the body involved (i.e. the managing agent's board of directors) and is not a requirement that each and every board member is required to be present. The full board should be operating as agreed within its terms of reference.

**GOV 3.8**

**Annual board effectiveness review**

The board should undertake a formal and rigorous annual evaluation of its own performance and that of its committees and individual directors.

- The review should be carried out on at least an annual basis and can be internal or external;
- The results of the review and any recommendations should be reported to the Chairman; and
- The Chairman should monitor the implementation of any recommendations.

Lloyd’s would expect that the board effectiveness review should be the responsibility of the Chairman as executive directors will be conflicted. The non-executive directors should be responsible for performance evaluation of the chairman, taking into account the views of executive directors.

**Conducting the review**

The review may be conducted by internal or external resource provided the agent can demonstrate that they are sufficiently independent and that the review itself is rigorous and robust. The review need not follow the same format each year and where internal resource is generally used to conduct the review, Lloyd’s would expect agents to consider conducting a periodic external review.

Evaluation of the board is likely to consider:

- the balance of skills, experience, independence and knowledge of the company on the board;
- how the board works together as a unit; and
- other factors relevant to its effectiveness.

In addition to the board effectiveness, the review should provide a view of the operation and effectiveness of its committees. The review will also form part of the regular review of the wider system of governance (see GOV1.2). The approach to the board effectiveness review should be documented and this may be part of an overall document setting out the approach to the review of the system of governance. The outcome of a managing agent’s internal performance and evaluation process and considerations of any nominations committee in terms of board constitution and appointments are likely to contribute to the overall review.

**Follow up**

The chairman should act on the results of review by recognising the strengths and addressing the weaknesses of the board and, where appropriate, proposing new members be appointed to the board or seeking the resignation of directors.
The evaluation of individuals should aim to show whether each director continues to contribute effectively and to demonstrate commitment to the role (including commitment of time for board and committee meetings and any other duties).

SECTION 4: FIT & PROPER

GOV 4.1

Fit and proper requirements for individuals

Managing agents shall ensure that all persons who effectively run the business or have other key functions are at all times fit and proper.

Managing agents shall establish, implement and maintain documented policies and adequate procedures to ensure that all persons who effectively run the business or have other key functions are at all times fit and proper.

The assessment of whether a person is 'fit' shall:

- include an assessment of the person's professional and formal qualifications, knowledge and relevant experience within the insurance sector, other financial sectors or other businesses and whether these are adequate to enable sound and prudent management;
- take account of the respective duties allocated to that person and, where relevant, the insurance, financial, accounting, actuarial and management skills of the person; and
- in the case of board members, take account of the respective duties allocated to individual members to ensure appropriate diversity of qualifications, knowledge and relevant experience to ensure that the business is managed and overseen in a professional manner.

The assessment of whether a person is "proper" shall:

- consider whether they are of good repute and integrity; and
- include an assessment of that person's honesty and financial soundness based on evidence regarding their character, personal behaviour and business conduct including any criminal, financial and supervisory aspects relevant for the purpose of the assessment.

A managing agent must ensure that all board members and key function holders meet the 'fit and proper' criteria. Key functions include those prescribed by the PRA and/or FCA, or Lloyd's, as well as any others that the managing agent considers important in its system of governance. Lloyd’s expects this to include, as a minimum, the chairman, chairman of the risk committee, chairman of the audit committee, senior independent director, director of underwriting/active underwriter, finance function, risk management function, compliance function, internal audit function and actuarial function. Other functions may be considered key functions according to the nature, scale and complexity of the business or the way it is organised.

Fitness

Fitness for a role should be based on assessment of management competence and technical competence. Managing agents should base their assessments on:

- the individual's previous experience, knowledge and professional qualifications; and
- demonstration of due skill, care, diligence and compliance with the relevant standards of the sector the person has worked in
Propriety
Assessment of propriety of an individual should be based on their reputation, reflecting:

- past conduct;
- criminal record;
- financial record; and
- supervisory experience.

The current EIOPA draft guidelines and explanatory notes on the system of governance include guidance on relevant matters to be considered in the assessment of an individual’s propriety, including criminal offences, disciplinary and enforcement actions.

Fit and Proper Policy
The fit and proper policy should set out:

- responsibilities for managing the fit and proper policy and applying its requirements;
- criteria that will be used in assessing whether an individual is fit and proper, both initially and on an ongoing basis, and whether there are different levels of checks for board members/function holders/other staff;
- a description of situations that give rise to re-assessment of fitness and propriety (recognising that this will not be an exhaustive list); and
- procedures for dealing with instances where an individual’s status may change such that they can no longer be judged to be fit and proper.

The following may be regarded as evidence of procedures to ensure the adequacy of skills and experience:

- recruitment procedures;
- performance review/appraisal process;
- board evaluation process – including review and mitigation; and
- training and CPD.

It is important that managing agents retain evidence to demonstrate that the checks have been applied to relevant individuals and that, where issues have been identified, appropriate action has been taken.

Fit & Proper and outsourcing
The current EIOPA draft guidelines on the system of governance propose that where a key function is outsourced, the fitness and propriety requirements should apply to the individuals employed by the service provider to perform the outsourced functions.

An individual within the managing agent should be designated with overall responsibility for the outsourced function. The designated individual should be fit and proper and possess sufficient knowledge and experience regarding the outsourced key function to be able to challenge the performance and results of the service provider.
SECTION 5: OUTSOURCING

GOV 5.1

Outsourcing functions or insurance/reinsurance activities

Managing agents remain fully responsible for meeting all of their obligations when they outsource functions or any insurance or reinsurance activities.

Outsourcing of critical or important operational functions or activities shall not be undertaken in such a way as to lead to any of the following:
- materially impairing the quality of the system of governance of the managing agent;
- unduly increasing the operational risk;
- impairing the ability of Lloyd’s to monitor the compliance of the managing agent with its obligations; and
- undermining continuous and satisfactory service to policyholders.

Managing agents shall ensure that the service provider(s) have:
- adequate risk management and internal control systems;
- the necessary financial resources to perform the outsourced tasks;
- sufficiently qualified and reliable staff involved in providing the outsourced functions or activities; and
- adequate contingency plans to deal with emergency situations or business disruptions and periodical testing of back up facilities where necessary.

Managing agents shall ensure that they adequately take account of outsourced activities in their risk management and internal control systems.

Outsourcing definition

Outsourcing can be defined as an arrangement of any form between a managing agent and a service provider, by which the service provider performs a process, service or activity, whether directly or by sub-outsourcing, which would otherwise be performed by the managing agent itself.

Critical or important functions

Managing agents should determine and document whether an outsourced function is a critical or important function on the basis of whether the function is essential to the operation of the business, i.e. it would be unable to deliver its services to policy holders or members without the function.

The current EIOPA draft guidelines and explanatory notes on the system of governance propose the following examples of functions that would be considered critical or important:
- the design and pricing of insurance products;
- the investment of assets or portfolio management;
- claims handling;
- the provision of regular or constant compliance, internal audit, accounting, risk management or actuarial support;
- the provision of data storage;
- the provision of on-going, day-to-day systems maintenance or support; and
- the ORSA process.
The EIOPA explanatory text also suggests that the following activities should not be considered critical or important operational functions or activities:

- the provision of advisory services to the business, and other services which do not form part of the its insurance or reinsurance activities, such as legal advice, the training of personnel and the security of premises and personnel;
- the purchase of standardised services, including market information services and the provision of price feeds;
- the provision of logistical support, such as cleaning or catering; and
- the provision of elements of human resources support, such as recruiting temporary employees and processing.

Managing agents are required to consider whether any proposed outsourcing arrangement will unduly increase operational risk. In Lloyd's view this would occur when the increase in operational risk is disproportionate to the benefits to be gained from the outsourcing arrangement. Managing agents should also consider the impact in relation to their own risk appetite.

Whilst there is no specific requirement to notify Lloyd's of new outsourcing arrangements or changes to existing arrangements, managing agents should consider whether Lloyd’s should be informed where any significant new outsourcing arrangements or changes to existing arrangements are planned.

**Outsourcing and Delegated Underwriting**

When an insurance intermediary who is not an employee of the managing agent is given authority to underwrite business or settle claims in the name and on account of the managed syndicate(s) the activity should be subject to the outsourcing requirements under Solvency II. Further guidance on the application of requirements to Market Agreements can be found in the LMA Solvency II Committee’s January 2013 Outsourcing paper

[Link to LMA Solvency II Committee Outsourcing paper can be found in the appendix at the end of the document]

[Cross reference to DU standards]

**Xchanging**

Lloyd's recognises that Xchanging contracts for the market are agreed centrally and Lloyd's works with the LMA to ensure that the wording is consistent with Solvency II requirements.

**GOV 5.2**

**Outsourcing policy**

Any managing agent which outsources or proposes to outsource functions or any insurance or reinsurance activity to a service provider shall establish a written outsourcing policy.

The outsourcing policy shall take into account:

- the impact of outsourcing on the business; and
- the reporting and monitoring arrangements to be implemented in cases of outsourcing.

Where a managing agent outsources or proposes to outsource functions or activities it must have an outsourcing policy which includes consideration of the impact of outsourcing on its business and the
reporting and monitoring arrangements to be implemented in case of outsourcing. The policy must be assessed and updated regularly.

The outsourcing policy or supporting procedures should document:

- the process for development and approval of outsource contracts, including the managing agent’s governance arrangements over the determination of, firstly, whether outsourcing is appropriate and subsequently over the approval of the contract;
- the minimum requirements for any outsourcing agreement (see GOV 5.4). Managing agents may wish to include a template for outsourcing agreements as an appendix to the policy;
- the process for reporting and performance monitoring, including establishing key performance indicators; and
- business contingency plans, including exit strategies.

GOV 5.3
Outsource provider selection

When choosing a service provider for any critical or important operational functions or activities, the board shall ensure that it meets the requirements set out in Solvency II Level 2 Article 264 paragraph 3.

Where the managing agent and the outsource provider are members of the same group the managing agent shall, when outsourcing critical or important operational functions or activities, also take into account the extent to which it controls the service provider or has the ability to influence its actions.

Managing agents should refer to the Solvency II text (Level 2, Article 264, paragraph 3) for full details of the areas that need to be considered when choosing a service provider for any critical or important functions. At the point of selection managing agents need to ensure that they have the competence and ability at an appropriate senior level within the business to assess whether the service provider delivers according to contract. This will need to be maintained so that the managing agent is able to effectively monitor the arrangement on an ongoing basis.

Group outsourcing

Where functions or activities are carried out elsewhere in the group, managing agents should consider carefully whether the arrangements fall within the definition of outsourcing. Where this is the case, the standards and requirements relating to outsourcing will apply. However, the managing agent may take account of the extent to which it controls, or has influence over, the service provider and the examination of the service provider may therefore be less detailed. In such cases managing agents should ensure that there is a written agreement in place with the service provider setting out the duties and responsibilities of both parties. This could take the form of a service level agreement as the arrangement is unlikely to be subject to formal negotiations in the same way as an external outsource arrangement. Managing agents will retain responsibility for the outsourced functions and need to be able to demonstrate robust management of the arrangement(s) with, for example, business contingency plans.
Managing agents shall ensure that the terms and conditions of the outsourcing agreement are consistent with the managing agent's obligations under the Solvency II Framework Directive.

The written outsourcing agreement to be concluded between the managing agent and the service provider shall clearly state the requirements set out in Solvency II Level 2 Article 264 paragraph 4.

Managing agents should refer to the Solvency II text (Level 2, Article 264, paragraph 4) for full details of the areas that need to be included in outsourcing agreements. As well as these specific requirements managing agents may also wish to include explicit provision in outsourcing agreements for the performance of periodic audits of outsourced activities.

It is good practice to maintain a central record of all outsourcing arrangements and key details of each relevant agreement. This could also include a record of the individual within the managing agency with responsibility for each agreement.

Section 5.3 includes further guidance on agreements for group outsourcing arrangements.
SECTION 6: REQUIRED FUNCTIONS

GOV 6.1
Required functions - general provisions
Managing agents shall have effective risk management, compliance, internal audit & actuarial functions and ensure these are incorporated into the organisational structure in a way which ensures that each function is free from influences which may compromise its ability to undertake its duties in an objective, fair and independent manner and in the case of the internal audit function in a fully independent manner.

Managing agents shall ensure that:

- each function operates under the ultimate responsibility of, and reports to the board and has a clear reporting line to a nominated board member;
- where appropriate, each function cooperates with the other functions in carrying out their roles;
- individuals performing a function are able to communicate at their own initiative with any staff member and have the necessary authority, resources and expertise and that they have unrestricted access to all relevant information necessary to carry out their responsibilities; and
- the individuals performing a function promptly report any major problem in their area of responsibility to the board.

Managing agents should ensure that all of the required functions have sufficient resource and expertise as well as access to the Board and other personnel as required to fulfil their roles. The staffing of the functions listed in the standard will not necessarily correspond directly to existing departments given the nature of their responsibilities. For example, the risk management function is likely to need actuarial knowledge to fulfil its responsibilities on the internal model, whereas the risk management department may not include or require this resource to fulfil its day to day duties.

The functions should be integrated into the organisational structure in a way that ensures that there is no undue influence, control or constraint exercised on the functions with respect to the performance of their duties and responsibilities by other operational or key functions, senior management or the board. The functions should retain responsibility for taking the decisions necessary for the proper performance of their duties without interference from others.

Independence & segregation
Managing agents should seek to ensure that there is as much independence between functions as possible. This does not mean that the functions have to be completely segregated, with the exception of the internal audit function, provided that managing agents can demonstrate that the approach they adopt is proportionate to their risk profile. There are specific requirements around the independence of the internal audit function included in GOV6.4 and further guidance is set out in that section.

Reporting
The key functions should be able to report their results and any concerns and suggestions for addressing these directly to the board without restrictions as to their scope or content from anybody else. This does not however preclude that the reports are subject to comments by relevant functions within the business before they are passed on.
Lloyd’s expects each function to have a reporting line to a nominated board member, to ensure that there is clarity over accountabilities at board level. This does not mean that each function must report to a different director, but there should be a clear reporting line to a specific individual, rather than to the board as a whole. In the case of internal audit, the head of internal audit will usually report into the audit committee. They are likely to have a direct reporting line to the audit committee chair, and may also have a secondary executive reporting line.

Role of the board

The board is ultimately responsible for deciding how to react to the results, concerns and recommendations presented by the key functions. For example, it could resolve not to act or act differently from suggestions on the findings of a key function. However, it should not exert influence to suppress or tone down key function results in order that there should be no discrepancy between the findings of key functions and the board’s actions.

GOV 6.2

Risk management function

Managing agents shall have an effective risk management function.

The tasks of the risk management function shall include:
- assisting the board and other functions in the effective implementation and operation of the risk management system;
- monitoring the risk management system;
- monitoring the general risk profile of the business as a whole;
- detailed reporting on risk exposures and advising the board on risk management matters, including in relation to strategic affairs such as corporate strategy, mergers and acquisitions and major projects and investments; and
- identifying and assessing emerging risks.

For agents using an internal model, the risk management function shall cover the following additional tasks:
- to design and implement the internal model;
- to test and validate the internal model;
- to document the internal model and any subsequent changes made to it;
- to analyse the performance of the internal model and to produce summary reports on its performance;
- to inform the board about the performance of the internal model, suggesting areas needing improvement and updating the board on the status of actions to improve previously identified weaknesses;
- liaise closely with the users of the outputs of the internal model; and
- co-operate closely with the actuarial function.

Managing agents should structure their risk management function in the most appropriate way for their business and organisation, ensuring that the function is embedded in the organisational structure and taking account of the standards and guidance in GOV6.1. In practice, the risk management function is unlikely to be carried out by one individual or team in the business. There may be a risk management team or department but this will not necessarily include all areas that would be considered part of the risk management function.
Responsibilities

The risk management function is responsible for coordination of risk management activities across the business and ensuring the correct implementation of the risk policies. Its role will cover a number of activities including:

- specialist analysis and quality review of the design and effectiveness of the risk management system;
- monitoring the risk management system in order to identify any material failure of the system that impairs its effectiveness and outlining possible solutions for addressing such problems;
- reporting risk exposures to the board in the context of the agreed risk appetite and advising the board on the risk aspects of strategic affairs. This includes providing internal information on the outcome of the ORSA. It also covers reporting on risk exposures that have been identified as potentially critical and preparing reports on specific areas of risk according to requests from the board;
- suggesting ways to deal with emerging risks; and
- reporting to the senior management and other persons who require information, as well as to the board. The information will need to provide a comprehensive and objective representation of the business's risks and contain analyses of changes in the risks.

Internal model responsibilities

Lloyd’s expects all managing agents to have an internal model and the risk management function has specific responsibilities in relation to the model, which should be covered in its terms of reference. There are limited cases where it may be acceptable for agents to operate without an approved internal model, for example where the managing agent and/or syndicate is newly established. Lloyd’s will discuss these on a case by case basis with the managing agent concerned and agree an appropriate approach in each instance.

Within the risk management function, responsibility for design and implementation of the internal model should be separate from the responsibilities to test and validate the model. This should not present difficulties in practice as the risk management function is not necessarily the same as the risk management department, as outlined in the section above.

The risk management function should also be responsible for the following tasks in relation to an internal model:

- integration of the internal model into the risk management system and its day-to-day operations; and
- assessment of the internal model as a risk management tool and as a means of calculating the SCR.

Link to Risk Management Standards

The Governance Standards and guidance set out above cover the overall role of the risk management function. Managing agents should also refer to the Risk Management Standards and supporting guidance which contain further detail on the risk management system and specific risk areas.
Managing agents shall have an effective compliance function.

The compliance function shall include:

- advising the board on compliance with the laws, regulations and administrative provisions adopted pursuant to the Solvency II Framework Directive, Lloyd’s rules/requirements and other relevant regulatory requirements;
- an assessment of the possible impact of any significant changes in the legal environment on the operations of the business;
- the identification and assessment of compliance risk;
- assessing the adequacy of the measures adopted by the business to prevent non-compliance; and
- a compliance policy that defines the responsibilities, competencies and reporting duties of the function.

Managing agents shall appoint a compliance officer who is:

- a director or Company Secretary of the managing agent (in the event that a proposed compliance officer does not meet this requirement, the managing agent would need to discuss this with Lloyd’s prior to appointment); and
- responsible for compliance with Lloyd's Acts 1871 to 1982 and the managing agent’s duties to the members for whom it acts.

The agent’s compliance function must be able to communicate directly with any staff member on its own initiative and be able to access any records necessary for it to fulfil its role.

Compliance policy

The compliance policy should set out the role and operation of the compliance function including details of its operation within the business e.g. unfettered access, reporting structure. The compliance policy should also address the areas set out in GOV2.4 (required policies).

Responsibilities

Compliance is typically seen as a ‘second line’ activity in a three lines of defence model, with responsibility for monitoring and oversight of compliance with laws, regulations and administrative provisions. Compliance activities typically include the following areas:

- developing the compliance plan (see GOV6.4);
- drawing up guidelines and procedures for staff relating to compliance matters;
- enhancing staff awareness and ensuring continuous training of staff on compliance matters;
- recording any incident that must be reported and ensuring that the managing agent fulfils its obligations regarding notification to third parties (e.g. securities and financial market authority, etc.);
- investigating and following up breaches of the laws and regulations;
- advising on new products, services and markets from a compliance perspective;
- monitoring projected revisions of legislation and plans to introduce new regulation and assessing their potential impact on the business and monitoring the relevant court decisions;
- coordinating the money laundering reporting process; and
- regular reporting.
Reporting

The compliance function should report regularly to the board on compliance issues, covering compliance with laws, regulations and administrative provisions from regulators (including Lloyd’s), as well as the possible impact of changes in the legal environment and the assessment of compliance risk. The compliance report should also cover progress against the compliance plan (see GOV6.5).

The compliance function should ensure that any major compliance issues identified are reported promptly to the board.

GOV 6.4

Compliance plan

Managing agents shall have an effective compliance plan.

The compliance plan shall:
- set out the planned activities of the compliance function; and
- take into account all relevant areas of the activities of the business and their exposure to compliance risk.

Intended compliance activities should be set out in a compliance plan detailing the timetable of compliance work to be undertaken. The plan should cover at least the next business year in detail and may also provide information on planned activities and areas to be considered in future years. The plan would typically cover:
- regular monitoring activities;
- specific projects or tasks planned for the year;
- all areas of the business to a depth proportionate to their exposure to compliance risk;
- narrative comment on the state of the compliance ‘environment’, to put the detailed timetable of activities into context; and
- liaison with the PRA/FCA and Lloyd’s.

The compliance function should monitor progress against the plan and report on this to the board.

GOV 6.5

Internal audit function

Managing agents shall have an effective internal audit function which is objective and independent from the operational functions.

- The internal audit function shall include an evaluation of the adequacy and effectiveness of the internal control system and other elements of the system of governance; and
- The managing agent shall ensure that individuals carrying out the internal audit function do not assume any responsibility for any other function.

GOV 6.1 requires the internal audit function to be objective and fully independent. The requirement for independence from the operational functions effectively means that there should be a separate unit or individual within the managing agent with responsibility for internal audit. The internal audit
function should operate under the oversight of the board, reporting directly to the board or to an audit committee (see below for more detailed guidance on audit committees).

Lloyd’s view is that it is acceptable to outsource the internal audit function, provided it is subject to effective in-house oversight and challenge. This includes having a nominated senior individual responsible for liaison with the internal audit provider as well as ensuring that there is adequate reporting and oversight of internal audit matters at audit committee and/or board level. This is consistent with the general guidance on outsourcing set out in GOV5.3.

To ensure that internal audit independence is maintained, managing agents should consider the following:

- periodic rotation of internal audit staff assignments whenever practicable, to avoid any conflicts of interest;
- avoiding internally recruited auditors auditing activities or functions they performed in the recent past;
- ensuring that internal audit is not responsible for the delivery of business projects, although internal audit representative(s) may sit on project teams in an advisory capacity; and
- ensuring that internal audit is not responsible for implementation of audit recommendations – this is the responsibility of management.

Role and responsibilities

The role of the internal audit function is to examine and evaluate the functioning of internal controls and all other elements of the system of governance, as well as the compliance of activities with internal strategies, policies, processes and reporting procedures.

Managing agents need to ensure that there is clarity over the role and responsibilities of internal audit for example by formally documenting in an internal audit charter. The internal audit charter would typically:

- define the internal audit function’s purpose, strategic approach, authority and responsibility;
- establish the position of internal audit within the organisation;
- authorise internal audit to access records and personnel relevant to the work performed; and
- be approved by the audit committee and/or board.

Audit committee

Managing agents are not required to have an audit committee under Lloyd’s minimum standards, but in Lloyd’s view it is good practice to have an audit committee in place in order to provide effective oversight and monitoring of the internal audit function. Where managing agents have an audit committee internal audit should report directly to that committee, in order to maintain independence.

There should be a defined terms of reference for the audit committee including key information such as membership of the committee, attendance at meetings, frequency of meetings, authority and duties.

In order to maintain an appropriate degree of independence, the audit committee would typically comprise independent non-executives. It is also important that the non-executives have the required skills and/or knowledge for their role as members of the committee. For example, one of the roles of the audit committee is to review the financial statements; therefore there should be appropriate financial skills amongst the audit committee members.
The audit committee’s responsibilities in relation to internal audit should include:

- assessing the effectiveness of internal audit;
- approving the audit plan and monitoring delivery of the audit plan;
- reviewing and challenging all internal audit reports;
- providing input to the scope of audit work;
- determining if audit resources are adequate; and
- appointment or removal of the Head of Internal Audit.

Where Lloyd’s minimum standards make reference to board responsibilities for internal audit, it is acceptable for those matters to be covered in detail at audit committee level provided they are also reported to the board. For example, the audit plan is likely to be discussed in detail at audit committee level, but should also be reported to the board following agreement by the committee.

Impact of Sarbanes Oxley (SOX)

SOX is not a Lloyd’s requirement, however a number of US owned managing agents are subject to SOX requirements through their ownership by US public companies. In order to demonstrate SOX compliance, organisations must identify and test controls over inputs to their financial statements. Given the resources required to carry out this work, internal audit are often called upon to assist and this may divert audit effort away from the audit plan. SOX testing focuses on controls around the inputs to the financial statements and not on other areas of operational risk e.g. underwriters operating within their authority limits. It is therefore insufficient for an entity to rely solely on SOX testing as a means of testing the entire control environment or meeting the internal audit requirements of Lloyd’s minimum standards.

Internal audit may place reliance on testing of financial controls carried out during SOX compliance work. If reliance is to be placed on this work it is important that the testing has been carried out independently of management.

Chartered Institute of Internal Auditors Guidance

Managing agents should ensure that they are aware of the ‘Effective Internal Audit in the Financial Services Sector’ guidance issued by the Chartered Institute of Internal Auditors (IIA) in July 2013 [Link to IIA guidance can be found in the appendix at the end of the document] which covers the following areas:

- role and mandate of internal audit;
- scope and priorities of internal audit;
- reporting results;
- interaction with risk management, compliance and finance;
- independence and authority of internal audit;
- resources;
- quality assessment; and
- relationships with regulators.
## GOV 6.6
### Internal audit planning

The internal audit function shall establish, implement and maintain an audit plan.

*Managing agents shall ensure that the internal audit function:*

- adopts a risk-based approach in deciding its priorities;
- sets out in the audit plan the work to be undertaken in upcoming years, taking into account all activities and the complete system of governance of the managing agent and syndicate(s);
- carries out audits which are not included in the plan where necessary; and
- reports the audit plan to the board.

There should be a clear methodology for developing the internal audit plan and the following areas should be considered in preparing the plan.

Before completing the detailed internal audit plan, internal audit should set its overall scope i.e. the audit universe of all areas that should be considered when formulating the plan. The audit universe will drive the audit plan, with areas prioritised according to the associated level of risk. A detailed audit plan should be completed for the forthcoming year, including details of timing and internal audit resource for each assignment. A less detailed schedule of audits to be completed over the following two years should also be prepared. The basis on which the audit areas have been prioritised should be clearly explained in the audit plan, along with the audit cycle approach (i.e. how the frequency of audits of specific areas is determined).

The process of developing the internal audit universe/plan should involve discussions with management, although management should not dictate the contents. The risk register will be a key input to internal audit’s assessment of the risks in the business. However, internal audit should take an independent approach to assessing the risks in the business and the risk register should therefore not be relied upon as being the only source of risk related information. Indeed, the annual internal audit plan should include sufficient work to ensure that the internal audit function is able to assess the overall effectiveness of the governance and risk and control framework of the managing agent.

The audit plan should be approved by the board/audit committee and progress in delivering the audit plan should be reported to the board/audit committee.

Where the internal audit sections of Lloyd’s governance standards refer to reporting to or approval by the board, Lloyd’s recognises that this may also be achieved by reporting to or approval by the audit committee, which in turn reports to the board.

### Audit fieldwork

Audit work should be scoped to determine the areas that will be covered during the course of the audit. This should be based on the risks faced by the business and knowledge of any areas where there may be concerns about the effectiveness of controls.

- the work performed should be clearly linked to the audit scope to demonstrate that the scope of the audit has been met;
- the records of testing carried out during the course of the audit should clearly define the objective of the test, the sample selection basis and the testing performed, as well as test results; and
all audit procedures forming part of the audit assignment should be documented in working papers and there should be a clear audit trail from the work performed to the final audit report.

Chartered Institute of Internal Auditors Guidance

Managing agents should ensure that they are aware of the ‘Effective Internal Audit in the Financial Services Sector’ guidance issued by the Chartered Institute of Internal Auditors (IIA) in July 2013 [Link to IIA guidance can be found in the appendix at the end of the document] (see section 6.5 above for an outline of the areas covered by this guidance).

GOV 6.7
Internal audit reporting & follow up

Any findings and recommendations of the internal audit function shall be reported to the board.

The internal audit function shall:
- issue recommendations based on the result of work carried out in accordance with the internal audit plan; and
- submit a written report on its findings to the board on at least an annual basis.

Management actions proposed with respect to each of the internal audit findings shall be subject to review and challenge by the board. The internal audit function shall verify compliance with the actions agreed on the basis of its recommendations and report its findings to the board.

Internal audit should prepare a clear and concise report of the work performed during the course of an audit. The report should include actions agreed by management. This report should clearly state:
- a summary of the work that has been performed linked to the scope of the audit;
- an overall conclusion (this may incorporate a specific rating);
- summary of key findings; and
- detailed audit findings and appropriate recommendations including timescales for implementation of recommendations and persons responsible.

A rating may be applied to each audit finding, which will assist in indicating the relative importance of the findings and associated recommendations. Where relevant, the report should also comment on how past findings and recommendations have been addressed.

The report should be presented to the audit committee or board and the internal auditor should be prepared to respond to questions and challenge by the relevant forum. The distribution list for audit reports should include the audit committee or board, senior management of the area being audited, external auditors and the risk management function.

Issue tracking

It is imperative that all issues raised are monitored to ensure that agreed management actions are implemented in order to strengthen the control environment. There should be a record maintained of all audit issues raised and their status (implemented / outstanding etc).
Internal audit should verify the implementation of agreed management actions through testing and discussion with management on a regular basis, e.g. quarterly, and the audit committee or board should be kept informed of the status of agreed management actions.

Progress on implementing audit actions will also be an important factor in the regular review of the risk register. For this reason reports on such progress should also be tabled whenever the risk register is formally reviewed.

Where internal audit reports include suggestions for business improvements, they may not be subject to the same formal monitoring and verification as actions taken to address identified control weaknesses.

**Reporting to the Board**

There should be sufficient reporting to the board from the internal audit function and/or audit committee to ensure that the board is aware of the key issues.

In practice there is a variety of approaches to reporting, for example:

- a written annual internal audit summary report for the board, as well as regular reporting from the audit committee;
- regular written internal audit reports provided to the audit committee and board, e.g. on a quarterly basis; and
- audit committee minutes and papers made available to all board members, with summary written or verbal report (from the audit committee chair) to the board.

Where the audit committee chairman provides a verbal update to the board, this should be in sufficient detail to ensure that the board has an awareness of the key issues and the associated board minutes should reflect the detail of the verbal report and subsequent discussion.

Whichever approach is adopted, the reporting should cover issues identified with the internal control system and failures observed in following internal processes and procedures. It should include agreed management actions to remedy inadequacies and follow up on the actions taken by the managing agent in response to issues raised in previous reports. The report should also include information on the extent to which the internal audit function’s objectives, the execution of the audit plan and the follow up of agreed management actions have been achieved.

Where the internal audit sections of Lloyd’s governance standards refer to reporting to or approval by the board, Lloyd’s recognises that this may also be achieved by reporting to or approval by the audit committee, which in turn reports to the board.

**Chartered Institute of Internal Auditors Guidance**

Managing agents should ensure that they are aware of the ‘Effective Internal Audit in the Financial Services Sector’ guidance issued by the Chartered Institute of Internal Auditors (IIA) in July 2013 ([Link to IIA guidance can be found in the appendix at the end of the document](#)) (see section 6.5 above for an outline of the areas covered by this guidance).
Managing agents shall have an effective actuarial function.

The actuarial function shall be carried out by individuals who have knowledge of actuarial and financial mathematics commensurate with the nature, scale and complexity of risks in the business and who are able to demonstrate their relevant experience with applicable professional and other standards. The responsibilities of the actuarial function include:

- co-ordinating the calculation of technical provisions;
- ensuring the appropriateness of the methodologies and underlying models used as well as the assumptions made in the calculation of technical provisions;
- assessing the sufficiency and quality of the data used in the calculation of technical provisions;
- comparing best estimates against experience;
- informing the board on the reliability and adequacy of the calculation of technical provisions;
- overseeing the calculation of technical provisions in the cases set out in Article 82;
- expressing an opinion on the overall underwriting policy;
- expressing an opinion on the adequacy of reinsurance arrangements; and
- contributing to the effective implementation of the risk management system, in particular with respect to the risk modelling underlying the calculation of the capital requirements.

Managing agents shall ensure that they comply with the detailed requirements set out in Level 2 Article 262 paragraphs 1 to 7.

Lloyd’s Actuarial Function Report Guidance (February 2012) includes further guidance on the requirements of the syndicate actuarial function and should be read in conjunction with the summary below.

[Link to Lloyd’s Actuarial Function Report Guidance can be found in the Appendix at the end of this document]

Syndicate actuarial function requirements

Managing agents are responsible for ensuring that those carrying out the actuarial function have appropriate skills and knowledge, and for defining and operating appropriate governance surrounding their actuarial functions. As such, syndicate actuarial functions can be provided by either internal or external parties.

The actuarial function does not necessarily need to be a nominated person or single department; however the constitution of the actuarial function should be well defined in the governance and risk management structure established in the entity. Notably the provision of opinions on underwriting policy and adequacy of reinsurance arrangements may be provided by teams not usually considered “core actuarial” (and not necessarily made up of actuaries) which are deemed to have the appropriate expertise in each of these areas. The actuarial function can discharge the duties with opinions being collectively provided by more than one individual or by one person who is then relying on the work done by others but remaining responsible for the opinion. The exact constitution of the actuarial function will vary by syndicate but syndicates are reminded to consider the independence of the actuarial function from the normal operation of the syndicate and the management and administrative bodies.
GOV 6.9

Actuarial function report

The actuarial function shall produce a written report to be submitted to the board, at least annually.

The actuarial function report shall:

- document all tasks that have been undertaken by the actuarial function and their results;
- clearly identify any deficiencies and give recommendations as to how such deficiencies should be remedied; and
- be submitted to Lloyd's at least annually.

Lloyd's Actuarial Function Report Guidance (February 2012) includes further guidance on the requirements of the syndicate actuarial function report, including:

- calculation of technical provisions;
- opinion on the overall underwriting policy; and
- opinion on the adequacy of reinsurance arrangements.

[Link to Lloyd’s Actuarial Function Report Guidance can be found in the Appendix at the end of this document]
SECTION 7: REMUNERATION POLICY

GOV 7.1

Remuneration policy

Managing agents shall adopt a written remuneration policy.

When establishing and implementing the policy managing agents shall ensure that:

- they comply with the principles around its governance and application set out in Solvency II Level 2 Article 265, paragraph 1; and
- for board members, persons who effectively run the business, key function holders and other staff whose activities have material impact on the risk profile, they comply with the principles around the basis of remuneration set out in Solvency II Level 2 Article 265 paragraph 2.

Remuneration Policy

Managing agents should refer to the Solvency II text (Level 2, Article 265, paragraph 1) for full details of the principles they should comply with when establishing and applying their remuneration policy. The areas covered by these principles include the following:

- alignment of the policy with the business and risk management strategy, risk profile, objectives, risk management practices and the long-term interests and performance of the business as a whole;
- the need to ensure that the policy does not encourage risk-taking that exceeds the risk tolerance limits of the syndicate;
- application of the policy to the business as a whole, with specific arrangements for the various categories of staff whose professional activities have a material impact on the risk profile of the business e.g. board members, key function holders etc;
- board responsibility for control and implementation of the policy;
- the need for clear, transparent and effective governance with regard to remuneration;
- establishing a remuneration committee, where considered appropriate in relation to the significance of the business in terms of its size and internal organisation; and
- disclosure of the policy to each member of staff.

Executive remuneration

Managing agents should seek to ensure that levels of remuneration are sufficient to attract, retain and motivate directors of the quality required to run the company successfully. There should be a formal and transparent procedure for developing policy on executive remuneration and for fixing the remuneration packages of individual directors. No director should be involved in deciding his or her own remuneration.

Managing agents should refer to the Solvency II text (Level 2, Article 265, paragraph 2) for full details of the principles they should apply when establishing and applying their remuneration policy for board members, persons who effectively run the business, holders of key functions and other categories of staff whose professional activities have a material impact on the risk profile. The areas covered by the principles include the following:
• consideration of fixed and variable components of remuneration schemes;
• basis for performance related variable remuneration;
• deferred payment of variable components of remuneration;
• criteria for assessing individual performance;
• termination payments; and
• the need for staff to commit to not using any personal hedging strategies or remuneration and liability-related insurance.
APPENDIX – LINKS

- Data Protection Act:

- LMA Solvency II Committee outsourcing paper
  http://www.lmalloyds.com/CMDownload.aspx?ContentKey=75a079ba-19cd-4253-8ac4-8dce67e085b5&ContentItemKey=34cde2c4-1e02-46a8-9356-f22a4cf573f5

- Chartered Institute of Internal Auditors Guidance
  http://www.iia.org.uk/media/354788/0758_effective_internal_audit_financial_webfinal.pdf

- Lloyd’s Actuarial Function Report Guidance (February 2012)
LLOYD’S MINIMUM STANDARDS
MS4 – RISK MANAGEMENT

JULY 2014
MS4 – RISK MANAGEMENT

MINIMUM STANDARDS AND REQUIREMENTS

These are statements of business conduct required by Lloyd’s. The Minimum Standards are established under relevant Lloyd’s Byelaws relating to business conduct. All managing agents are required to meet the Minimum Standards. The Requirements represent the minimum level of performance required of any organisation within the Lloyd’s market to meet the Minimum Standards.

Within this document the standards and supporting requirements (the “must dos” to meet the standard) are set out in the blue box at the beginning of each section. The remainder of each section consists of guidance which explains the standards and requirements in more detail and gives examples of approaches that managing agents may adopt to meet them.

GUIDANCE

This guidance provides a more detailed explanation of the general level of performance expected. They are a starting point against which each managing agent can compare its current practices to assist in understanding relative levels of performance. This guidance is intended to provide reassurance to managing agents as to approaches which would certainly meet the Minimum Standards and comply with the Requirements. However, it is appreciated that there are other options which could deliver performance at or above the minimum level and it is fully acceptable for managing agents to adopt alternative procedures as long as they can demonstrate the Requirements to meet the Minimum Standards.

DEFINITIONS

ECA - Economic Capital Assessment.

EIOPA - The European Insurance and Occupational Pensions Authority.

ORSA - Own Risk and Solvency Assessment.

SCR – Solvency Capital Requirements. [Where the risk management standards and guidance refer to the SCR this covers both the 1 year and ultimate numbers generated by the internal model]

The Board - Where reference is made to the board in the standards, agents should read this as board or appropriately authorised committee. In line with this, each agent should consider the matters reserved for the board under the Governance Standard in order to evidence appropriate full board discussion and challenge on these subjects.
SECTION 1: RISK MANAGEMENT SYSTEM

RM 1.1

Effective risk management system

Managing agents shall have in place an effective risk management system.

The risk management system shall:

- comprise strategies, processes and reporting procedures necessary to identify, measure, monitor, manage and report on a continuous basis the risks, at an individual and at an aggregated level, to which they are or could be exposed, and their interdependencies;
- be well integrated into the organisational structure and in the decision making processes of the managing agent; and
- cover the risks to be included in the calculation of the SCR as well as the risks that are not or not fully included in the SCR calculation.

Risk management is a continuous process that is used in the implementation of the business strategy and allows for an appropriate understanding of the nature and significance of the risks to which the business is exposed, including its sensitivity to those risks and its ability to mitigate them.

Managing agents should ensure that there is a coordinated and integrated approach to risk management and a common risk language that is understood across the business.

The board is ultimately responsible for ensuring the effectiveness of the risk management system, setting risk appetite and overall risk tolerance limits as well as approving the main risk management strategies and policies. Whilst risk management is the responsibility of the board as a whole, Lloyd’s requires that the risk management function should report to a nominated director (see GOV6.1). The current EIOPA draft guidelines and explanatory notes on the system of governance also propose that at least one board member is designated to oversee the risk management system on the board’s behalf. The detailed requirements with regard to the risk management function are covered in Lloyd’s governance standards (GOV6.1 & 6.2).

Elements of the risk management system

The standard sets out the features of an effective risk management system at a high level. Further requirements and guidance relating to these are covered within other sections of the standards and guidance as set out below:

<table>
<thead>
<tr>
<th>SUBJECT</th>
<th>REFERENCE IN STANDARDS/GUIDANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk strategy</td>
<td>RM2.1</td>
</tr>
<tr>
<td>Risk governance structure</td>
<td>RM2.1</td>
</tr>
<tr>
<td>Decision making processes</td>
<td>RM2.2</td>
</tr>
<tr>
<td>Risk identification and assessment</td>
<td>RM3.1</td>
</tr>
<tr>
<td>Risk reporting</td>
<td>RM3.2</td>
</tr>
</tbody>
</table>
Risk coverage

The risk management system must incorporate all material risks, both those that are included in the calculation of the SCR\(^1\) and those that may not be, such as reputational and strategic risk. Consideration should also be given to emerging risks (see RM3.1 for further detail on processes in relation to emerging risks).

For capital purposes the focus is the 1:200 point of the distribution, but this should not be the sole focus of the risk management system and consideration will need to be given to other points on the distribution as appropriate, for example, comparison with expected or planned performance.

\(^{1}\) Where the risk management standards and guidance refer to the SCR this covers both the 1 year and ultimate numbers generated by the internal model
SECTION 2: RISK GOVERNANCE

RM 2.1
Risk Management Strategy
The risk management system shall include a clearly defined risk management strategy which is consistent with the managing agent’s overall business strategy.

Managing agents shall ensure that the approach to risk management is communicated throughout the organisation and supported by explicit ownership of the risks and a clear allocation of responsibilities for their day to day management.

The risk management strategy shall be documented, including the managing agent’s:
- objectives;
- key risk management principles;
- risk appetite and approved risk tolerance limits;
- risk management approaches and processes; and
- assignment of risk management responsibilities across all the managing agent’s activities.

Business strategy can be defined as the high-level plans that are developed by a managing agent and are further specified via policies and business plans to ensure implementation in day-to-day business.

The risk management strategy should define and communicate the managing agent’s approach to managing risk by detailing the framework, tools and governance in place to deliver the defined strategy. It should illustrate how this approach is consistent with the overall business strategy. The top level business and risk strategy should be owned and directed by the board.

Lloyd’s does not prescribe the exact structure and content for managing agents’ risk documentation. However, it is important for managing agents to ensure that they have a comprehensive suite of risk management documentation that covers all the areas expected.

Organisational structure and risk responsibilities
A good organisational structure supports the effective management of risk. The structure should be appropriate to the managing agent but typically would provide for three levels of governance with respect to risk:

- direct responsibility for the management and control of risk (i.e. staff and management working within or managing operational business units together with the board);
- co-ordination, facilitation and oversight of the effectiveness and integrity of the risk management framework (e.g. the risk committee and risk management function); and
- provision of independent assurance and challenge across all business functions in respect of the integrity and effectiveness of the risk management framework (i.e. internal and external audit).

Such a structure is commonly referred to as the ‘three lines of defence’ model.

An effective structure would typically have clear accountability and expectations which will help achieve business objectives and ensure decisions are co-ordinated and consistent with stated risk appetite and policy. Careful consideration should be given to the allocation and communication of
roles, responsibilities and accountabilities across the business, and the setting of rules and processes for risk based decision making and reporting to ensure that these are appropriate.

It is important that all relevant parties understand their roles, responsibilities and accountabilities; including what is expected of them and their authority for decision making and reporting (i.e. each relevant individual is able to explain who they are accountable to, in what manner and how relevant risk appetites and policies apply to their role). There should also be a clear understanding of the relationships and associated tasks between key business and functional areas to ensure that all relevant parties are able to share relevant information and take account of all relevant and significant factors in order to make informed decisions.

Managing agents should ensure that they provide appropriate risk management tools, that are easily accessible, to support their processes and staff. Appropriate training and development should also be provided, for all staff, surrounding all aspects of the managing agent's approach to risk management.

The risk management framework should be underpinned by a commonly agreed and understood terminology and language for risk that complement the managing agent's culture and business practice, used by, and readily available to, all staff.

The organisational structure should facilitate appropriate risk information flows around the business on a timely basis, and there should be processes in place to escalate risk issues. To be effective, escalation processes would typically be accessible to all and have clearly laid-out procedures, trigger points and escalation points. It is important to ensure that the confidentiality, integrity and availability of information is maintained, particularly relating to those processes critical to the success of the business.

There should be unambiguous ownership of every aspect of the risk management process across the business. Ownership involves a range of responsibilities and could be defined using set roles such as:

- risk owner - has responsibility for managing and co-ordinating all aspects of the risk, ensuring that relevant information is available and assessed, and that relevant individuals are aware of the risk and involved in decision-making; and
- control/action plan owner - responsible for the management and execution of controls/action plans surrounding a specific risk.

Managing agents should also refer to GOV2.1 & 2.2 which set out more general requirements with regard to organisational structure and segregation of duties.

**Risk management strategy**

The risk management strategy should be documented, with further detail of the day to day implementation of the strategy set out in supporting documentation, typically in specific risk policies. The following sections set out more detail of areas that should be covered in the risk strategy and other supporting documentation.

**Objectives**

The approach to risk management should be consistent with the overall business strategy and therefore the risk strategy objectives should be derived from the actions in place to deliver the overall business plans. Typically the risk strategy objectives would be expressed at a relatively high level setting out broadly how the risk strategy is consistent with the high level business strategy.
Key risk management principles
The risk management principles should underpin the approach to risk management and guide the maintenance and development of the risk management framework. Examples include statements about the approach to risk governance, risk ownership and the risk culture.

Risk appetite and approved risk tolerance limits
Whilst Solvency II refers to both risk appetite and risk tolerances, these terms have not been explicitly defined within current Solvency II requirements or guidance. The following section sets out general guidance in relation to risk appetite and risk tolerances for agents to consider. Lloyd’s acknowledges that managing agents may have their own definitions for these terms, which do not align to the descriptions below. Some agents also use the term ‘risk capacity’ which is seen as a function of financial strength and risk management capability.

The high level risk management strategy documentation should set out the overall approach, with more detail in a supporting risk appetite framework or similar documentation. This section sets out areas for consideration in relation to risk appetite and provides some guidance on how risk appetite and tolerances could be defined.

Risk appetite can be defined as the articulation of the managing agent’s willingness to take on risk, and should focus, at a minimum, on the most material risks of the business. Managing agents should define and describe their risk appetite and overall risk limits to manage significant risks from all sources.

Risk appetite addresses the attitude of the board towards the most significant risks faced by the business. Board level risk appetite metrics should be consistent with strategic high level objectives and also be sufficiently detailed to be applied practically. They may include quantitative assessments in terms of risk and capital, as well as qualitative statements. The metrics should provide the board with a snapshot of the risk profile of the business against which the board can judge if risk taking is within acceptable boundaries.

Overall risk tolerance limits can be defined as the restrictions the managing agent imposes on itself when taking risks. This may include detailed limits and triggers supported by monitoring processes and should guide day to day decision making in line with the overall risk appetite metrics.

Each risk category needs to be addressed by the combination of risk appetite and tolerances, although there may not be an explicit risk appetite statement for every category. For example, group risk may be considered as part of operational risk with appropriate tolerances set around it, rather than having a separate group risk appetite statement.

It is important that risk appetites and tolerances are clearly communicated to all relevant managers and staff at all levels and cascaded as appropriate throughout the managing agent. They should guide risk acceptance and decision-making throughout the business.

Risk management approaches and processes
The risk management strategy should provide an overview of the risk framework and the approaches and processes in place to manage risk. There should also be supporting documentation such as risk policies and procedure documents which set out more detail of the risk processes in place. More detailed guidance on risk policies and risk processes is set out in sections 2 and 3 of the risk management standards.
RM 2.2

Decision Making

Managing agents shall have a clearly defined procedure on the decision-making process within the framework of the risk management system.

*Managing agents shall ensure that:*

- risk and risk management issues are addressed by the board and appropriate committee(s); and
- the identification and assessment of risk and control prompts action where necessary; and
- the persons who effectively run the business or have other key functions take into account the information reported as part of the risk management system in their decision making process.

Managing agents should ensure that there is clarity over the risk decision making process, in particular which bodies or individuals have decision making authority.

**Board and committee responsibilities**

The operation of the risk governance structure should provide adequate oversight and challenge to ensure that risks are being appropriately managed in line with the agreed risk appetite. This requires that proper consideration is given to risk issues at board level as well as appropriate reporting through the committee structure. Managing agents are responsible for determining the most appropriate risk governance structure for their business, taking account of the need to ensure that any forum they have in place has members with relevant and appropriate expertise and experience, appropriate terms of reference and the authority to act on relevant issues. It is usual practice to establish a risk committee with oversight of the entire risk management framework to ensure that risk matters are given sufficient attention and focus.

**Risk responses**

The identification and assessment of risk and control, which is described in more detail in RM3.1, should prompt appropriate action where necessary. There are a number of ways in which managing agents may respond to risk, including:

- transfer part of the risk elsewhere; for example by buying insurance or reinsurance;
- treat or mitigate the risk; i.e. reduce the likelihood and/or impact of it;
- accept or tolerate the current level of risk, where risk is approaching or already at risk tolerance limits. This may be appropriate where mitigating the current level of risk is disproportionate to the benefits to be gained by doing so;
- eliminate or terminate; for example by exiting a class of business altogether; and
- amending risk appetite levels or tolerating the breach for a short time (in which case the rationale should be documented).

When determining the appropriateness of risk responses the following could be considered:

- the feasibility and relative costs (direct, indirect and opportunity) and benefits of alternative risk response options, the cost to design and implement a new control, and the on-going cost of operating the control;
- the qualitative aspects of the risk, such as the impact on reputational risk;
- the need to ensure that responses are based on a comprehensive understanding of risk and its components, particularly the causes of risk, to ensure that they are addressed;
- how risk events and their controls interact with one another. In determining the most appropriate response a portfolio view of risk and control can enable management to
determine whether the overall level of risk in the business is commensurate with its risk appetite; and
• whether risks that cannot be controlled to within acceptable levels should be avoided, or contingency plans developed.

Action plans are typically developed and implemented to address unacceptable levels of risk and/or remediation of control weaknesses.

Managing agents should consider how the assurance processes can ensure the effective operation of controls and the implementation of action plans.

Risk information

Managing agents should ensure that there is effective reporting of key risk information to the relevant governance forums to ensure that those involved have all the information that they need to take into account in the decision making process. Section RM3.2 below sets out more detailed standards and guidance in relation to risk reporting.

RM 2.3
Risk Policies

Managing agents shall have in place written risk management policies.

The risk management policies shall cover the following areas:
• underwriting and reserving;
• asset-liability management;
• investment, in particular derivatives and similar commitments;
• liquidity and concentration risk management;
• operational risk management; and
• reinsurance and other risk mitigation techniques.

Managing agents shall ensure that the risk management policies:
• meet the requirements set out in Lloyd’s Governance Standard GOV2.4;
• define and categorise the material risks by type to which the business is exposed;
• define the approved risk tolerance limits for each type of risk;
• implement the managing agent’s risk strategy;
• facilitate control mechanisms; and
• take into account the nature, scope and time horizon of the business and the associated risks.

Whilst this standard refers to separate policies for each area, this does not necessarily mean that separate documents are needed for each. It would be acceptable to have one document covering all risk types or to have separate policies for each risk type. There may also be separate supporting documentation, for example setting out details of the current risk appetite and tolerances or stress and scenario testing framework. Whichever approach is adopted, managing agents should ensure that their documentation covers the areas set out in the standard.

The standard requires managing agents to define and categorise their material risks by type. Here, the term ‘risk type’ can be used interchangeably with ‘risk category’ (see section 3.1 below for further guidance on risk categories).
Risk management policy

The risk management policy is one of the governance policies required under Lloyd’s Governance standards and general requirements and guidance is set out in GOV2.4.

The risk management policy would typically:

- define the risk categories and the methods to measure the risks;
- cover all material risks, including emerging risks, quantifiable or non-quantifiable and reputational and strategic risks where relevant;
- outline how the managing agent manages each relevant category and area of risk;
- consider potential accumulation and interactions of risk;
- specify risk tolerance limits within all relevant risk categories in line with the managing agent’s overall risk appetite; and
- set out the process and frequency of regular stress and scenario tests, and describe the situations that would warrant special stress and scenario tests.

Managing agents need to ensure that their documentation covers the areas set out in Solvency II, level 2, Article 252 paragraphs 1(a) to (g) with regard to the following:

- underwriting and reserving risk;
- asset-liability management;
- investment risk;
- liquidity risk;
- concentration risk (i.e. aggregation of risk exposures within and between risk categories);
- operational risk; and
- reinsurance and other mitigation techniques.
SECTION 3: RISK PROCESSES

RM 3.1
Risk Identification & Assessment

The risk management system shall include processes by which a managing agent can identify, assess and mitigate the significant risks to the achievement of its business objectives.

Managing agents shall ensure that:

- their processes are proportionate to the nature, scale and complexity of the risks inherent in the business;
- they consider the risks to which they are or could be exposed in the short and long term;
- formal risk identification is undertaken at least annually, and updated regularly;
- risk is assessed using appropriate qualitative and/or quantitative techniques, which include consideration of risk aggregations and correlations;
- there are internal controls in place, designed to manage risks to acceptable levels and the effectiveness of controls is regularly considered in managing and balancing risk and appetite;
- details of all significant risks and controls are documented, e.g. in a risk register;
- they include the performance of stress tests and scenario analysis, including reverse stress tests, with regard to all relevant risks faced by the business in their risk management system;
- their processes do not place undue reliance on third party information and that, where relevant, they take steps to verify the appropriateness of any such information as part of their risk management; and
- they have a process to identify, assess and manage emerging risks.

Managing agents should ensure that they adopt processes for risk identification and assessment that are appropriate given the nature, scale and complexity of risks inherent in the business. It is important to ensure that the appropriate individuals from across the business are involved and that they understand the relevant aspects. The identification and assessment of risks should be clearly documented.

Risk identification

Risk identification is a key component of a robust risk management framework. As an initial step in this process managing agents should ensure that they have a clear understanding of their risk universe. This can be defined as documenting the various types of risk the business may face.

An effective risk identification process would typically:

- identify the significant risks to the achievement of the business objectives;
- identify all types of risk, associated major components and controls currently in place, from all sources, across the entire scope of the managing agent’s activities;
- identify risks around opportunities as well as threats, to increase the managing agent’s chance of maximising the benefit of those opportunities when they arise;
- ensure that the managing agent is aware of its major risks at any point in time, and include elements to update its understanding of risk on an ongoing basis, such as key indicators;
- focus on the root causes and influencing factors of risk, both internal and external, as well as its effects and outcomes: financial, reputational and other; and
- look forward, as well as drawing on past experience, by including elements such as horizon scanning.
Risk categories aid effective, systematic and comprehensive risk identification, forming the basis for a more detailed identification process to ascertain individual risks and their components. Managing agents should consider carefully the risk categories that they adopt and there should be clarity over how these map to Solvency II risk categories.

Managing agents may wish to employ a combination of “bottom up” (typically starting with data analysis, building up into an aggregate view) and “top down” (e.g. starting with the consideration of influencing factors or risk groups) tools according to the size and complexity of the business.

Risk assessment
Risk assessment enables a greater understanding of risk, and is vital to the process of making risk-based decisions, by providing:

- comparison of risks against each other, thereby helping to prioritise risks in terms of the focus and attention that should be given to individual risks;
- comparison against appetite, prompting remedial action and providing assurance towards the “in control” status of the organization;
- cost versus benefit analysis of risk taking activities and alternative control options; and
- valuable input into the capital assessment process.

An effective assessment of risk would typically be reviewed regularly to ensure it stays relevant and appropriate to the nature and level of risk within the business. The frequency of review should reflect the risk profile of the business, and might typically be quarterly or six-monthly. Managing agents should also look to ensure that their risk assessments identify potential aggregations of risk and risks that interact or correlate either positively or negatively across the business.

It is up to managing agents to decide on the most appropriate risk assessment process for the risks that they face, which may not necessarily be the same for all risk categories. For example, the processes followed for operational risk and insurance risk are likely to be different, given the nature of the information available to support the assessment.

Qualitative and quantitative assessment
Managing agents should ensure that they use an appropriate assessment method which might be qualitative or quantitative, or a combination or both. The appropriate method will depend on a number of factors, including the nature of the risk and the managing agent’s risk policy. Whatever methods are chosen, the managing agent should be able to demonstrate the effectiveness and appropriateness of its assessment criteria and techniques.

Qualitative methods are often used to facilitate risk assessment and encourage discussion e.g. in risk workshops. They are also used when there is insufficient data to perform more quantitative assessments or where more subjective judgement is needed. When using qualitative assessment methods it is important to be aware of the need to use the right people, with the appropriate competence and experience.

Where self-assessment methods are being used, there should be procedures to provide challenge and oversight to ensure judgement is being consistently applied across the organisation. This is important as there can be a significant diversity in judgmental perceptions of risk from person to person. Given the subjective nature of such assessments, key indicators and loss analysis may be of benefit to corroborate or challenge them.

Quantitative tools rely on the availability of a sufficient amount of reliable historical data. Where there is insufficient internal data, the use of an external loss database may provide some benefit. Managing agents should however give careful consideration as to whether that external data is
appropriate to their risk profile, and relevant to the particular risks being assessed. Furthermore, they should also take into account that they have relatively little control over the completeness and accuracy of information compiled in an external database.

The use of internal databases should also be treated with an element of caution since historical performance is not necessarily an indication of future events. Consideration should therefore be given to the potential changes to the risk and control environment, risk causes, impacts and probabilities over time.

Managing agents should also be able to demonstrate that parameters and assumptions used in modelling techniques are suitable and robust, and that time horizons are appropriate and consistent with related strategy and objectives.

**Impact and probability**

The approach to risk assessment may involve consideration of the impact and probability of risks on both an inherent and residual basis. Assessment of impact and probability of risks should be based on metrics or scales that are:

- suitable and appropriate to the business;
- commonly understood across the organisation; and
- in line with the managing agent’s risk policy.

Consideration of inherent risk (before controls) can provide a number of benefits:

- assisting the understanding of exposure level in the event of a significant control failure;
- helping identify key controls and their effectiveness;
- providing better understanding of the nature of interaction between risks and their associated controls; and
- providing assistance in the development of effective key indicators as well as controls.

A sensible assessment of inherent risk would be one that is appropriate to the risk profile of the business as well as the type and complexities of the appropriate risks. Such an assessment would typically be:

- practical and commensurate;
- relative to other risks; and
- more qualitative/subjective; as it may not be necessary or appropriate to associate a monetary value to the risk.

**Internal controls**

Control activities operate at all levels within the business to mitigate risks within acceptable levels. Controls may include policies, procedures, systems and processes in place throughout the organisation. Effective controls are typically:

- appropriate and commensurate with the key risks faced at all levels across the business in order to provide cost effective risk mitigation;
- a normal part of day to day activity, systems and procedures management and decision making processes throughout the business;
- co-ordinated across the business;
- subject to regular evaluation (i.e. are the controls effective at mitigating the key risks, did they work throughout the period under review, and if not, identify corrective action); and
- subject to an overall assurance process which also addresses the wider control environment.
The control environment encompasses the wider governance approach, management style, organisational structure and culture within which control activities take place. Controls are often categorised into two broad types although a combination will usually be needed:

- **prevent** - controls reduce the likelihood of a risk event occurring in the first place, e.g. planning and strategy setting, authorisation and data input controls; and
- **detect** - controls identify occurrences of risk events after they have occurred and enable remedial action to be taken to limit the extent of damage, e.g. exception alerts and reports, and reviews of actual results against expectation.

Risk assessment will need to consider the effectiveness with which controls mitigate risk. One method is to consider the design of a control and its performance:

- **design** – considers how well the control should work if it is always applied in the way it is intended to work; and
- **performance** – considers the way in which the control is operated in practice; if it is applied when it should be and in the way intended by its designer.

**Risk documentation**

All significant risks should be documented, for example in a risk register. A risk register brings together the output of the risk identification process and should reflect the size and complexity of the business and its risk policy. An effective risk register typically:

- gathers together risk information to enable effective sharing and communication of that information;
- focuses attention on the key risks and therefore drives action;
- is consistent with the capital requirements of the managing agent;
- assists in developing a portfolio view of risk;
- facilitates monitoring and review;
- evidences a systematic and comprehensive approach to risk identification; and
- is subject to regular review and update.

With respect to significant risks, a risk register typically captures:

- a description of the risk;
- the assessment of risk and control;
- causes and influencing factors, both internal and external;
- effects and outcomes, financial, reputational and other; and
- controls and actions currently in place to manage elements of the risk.

**Stress & scenario tests**

Managing agents should use stress and scenario tests as tools in their risk assessment process to determine the expected financial consequences of adverse circumstances and events arising. The overall approach should include stress tests, scenario analyses and reverse stress testing.

Stress tests are generally defined with reference to movements in key financial parameters (such as interest rates, asset values or liability values), whereas scenario tests may make reference to the cause of the adverse developments, such as material natural catastrophe or major industrial incident.

Stress tests should be tailored by the managing agent to their risk profile. To this purpose managing agents should identify possible short and long term risks and possible events or future changes in
economic conditions that could have an unfavourable effect on their overall financial standing and determine their capital impact.

Scenario analyses should be based on a range of events, including extreme but plausible events, and take into account any material second order effects which may arise.

Reverse stress tests are those that require a managing agent to assess scenarios and circumstances that would render its business model unviable, thereby identifying potential business vulnerabilities. Reverse stress testing starts from an outcome of business model unviability and identifies circumstances under which this might occur. This is different to general stress and scenario testing which tests for outcomes arising from particular events or changes in circumstances. Reverse stress tests need to focus not only on the capital impact of potential events but also on other elements which could make a business model unviable e.g. loss of business, profitability or reputational impacts of certain events.

A firm’s business model is described as being unviable at the point when crystallising risks cause the market to lose confidence in the firm. A consequence of this would be that counterparties and other stakeholders would be unwilling to transact with or provide capital to the firm and, where relevant, existing counterparties may seek to terminate their contracts. Such a point could be reached well before regulatory capital is exhausted.

The content of all stress and scenario tests and reverse stress tests should be documented, along with conclusions drawn and any follow up actions agreed.

**Reliance on third party information**

Lloyd’s recognises that there may be a need for managing agents to use external data. Where external data is used managing agents should ensure that it is appropriate and relevant to their business and that they do not place undue reliance on any external assessments (e.g. external credit assessments, as set out in Solvency II level 2, article 251, paragraph 4).

**Emerging risks**

Emerging risk can be defined as a risk that is perceived to be potentially significant but which may not be fully understood or allowed for in insurance terms and conditions, pricing, reserving or capital setting. Managing agents need to ensure that their risk processes cover the identification, assessment and management of emerging risks in a way that is appropriate for their business. Consideration should be given to:

- governance structure i.e. governance groups involved in the process;
- internal and external information sources;
- documentation of emerging risk information and assessments; and
- reporting on emerging risks.
RM 3.2
Risk Monitoring & Reporting
The risk management system shall include reporting procedures and processes which ensure that information on the material risks faced by the business and the effectiveness of the risk management system are actively monitored and analysed.

Managing agents shall ensure that:
- they have processes for regular monitoring and update of their risk profile for changes to the internal and external risk environment, and identifying and responding to significant issues and events;
- they have sufficient measures and checks in place to enable ongoing monitoring of the internal and external risk environment;
- key risk information is reported via the governance structure;
- risk analysis prompts appropriate modifications to the risk management system where necessary; and
- the risk profile is a key input to setting and re-setting business objectives, policies, risk appetite and the internal control environment.

It is important that managing agents have processes in place to ensure that they maintain an accurate, current view of their risk profile. Appropriately detailed regular reporting should be in place across all relevant levels of the business. The frequency and content of reporting to the board should ensure that it has all necessary current information for decision taking, at an appropriate level of detail.

Monitoring the risk profile
An effective process for the regular review and update of the risk profile would typically:
- take into account all risks identified by the business, with more rigorous review of significant risks;
- identify, respond to and escalate, to appropriate parties significant changes in the risk profile;
- be continuous and iterative to ensure the risk profile is up to date; and
- be triggered by changes in the risk environment, both internal and external.

Monitoring the risk environment
Managing agents should ensure that they have sufficient measures and checks in place to enable them to monitor the internal and external risk environment. This should enable them to obtain information that may signal a need to re-evaluate objectives, policies and appetite for risk, internal control, information needs or related information systems.

The process of monitoring and review could be prioritised to focus on:
- risks posing the greatest probability of damage to the business, including projects with significant risks attached; and
- key controls relied on in achieving an acceptable level of residual risk.

Monitoring and review practices should be appropriate to the business. Practices might include:
- continuous monitoring via routine measures and checks, including risk and control indicators;
- risk and control owner reviews;
- analysis of actual losses and near misses; and
- internal and external audit checks of processes, systems and controls.

Effective monitoring typically includes undertaking regular inspection of actual performance for comparison with pre-set objectives, expected or required performance. It will also involve input from across the organisation, providing a link between individual teams and the risk management function.

Managing agents should also ensure that their processes include consideration of any relevant changes in the external environment, e.g. changes in economic conditions, industry losses, changes in the regulatory environment etc

**Risk reporting**
Timely and accurate management information assists management to:
- understand the risk profile of the business and how this has changed over time;
- determine whether risk exposures are being managed in accordance with the risk appetite and high level standards set by the board;
- assess the "in control" status of the business (i.e. where risks are within appetite the control environment is effective, or if not, the contributing factors are understood and there are plans in place to manage them); and
- take action to mitigate unacceptable exposures to risk.

Key risk information should be reported via the governance structure (see RM2.1 for more detail on risk governance) and is likely to cover a range of reports including:
- updates/changes to the risk profile;
- risk appetite reporting and key risk indicators;
- actual/potential losses and near miss events;
- control effectiveness; and
- action plan progress.

Managing agents should ensure that appropriate action is taken in response to the issues reported (refer to RM2.2 for further guidance).
SECTION 4: OWN RISK & SOLVENCY ASSESSMENT

RM 4.1

ORSA Scope

As part of its risk-management system every managing agent shall conduct its own risk and solvency assessment.

The ORSA should cover each syndicate under management and should include at least the following:

- the overall solvency needs taking into account the specific risk profile, approved risk tolerance limits and the business strategy;
- the compliance, on a continuous basis, with the regulatory capital requirements, and with the regulatory requirements regarding technical provisions; and
- the significance with which the risk profile of the managed syndicate(s) deviates from the assumptions underlying the Solvency Capital Requirement calculated with the internal model.

The ORSA can be defined as ‘the entirety of the processes and procedures employed to identify, assess, monitor, manage, and report the short and long term risks a (re)insurance undertaking faces or may face and to determine the own funds necessary to ensure that the undertaking’s overall solvency needs are met at all times’ [EIOPA: ORSA Issues Paper, 27 May 2008].

The ORSA requires managing agents to consider their own assessment of the risks and associated economic capital required to meet the strategic objectives of the managed syndicate(s). The ORSA should allow management to obtain a real and practical understanding of the risks which each syndicate is exposed to, or could face in the future, and the capital and/or mitigating actions required to cover those risks. As such the ORSA should consider risk, capital, performance and strategy processes and should provide management with information required to make key decisions regarding the overall risk and capital profile of the syndicate(s).

The ORSA should be seen as an ongoing process, rather than purely a point in time report. RM4.3 covers the ORSA process, with detail on the ORSA report included in RM4.4.

Overall solvency needs

Determining overall solvency needs should contribute to assessing whether to retain or transfer risks and how best to optimise capital levels

The assessment of overall solvency needs should:

- reflect the managing agent’s management practices, systems and controls, including the use of risk mitigation techniques;
- assess the quality of processes and inputs, in particular the adequacy of its system of governance, taking into consideration risks that may arise from inadequacies or deficiencies;
- connect business planning to solvency needs;
- include explicit identification of possible future scenarios;
- address potential external stress; and
- take account of management actions that may be adopted in adverse circumstances.
Compliance with regulatory capital requirements and technical provisions

The assessment of compliance on a continuous basis with the regulatory capital requirements should include, at least, an assessment of:

- potential future changes in the risk profile and stressed conditions;
- the quantity and quality of its own funds over the business planning period; and
- the composition of own funds across tiers and how this composition may change as a result of redemption, repayment and maturity dates during the business planning period.

The actuarial function should provide input on continuous compliance with the requirements regarding the calculation of technical provisions and the risk arising from this calculation. This should be in line with the information contained in the annual report of the actuarial function. The ORSA report should make reference to this, but only needs to include high level commentary.

Deviation from assumptions underlying the SCR

Where differences occur, managing agents should be able to explain the reasons for any difference between the assumptions underlying the ORSA and the SCR calculation, for example deviations in risk profile or timing differences.

Lloyd’s ORSA guidance

Lloyd’s has issued separate guidance notes designed to assist managing agents with understanding the requirements and Lloyd’s expectations of syndicate ORSAs. Managing agents should refer to these documents for additional detailed guidance.

[Link to Lloyd's ORSA Guidance notes, September 2011 & May 2012 can be found in the Appendix at the end of this document]

RM 4.2
ORSA Policy

Managing agents shall have a written ORSA policy.

The ORSA policy shall comply with the general provisions set out in Lloyd's governance standards for required policies (GOV2.4). It shall also cover at least the following areas:

- a description of the processes and procedures in place to conduct the ORSA including how the forward looking perspective is addressed;
- consideration of the link between the risk profile, the approved risk tolerance limits and the overall solvency needs;
- how stress tests, sensitivity analyses or reverse stress testing are to be performed and how often they are to be performed;
- information on data quality requirements; and
- the frequency and timing for the performance of the regular ORSA and the circumstances which would trigger the need for an ORSA outside the regular timescales.

The ORSA policy should describe the overall ORSA process, how this is integrated with the strategic and business planning processes of the managing agent and the role of the board and managing agent in running the ORSA. Where managing agents have other specific documents that cover the areas set out in the standard it is appropriate to include high level detail in the ORSA policy with cross reference to the relevant documents.
The ORSA policy should be subject to approval by the board (or an appropriate formal sub-committee of the board which has delegated authority to approve policies), as should any subsequent changes, unless these are minor.

RM 4.3
ORSA Process

Managing agents shall have an effective ORSA process in place.

Managing agents shall ensure that:
- their process includes consideration of both the SCR risk measure and any internal risk numbers, where different;
- the ORSA is an integral part of the business strategy and shall be taken into account on an ongoing basis in the managing agent’s strategic decisions;
- the ORSA is performed regularly and without any delay following any significant change in their risk profile; and
- they maintain a record of each ORSA.

An effective ORSA process requires adequate, robust processes for assessing all the risks inherent in the business and determining the corresponding capital needs, while ensuring that the output is embedded into the managing agent’s decision making process. This will require input from across the business. Standards and guidance on risk assessment are covered under RM3.1.

The ORSA process should operate continuously throughout the year but must be accompanied by periodic formal ORSA reporting (see RM4.4 below for more detailed guidance on the ORSA report).

ORSA risk measures

The ORSA process must include consideration of the SCR calculated using the internal model as well as an assessment of economic capital needs (ECA) based on the actual and potential risks faced both in the coming year and over the strategic planning horizon. Where managing agents use their SCR plus the economic capital uplift applied by Lloyd’s as their managed syndicate(s) ECA they should be able to outline why they consider that this is appropriate. This does not mean that Lloyd’s expects agents to justify the Lloyd’s uplift; rather they should be able to explain why they are comfortable that the level of ECA is appropriate for them.

Integration with business strategy

The central aim of the ORSA is to provide managing agents with a mechanism through which the board and management can assess the risks faced and determine the level of economic capital required to meet the strategic objectives of the syndicate(s). Managing agents should have processes in place that support the ORSA by providing the information required to make key decisions regarding the overall risk and capital profile of the syndicate(s).

Capital planning should be considered in both the short and long term and should consider alternatives to ensure that capital requirements can be met even under unexpectedly adverse circumstances.

[Link to MS1 – UNDERWRITING MANAGEMENT]
Frequency of the ORSA report
Managing agents should ensure that they bring together the outputs from the underlying processes into a formal ORSA report on at least an annual basis. The appropriate timing for this and any scheduled interim updates should be agreed by the board, for example, a full annual report with quarterly updates. The ORSA policy should also set out the circumstances which would require the ORSA to be re-run, e.g. when there is a significant change in the risk profile.

Record of the ORSA
The ORSA and its outcome should be appropriately evidenced and internally documented. Whilst the periodic ORSA report is part of the record of the ORSA, this requirement also extends to being able to evidence the ongoing ORSA process.

Managing agents should refer to Lloyd’s ORSA guidance documents for additional detailed guidance.

[Link to Lloyd’s ORSA Guidance notes, September 2011 & May 2012 can be found in the Appendix at the end of this document]

RM 4.4
ORSA Report
Managing agents shall prepare an ORSA report at least annually.

The ORSA report shall:
• cover each syndicate under management;
• be submitted to Lloyd’s at least annually; and
• be prepared in line with Lloyd’s requirements.

Lloyd’s has previously issued separate guidance notes designed to assist managing agents with understanding the requirements and Lloyd’s expectations of syndicate ORSAs and managing agents should refer to these for more detailed guidance on ORSA reports.

[Link to Lloyd’s ORSA Guidance notes, September 2011 & May 2012 can be found in the Appendix at the end of this document]

Whilst Lloyd’s has not prescribed a specific format for ORSA reports, it is expected that the following fundamental principles will be met within syndicate ORSA reports.

Syndicate focus
Managing agents must provide sufficiently detailed risk and capital information about each syndicate under management so that clear conclusions and decision making can be demonstrated specific to each syndicate.

Clear conclusions and management actions
The report should provide a summary of the key conclusions drawn from underlying processes and not solely duplicate existing documentation in place. The ORSA report should also clearly outline mitigating actions currently in place or planned.

Detailed capital assessment
The capital assessment must clearly set out each syndicate’s capital requirements including an explanation of the difference between regulatory (SCR) and economic capital assessments. The
report should state an “own” assessment of economic capital required for each syndicate with supporting rationale.

**Stressed risk and capital profile**

The ORSA report should clearly summarise the results of any quantitative and qualitative analysis conducted of potential “shocks” or risks the business may face, both over the one-year and longer-term horizon. This assessment should include anticipated future risks along with an associated impact on capital assessments and performance. This assessment does not require managing agents to have a “multiyear” internal model.

**Board approval**

The ORSA report should be board approved before being submitted to Lloyd’s and should include clear “as at” dates. Whilst Lloyd’s recognises that EIOPA’s current draft level 3 guidelines allow for an internal ORSA report as well as a supervisory report, our preference is that the board should receive and use the same version of the report that is submitted to Lloyd’s.

**Format and length**

The ORSA report should be a sufficiently concise document, providing details of the overall result of ORSA processes and reference to supporting information. The document should be of a length that is appropriate for use by the managing agent’s board and senior management.

The May 2012 Lloyd’s guidance notes (see link above) include additional detail on what Lloyd’s would expect to see from managing agents ORSA reports to address Solvency II requirements in the following areas:

- risk profile and appetite;
- assessment of capital;
- stress and scenario testing; and
- forward looking assessment.

Managing agents should ensure that information on the results and conclusions from the ORSA is communicated to all members of staff to whom the information is relevant. This does not necessarily mean that the full ORSA report has to be circulated, but the relevant information, conclusions and follow-up actions need to be shared as appropriate.
APPENDIX – LINKS

- ORSA Issues paper:

- Lloyd's ORSA Guidance notes, September 2011 & May 2012
MS5 – SCOPE, CHANGE AND USE

MINIMUM STANDARDS AND REQUIREMENTS

These are statements of business conduct required by Lloyd’s. The Minimum Standards are established under relevant Lloyd’s Byelaws relating to business conduct. All managing agents are required to meet the Minimum Standards. The Requirements represent the minimum level of performance required of any organisation within the Lloyd’s market to meet the Minimum Standards.

Within this document the standards and supporting requirements (the “must dos” to meet the standard) are set out in the blue box at the beginning of each section. The remainder of each section consists of guidance which explains the standards and requirements in more detail and gives examples of approaches that managing agents may adopt to meet them.

GUIDANCE

This guidance provides a more detailed explanation of the general level of performance expected. They are a starting point against which each managing agent can compare its current practices to assist in understanding relative levels of performance. This guidance is intended to provide reassurance to managing agents as to approaches which would certainly meet the Minimum Standards and comply with the Requirements. However, it is appreciated that there are other options which could deliver performance at or above the minimum level and it is fully acceptable for managing agents to adopt alternative procedures as long as they can demonstrate the Requirements to meet the Minimum Standards.

DEFINITIONS

EIOPA - The European Insurance and Occupational Pensions Authority.
ESG – Economic Scenario Generator
LIM – Lloyd’s internal model
SCR – Solvency Capital Requirements
The Board - Where reference is made to the board in the standards, agents should read this as board or appropriately authorised committee. In line with this, each agent should consider the matters reserved for the board under the Governance Standard in order to evidence appropriate full board discussion and challenge on these subjects.
SECTION 1: SCOPE

SCU 1.1

Model Scope

Managing agents shall have within scope of the internal model all material risks and processes.

Managing agents shall ensure that the scope of the model:
- includes all material risks;
- allows for the appropriate calculation of the regulatory and ultimate SCRs; and
- allows sufficient risk coverage such that the requirements of the use test are met.

Managing agents should note that the scope of the internal model under Solvency II is significantly broader than the capital calculation kernel alone and it will not be sufficient to have a sophisticated capital model alone. To secure both initial internal model approval and continued compliance/approval, agents will need to demonstrate that the internal model plays a key part in the running of the business, that there are sufficient governance and standards around the model and that the risk management process is embedded within capital setting.

Agents must be able to define the scope of the internal model for each managed syndicate. Lloyd’s does not mandate use of a specific scope for internal models as this should be relevant to the business and risk profile of each syndicate. Internal model scope does not need to be consistent across agents for the purposes of the Lloyds internal model (LIM) but agents will need to ensure that they satisfy both the SCR calibration requirements and model outputs required by the LIM.

Agents should note that any component or process that can have a significant impact on the SCR must satisfy the requirements of Solvency II, irrespective of whether or not it has been defined as “within scope” of an internal model.

Agents should also note that Lloyd’s review process will not be limited by the scope of the internal model but will cover anything which is considered material to its review and decision making process.

Issues to consider when choosing scope

There is a wide range of elements that could be defined as being within the scope of an internal model and the choice of whether or not to include these may impact how the requirements of Solvency II are to be met. Agents must understand the implications of including or excluding certain elements from the scope of an internal model and should be able to explain how the scope of the model was determined and why specific elements are included or excluded. In defining the scope of an internal model, an agent must consider a number of issues. Examples of the types of issues to consider are set out below.

Coverage of material risks

Managing agents must demonstrate that the internal model covers all material risks. Lloyd’s recommends that all risks included in the managing agent’s risk register (or emerging from its risk assessment process) are listed and individually identified as being included within the internal model or not. If a risk is not covered by the internal model then an explanation should be provided. This demonstration must be based on a combination of qualitative and quantitative ‘risk indicators’ and examples are given in the level 2 text.
Demonstrating the use test

The wider the scope of the internal model, the easier it may be to demonstrate that the internal model is widely used within the risk management of the organisation. This is one of the potential drivers for the broadest scope of the internal model.

Documentation

All processes that are included within the scope of the internal model need to be documented to a suitable standard for Solvency II. This will obviously increase resource requirements for supporting the internal model. Excluding a process from the scope of the internal model does not mean however that Solvency II requirements can be ignored, and other documentation standards will still apply consistent with the overall risk management system of the business.

Model change policy

Changes that expand the scope of a model may be classified as a model extension, and could fall outside the scope of the model change policy. Agents will therefore need to consider how the scope of the model may affect how model change policies and governance processes operate.

Validation

Managing agents will be required to develop a comprehensive validation process to demonstrate that an internal model is suitable for setting capital under Solvency II. Many validation processes are mandatory under the level 2 guidance, including stress and scenario testing, sensitivity testing, back testing and profit and loss attribution. The scope of the validation will depend on the scope of the internal model itself. The validation policy must cover all quantitative and qualitative aspects of the internal model. If, exceptionally, there are parts of the internal model not covered by the policy, agents will be required to state this and detail why it is appropriate to exclude those parts from the validation process.
SECTION 2: EXTERNAL MODEL GUIDANCE

SCU 2.1
Identification of external models and data

Managing agents shall be able to explain the role of external models and data in the internal model.

Managing agents shall be able to:
- identify external models and external data sources used in the internal model;
- assess the materiality of the external models and data sources; and
- explain the role in the internal model of any external models and data used.

This guidance applies only to external models and datasets within the scope of the internal model. Only external models are discussed, but the guidance also applies equally to external data that feeds into the internal model.

Some examples of external models or external data sources that managing agents may wish to include in their internal models are:
- models or data in relation to specialist areas of underwriting risk such as natural catastrophes;
- industry loss, loss development, loss distribution or exposure databases, or models derived from such data, that can be used to validate, augment or substitute for the managing agent's own data or models;
- models or data in relation to economic variables or economic scenarios, such as ESGs, yield curves, exchange rates, default rates; and
- studies carried out by professional advisors that support parameterising the internal model, such as models used by brokers to model exposure and reinsurance.

All external models that are within scope of the internal model need to operate to the same set of standards as the internal model itself. For external models this poses additional challenges because the managing agent does not always have direct access to or control of the model.

Each year an identification and materiality assessment process should take place to ensure that all external sources in the internal model are captured through this process, and managing agents’ work is focused on external models that have a material impact on the outcome of the internal model. Views on materiality should be supported by sensitivity tests, where practicable.
Understanding external models and data

Managing agents shall be able to explain the nature and reasons for use of external models and data.

Managing agents shall be able to:

- explain the reasons for preferring external models and data to internally developed models and data;
- list the alternatives considered and explain the decision in favour of a particular external model or a set of external data; and
- demonstrate a detailed understanding of external models and external data used in their internal model, including model and data limitations.

Managing agents must document a justification for their selection of material external models, including reasons for choosing an external model over an internal one, and implement a regular review system to ensure such selections remain appropriate.

Managing agents can demonstrate their understanding of external models by addressing areas such as:

- Showing that the board and senior executives have a good basic understanding of the key assumptions, outputs and operation of the external models, and link them to relevant decisions;
- Showing that users understand the external models in detail and understand the nature and use of the key model components;
- Identification and documentation of model limitations and uncertainties, and communication of these to relevant stakeholders at all levels; and
- Documentation of major changes to external model and adaptations for use within the agent’s internal model.

A good understanding of an external model or dataset, supported by a clear picture of the materiality of the external model in the context of the internal model and the uses of the external model, provides a sound basis for the application of expert judgement in determining the key areas for validation and the extent of validation required. This may be necessary where managing agents do not have full access to the underlying theory, structure and documentation of the external model.
SCU 2.3
Application of internal model standards to external models

Managing agents shall ensure that use of external models or data within the internal model does not compromise the internal model meeting any of the relevant tests and standards.

Managing agents shall explain how the internal model continues to meet the tests and standards including:

- use test;
- validation; and
- documentation.

The tests and standards for internal models (embodied in Articles 120-125) apply in full to external models and data sets, though managing agents should consider the principles of proportionality when assessing their approach. Where an external model has limitations, these should be monitored, and alternatives considered where these are material.

For each material external model the managing agent should additionally explain whether they regard the data used to populate the external model is appropriate, and whether it is internally sourced data or externally sourced data. For example, managing agent data or broker data can be used to populate external catastrophe models. Where external data is used to populate the external model, the managing agent needs to apply the same standards to this as they would to an internal model.

Following are examples of how the internal model standards apply to external models. Managing agents should refer to the other Lloyd’s standards for more information.

Use test
Managing agents should be able to explain how they use the external model within the internal model and how the Board and senior management obtains comfort over its limitations. Use of an external model falling within the scope of the internal model can itself contribute to the use of the internal model.

Statistical quality standards
Obtaining the data sources used within external models is often not possible because they contain proprietary knowledge. Nevertheless, managing agents should be able to show that they understand the underlying data sources used in the external model (such as major attributes, limitations, characteristics of data used and approximations used for missing or unreliable data), and, at a high level, how the broad methodology works within the external model. Particularly important here is the ability to highlight the material assumptions within the external model and the level of sensitivity that the external model has to these assumptions in the context of the agent’s internal model.

Calibration standard
The external model itself does not need to be calibrated to a 99.5% probability over a 12 month time period because this requirement applies to the internal model calculation kernel directly. However, the contribution of the external model to this default probability within the internal model should be understood so that its materiality can be assessed.
**Profit and loss attribution**
This standard does not apply directly to external models other than when considering the profit and loss attribution of the internal model; the external model should be able to give the required level of granularity of information to make this possible.

**Validation standards**
Validation is an important element in demonstrating understanding and identifying limitations and future improvements needed. This applies to external models and data in just the same way as to the internal model. Managing agents’ validation policies, processes and reports must cover external models and data to the same extent and standards as they do the rest of the internal model.

**Documentation standard**
Documentation of external models is important, and agents should work with vendors to ensure there is sufficient material available to understand the methodology underlying the external model, its limitations and weaknesses (particularly circumstances where the internal model may become ineffective as a result of the external model), the key assumptions in the external model, and material areas of expert judgement that drive the external model results.
SECTION 3: USE TEST GUIDANCE

SCU 3.1

Use and role of model

The internal model shall be widely used in and play an important role in managing agents’ systems of governance.

Managing agents shall:

- ensure that their model uses include the following as a minimum:
  - calculation of economic capital;
  - capital allocation; and
  - use in the ORSA.

- explain their approach to important internal model uses in a policy or other board-approved document, covering:
  - a description of each model use;
  - the governance and controls applying to each model use;
  - action to be taken in case of issues arising from model use; and
  - regular reporting of model use to the board;

- ensure that the internal model is capable of ranking risk adequately to support wide and important use of the internal model;

- ensure consistency is achieved between outputs for different uses;

- be able to explain and justify where the internal model is not used as part of the material decision making process;

- document how the internal model is used to support decision making processes; and

- ensure that key model outputs are regularly discussed and reviewed by the board as part of its decision making process.

Scope of model use

Managing agents must be able to demonstrate that the internal model is widely used in, and plays an important role in the system of governance. The uses of an internal model are expected to vary according to the definition and scope of the model. Apart from the minimum uses set out in the requirements (i.e. economic capital, capital allocation, ORSA), there is no checklist for uses of an internal model, so each agent must have its own list of uses which are both relevant and material to the business. A policy or other board-approved document is useful in demonstrating that model use is understood and properly managed by the board.

Managing agents should assess each use according to these criteria, as a long list of trivial or irrelevant uses will not help towards satisfying the use test. Solvency capital and decision making are mandatory uses, and Lloyd’s requires that agents use their internal models for capital setting. Other common, important uses include pricing, reinsurance, risk management and investment, though there are many others agents should consider. The internal model should normally be used to support decisions where these are within scope, unless a rationale can be provided for not doing so.

Model use policy

Managing agents should ensure that they have documented their model uses in a model use policy or similar documentation, as this helps to ensure a common understanding amongst the board,
senior management and model users of how it is intended that the internal model will be used within the organisation.

The information captured in a model use policy would typically include the following:

- a summary description of each use including:
  - brief details of how it will support business decision-making; and
  - model outputs for the use.

- key stakeholders, e.g. individuals, teams, committee(s), the board;
- roles and responsibilities in relation to model use;
- governance considerations – e.g. documentation and validation of model uses; and
- how feedback from model use will be captured and the link to model development and change.

There should be regular reporting on model use to the board which enables them to see whether the uses set out in the policy are fully in use and embedded. Typically such a report would be produced on an annual or quarterly basis and should provide an overview in addition to the reporting that the board will see as a consequence of specific model uses.

Managing agents may wish to distinguish in their model use policies those uses that are seen as ‘core’ (i.e. regular and important uses of the model), as well as identifying the uses where further development is planned. Alternatively, this information could be included in a procedure document if not in the policy itself.

**Evidencing model use**

Meetings and internal review and discussion of model outputs are vital evidence of use. There should be clear evidence of the information presented to the meeting and minutes should be taken of the relevant committee or board meetings capturing the decision made as well as the key points of any discussion. If different options or approaches are discussed these should be clearly presented in papers circulated to those present at the meeting and/or clearly outlined in the minutes of the meeting.

Outputs from the internal model may be used more extensively than simply within committee or board meetings and form part of the information used on a day-to-day basis to manage the business. Such information may be produced for different functions within the business and may take many different forms. To evidence model use managing agents should be able to provide examples of such information derived from the internal model and identify where this is used to help with both governance and decision-making.

A model use log can provide useful evidence of model uses, both for internal purposes and for external parties such as Lloyd’s. The log should record where the model has been used for the uses set out in the model use policy and would typically include the following information:

- date of use;
- description of use eg capital assessment, assess impact of change in RI programme (with brief details of the change) etc;
- end user – i.e. individual/committee or Board;
- business decision outcome/summary – high level details;
- record of decision e.g. Meeting minutes (date…), email etc;
- model output used (e.g. reference to specific report);
- note whether decision is consistent with internal model output; and
- where decision is not consistent with internal model output, reasons why output rejected and/or model improvements/change required.
**Consistency**
Managing agents must be able to show how different uses are based on consistent model outputs. There should be robust, controlled and documented procedures for monitoring consistency. The internal model version used in decision making should be consistent with the version used to calculate the SCR\(^1\), and should be fundamentally consistent with other tools used in the decision making process, such as accounting, reserving and external models. Where there are divergences between the internal model and other tools used in decision making, the managing agent must be able to explain the impact of and reason for these divergences. Note that section 1.2 below comments on the circumstances where an agent is awaiting approval for a major model change.

**Risk ranking**
Risk ranking analysis should enable managing agents to identify the most material risks in the business and therefore ensure that their use of the model and risk management actions focus on the most important areas.

Where risk components are excluded from the model, managing agents must be able to demonstrate that this approach is appropriate. Usually, the reason will be materiality, in which case, agents must be able to show and subsequently monitor figures to support their views.

**Decision making**
The internal model must be used in managing agents’ decision making processes, specifically:

- to support the relevant decision-making processes, for example, reporting to address the needs of different participants in the process;
- to assess the potential impact of material decisions; and
- regular discussion and review by the board of the internal model and its results.

It is not expected that the outputs of the model will always be followed in terms of decisions made. However, it is expected that the outputs are an important consideration as part of those decisions and that this consideration is demonstrable. Managing agents should ensure that they take account of any known limitations of the internal model when they consider model outputs as part of the decision-making process. It is therefore important that model users are aware of the impact of any limitations for their specific area of use.

The internal model should give prospective support to decision-making and retrospective verification of decision-making. It should at a minimum be able to produce and measure the economic and regulatory capital and risk management impact of decisions for which the model is used.

A model use log, as outlined in the section ‘Evidencing Model Use’ above, can provide good evidence to demonstrate where the internal model has been used to support specific decisions.

---

\(^1\)Where the internal model use standards and guidance refer to the SCR this covers both the 1 year and ultimate numbers generated by the internal model.
SCU 3.2
Understanding the internal model

Managing agents shall ensure that there is an adequate understanding of the internal model, both on an overall basis and in detail, within the managing agency.

Managing agents shall ensure that:

- the board and senior management have an overall understanding of the model including:
  - the structure of the internal model, the way the model fits to the business and is integrated in the risk-management system;
  - the scope and purposes of the internal model and the risks covered/not covered by the internal model the general methodology applied in the internal model calculations;
  - the limitations of the internal model; and
  - the diversification effects in the internal model.
- all users have a sufficiently detailed understanding of the parts of the internal model relevant to the uses for which they are responsible.

Understanding the model

In order to demonstrate compliance, the board and relevant senior management must have an overall understanding of the internal model. Senior management must have a sufficiently detailed understanding of the parts of the internal model used in the area for which they are responsible.

The board and senior management of the managing agent will be expected to know and discuss the principles of:

- how the model is governed as well as the committee or forum charged with developing the model, overseeing the framework for designing the model and ensuring the effective operation of the model;
- main uses of the model, and how it can inform certain decisions; examples of its use within the agent, including challenge provided to assumptions and outputs;
- the process, in general terms, by which the model is validated;
- how the model is materially consistent with the business profile of each syndicate managed by the agent; and
- material limitations of the model.

An essential part of the embedding process for managing agents is the demonstration that a process of education and communication has occurred. Examples of how this could be achieved may include:

- a training programme assigning categories to the board and senior management in accordance with the appropriate level of knowledge of the model that is required;
- documenting elements of understanding that are appropriate for each grouping (e.g. by breaking down the ‘internal model’ into a number of areas and documenting the level of detailed knowledge required for each aspect); and
- evidence that training sessions and workshops were held, attendees present and the information presented. Agents should note that whilst receipt of training will help demonstrate understanding, it does not equate with “use”: this can only be demonstrated through the utilisation of the model in material business decisions.

Appropriate methods should be in place to assess the effectiveness of training. This can include formal assessments, such as post training follow up reviews and consideration as part of the board
effectiveness review, as well as more informal feedback and model user discussions. Whichever method is used, it is important to ensure that the purpose of the training is clear and that there is appropriate follow up to ensure that the training delivered has met its objectives and that any further training needs identified are addressed.

It is recognised that the level of knowledge expected from senior management and board members will vary according to their role. For example, the Chief Actuary would be expected to have greater technical knowledge of some parts of the model than, say, the non-executive chairman. The Finance Director may have greater understanding than the Business Development Director. However, where the model is used to inform certain decisions or as part of specific business processes, then the individuals involved in, and those who own, those decisions or processes should have a detailed understanding of the model, its outputs and limitations. For example, the Reinsurance Manager and Active Underwriter should understand the reinsurance modelling process in some depth.

Senior management on the committee primarily charged with responsibility for the design, implementation and enhancement of the model will be expected to have more detailed knowledge of the model than those not on such a committee.

It is important to ensure that sufficient understanding of the internal model is maintained over time. Appropriate training should be provided for new directors and staff, where there is a change in responsibilities within the managing agent or where there is significant change to the internal model.

**SCU 3.3**

**Integration with Risk management**

The internal model shall appropriately reflect the risk profile of the syndicate and be integrated into the syndicate's risk management systems.

*Managing agents shall ensure that:* 

- the internal model reflects the nature, scale and complexity of the risks inherent in the business;
- the outputs of the internal model and internal and external reporting are consistent and are taken into account in formulating risk strategies;
- internal model outputs are sufficiently granular to support decision-making, and as a minimum differentiate between:
  - lines of business;
  - risk categories; and
  - major business unit.
- model change policy provides for changes to the scope and nature of the business and changes in the risk management system.
- all material quantifiable risks identified by the risk management system which are within the scope of the internal model are covered by the internal model; and
- the quantifications of risks and the risk ranking produced by the internal model trigger risk management actions where relevant.

**Fit to business**

The internal model must fit the business model in a sufficiently granular manner. As well as the requirement to differentiate between lines of business, risk categories and major business units, managing agents should consider the following:
• The uses of the internal model and whether these are strategic decisions or more detailed, day-to-day decisions;
• The managing agents’ risk management framework and how granular this is;
• The granularity required for the decision making process;
• The structure of decision-making bodies in the managing agent; and
• The debate that is facilitated by the design of the output from the internal model.

Managing agents should be able to evidence that the model works in terms of these factors, and that the resulting feedback and debate results in improvement to the model.

**Impact of model scope and change on use test**

The scope of the internal model should cover sufficient uses to inform significant risk management and business decisions. Adequate scope is also essential to allow a wide range of uses to contribute towards continuous improvement of the internal model.

Managing agents need to have a clear process for changing the internal model, as set out in the standard on model change. Any time lag between changes in the risk management system and the internal model must not impair the use of the internal model in decision making or risk management. Agents will need governance and controls to ensure that they are always using the appropriate version of the model: in most cases, this will mean using the latest self-authorised version for decision-making and other internal uses, but with the ability to revert to the relevant previous authorised version of the model, should any changes fail to achieve Lloyd’s approval.

**Design and operation**

The frequency of calculation of the Solvency Capital Requirement must be at least annually, but managing agents are expected to run the SCR more frequently, dependent upon their use of the model. Managing agents may use a simplified calculation to for this purpose but the annual calculation of the SCR must be from a full run of the internal model, whether or not reduced scope or fewer simulations are considered appropriate for other uses. Managing agents should consider whether further full runs are appropriate during the year and be able to justify their decision.

There must be a documented process in place to monitor the syndicate’s risk profile and trigger a recalculation if there is a significant change. This should be consistent with the model change policy.

The board has a responsibility to ensure the ongoing appropriateness of the design and operation of the internal model, and that the internal model reflects the risk profile of the syndicate.

**Risk management actions**

Risk management action may be required where internal model outputs show that the quantifications or ranking of risk has changed, leading to a different understanding of the materiality of some risks. Actions could include increased validation or investigation of the reasons for change and may lead to model change.
SCU 3.4
Profit and loss attribution

Managing agents shall demonstrate an understanding of the causes and sources of profits and losses, show how they are explained by the categorisation of risk in the internal model and make appropriate use of the profit and loss attribution within the business.

Managing Agents shall, when conducting the Profit & Loss attribution:

- understand the key drivers of profit;
- understand the reasons for deviations from the profit expectation; and
- apply this understanding to business decisions made.

Use of Profit & Loss (P&L) attribution

Lloyd’s does not intend to prescribe how managing agents should use the P&L attribution. The information provided by the attribution is a key element in an agent being able to demonstrate use of the model. P&L attribution sheds light on how the different elements of the economic balance sheet and the internal model interact, which is important in understanding the model. This information is potentially valuable in the validation process, the system of governance, ORSA, decision support, risk management and other areas, so its use is an essential part of meeting the use test. Managing agents need to evaluate and document their use of the P&L attribution, and review it on a regular basis. They will need to ensure that feedback results in improvement both to the internal model and to the attribution itself.
SECTION 4: EXPERT JUDGEMENT

SCU 4.1
Expert Judgement

Managing agents shall document the use of expert judgement within their internal model.

Managing agents shall ensure that where expert judgement is used:

- they document why the expert is appropriately qualified to make the judgements;
- they document the judgements made;
- the judgements are falsifiable; and
- the judgements are kept under regular review.

A managing agent must document all instances in which data quality may be compromised as well as the implications. The agent must address the interrelationship between data and expert judgement and it may use expert judgment to complement or substitute the data. Such judgment must be reconciled with any relevant data.

Where expert judgment applied in respect of data deficiencies has a material impact, its use must be well founded and is admissible only if its derivation and usage follows a scientific method, as defined below:

- The expert judgment must be falsifiable, i.e. circumstances under which the expert judgment would be considered false can be clearly defined even though they may only be realised at a point in time far in the future;
- The expert judgment must be able to make transparent the uncertainty surrounding the judgment, e.g. by providing the context of the judgment, its scope, basis and limitations;
- Standards concerning the operation of the methodology used must exist and be maintained;
- The expert judgment must be documented. In particular, a track record of the expert judgments used must be available; and
- The expert judgment must be validated. Validation may include assessing the track record of expert judgments to assess reliability; challenging the expert judgment using scrutiny from other experts; comparing the expert judgment with existing and emerging data.

Lloyd’s is the world's leading specialist insurance market. This necessarily means that the risks around the business written within Lloyd’s are specialist and complex in nature. These inherent features of the business naturally lead to the use of and reliance on expert judgement. Expert judgement employed by all manner of professionals within the Lloyd’s market has become a key feature of the way that Lloyd's manages its risk through underwriting, reserving and capital provisioning.

Whilst it is not possible for the Lloyd’s market to move away from this dependence, Solvency II requires that expert judgement be better substantiated. Expert judgement relates to any decision that affects the selection of data, parameters or methodology within the internal model. That judgement may be exercised at numerous points in the journey from original data source to the final internal model input, but will nonetheless be considered within the remit of expert judgment.

Expert judgement should only be used where uncertainty exists. When expert judgement is used, if possible, it should be used with statistical techniques to minimise the risks highlighted below. In some cases, where credible statistical techniques cannot be used, expert judgement alone may
drive decisions e.g. tail dependence assumption between two new lines of business. Where expert judgement alone has driven a material assumption, there will be a greater need to review and to validate the decision making process.

Managing agents will need to consider carefully the additional risks that arise when relying on expert judgement (e.g. conscious or subconscious biases in estimates). Care needs to be taken to minimise these risks when using expert judgement to calibrate or validate the internal model.

Expert judgement should be evidenced where it forms part of the internal model. Managing agents need not document each and every piece of judgement. The selection of the level and scope of documentation should consider proportionality and materiality. Examples of ways to document expert judgement could include:

- name of expert;
- date of opinion;
- what expert opinion is being used;
- reason why expert judgement is required in this particular instance;
- rationale for the opinion itself (e.g. the stress test backing a particular view of risk);
- comment on any potential conflicts of interest that may arise from the use of this expert judgement;
- review by an independent third party;
- back-testing of the historic expert opinion in this class and from this particular expert; and
- where expert opinion is contradicted by otherwise applied standard statistical techniques, the judgement should be documented further to explain the deviation.

This list is not intended to be prescriptive; it is intended to give examples of what might be appropriate.
SECTION 5: MODEL CHANGE

SCU 5.1
Model change policy

Managing agents shall implement a written policy which sets out how they will manage model change.

The policy shall specify:
- the procedure to determine if a change in the internal model is needed as a consequence of:
  - any relevant change in the system of governance;
  - change in compliance with the requirements to use the internal model;
  - change in the appropriateness of the technical specifications of the internal model;
  - any relevant change to the risk profile of the undertaking the business;
  - validation results; and
  - general model improvement.
- the criteria for considering an internal model change a major change;
- when a combination of minor changes shall be considered a major change;
- the governance requirements in relation to changes to the internal model, including, but not limited to:
  - internal approval of changes;
  - internal and external communication;
  - documentation of changes; and
  - validation of changes.
- that changes to the model change policy itself fall outside of the scope of the policy, but shall still be treated in the same way as major model changes; and
- that changes to the scope of the model fall outside the scope of the model change policy but shall still be treated in the same way as major model changes.

Purpose of model change controls

The objective is that managing agents should develop a simple, reliable system for classifying changes to enable them to be managed more easily. Lloyd’s also needs to maintain an understanding of agents’ models to ensure that they remain adequate for capital setting and calibration of Lloyd’s Internal Model.

The classification of change and the indicators used to assist in it are closely related to the business and risk profiles of the syndicate. Classification should be specific to the syndicate and cover both quantitative and qualitative criteria. Criteria might cover matters such as impact on the SCR, impact on tests and standards, the difficulty or sophistication of validation and the governance required.

In order to set out criteria for major changes, managing agents will need to:
- establish triggers for major change;
- identify qualitative as well as quantitative triggers; and
- set out criteria for the identification of combinations of minor changes which might be equivalent to major changes. In such cases, the major change process will apply.
**Types of model change**

Lloyd’s has issued separate guidance to support managing agents in developing their approach to model change, which includes guideline definitions for types of model change. Managing agents should refer to this document for more detailed guidance.

[Link to Lloyd’s Model Change Guidance Notes & 2014 submission requirements, March 2014 can be found in the Appendix at the end of the document]

**Classification into major and minor changes**

The model change policy must include a specification of major or minor changes to the model. The model change process, as set out in the model change policy, will differ according to whether changes have been classified as either a minor or a major change. This classification will affect, in particular, how model changes are to be reported and reviewed by Lloyd’s, with all major model changes requiring prior agreement.

As well as being different in nature, model changes will also differ in terms of materiality to the internal model and the resultant output and use of the model. Managing agents must consider a range of criteria in determining whether a change is to be treated as major or minor, and must not focus solely on the impact on the SCR. There could also be other reasons why a change is classified as major, for example if the model approval was granted subject to certain conditions then any change that violated those conditions would be a major change.

All model changes will need to be reported to Lloyd’s but the process will vary according to whether it is deemed to be a major or a minor change. The board or committee responsible for model oversight must decide whether the potential change is major or minor as per the model change policy control process.

Lloyd’s would expect agents to estimate the potential effect of any change before the model is amended so that the board or relevant committee can approve development work on the change. Agents will also be required to notify Lloyd’s at an early stage that a major change is expected.

A number of the criteria that a managing agent should take into account in determining whether a change is minor or major are set out below.

**Impact on the SCR**

One of the key criteria an agent should take into account for deciding whether a model change is major or minor, is the effect the change has on the SCR. Managing agents should document the rationale for their selected major change trigger, based on historic experience and previous model changes. Lloyd’s expectation is that the trigger would fall in the range of a 10-15% movement in the SCR. This should be measured against the 1 year SCR as a minimum, although given that Lloyd’s sets capital using the ultimate SCR agents may also wish to monitor the movement in the ultimate SCR.

The criteria must also take into account the change in the sensitivity of the SCR. For example, a change in methodology increasing the capital requirements in respect of holding equities would have no effect if no equities are held at that point in time; the SCR may remain constant. However, a change in investment portfolio in the future could then increase the SCR significantly and this type of effect must be considered when determining if a model change is major or minor. i.e. it should be considered at the time the methodology changes, not just when there is a change in investment strategy which means that the SCR is impacted.
Combination of minor changes

Lloyd's has issued separate guidance to support managing agents in developing their approach to model change, which includes guidance on the approach to combination of minor changes. Managing agents should refer to this document for more detailed guidance.

[Link to Lloyd’s Model Change Guidance Notes & 2014 submission requirements, March 2014 can be found in the Appendix at the end of the document]

Qualitative criteria

There must be allowance for qualitative criteria in determining whether a model change is major or minor. For example, a significant change in methodology may result in an immaterial change in the SCR but such significant changes should still be classed as major.

Where a syndicate is novated to a new agent or merged with another syndicate, agents will be expected to consider this as a major model change, even if existing models continue to be used. Significant changes in capital support are likely to lead to a revised risk appetite and should normally be treated as major model changes. Changes in the material ownership of managing agencies are also likely to trigger a major model change.

Any corporate transaction leading to a change in the modelling platform will trigger the major model change process.

Model governance procedures

The internal model has a key role in the system of governance and managing agents must ensure that the model continues to reflect appropriately the risk profile of the syndicate. There must be appropriate internal governance around changes to the model as well as appropriate communication of these both internally and to Lloyd's.

No changes should be made to the internal model without following the relevant governance procedures which must be set out in the model change policy. These procedures should be clearly documented and understood by all staff for whom they are relevant.

Internal approval

Potential changes to the internal model may be notified to an appropriate function within a managing agent (such as a Model Steering Committee) who will assess the potential change in accordance with the internal model change control process. This process may be used to identify the necessary actions in response to the potential change. One of the initial stages of this process would be to determine what type of change is proposed and to classify the change as either minor or major.

Escalation path

As part of the model governance, proposed model changes must be classified into either major or minor changes, according to a process set out in the model change policy, as discussed above. The classification will affect how changes are to be recorded and reported to Lloyd's, as well as defining the timetable for recalculating and resubmitting the SCR to Lloyd's. [The process for interaction with Lloyd’s will be confirmed in due course.]

Major changes

Potential changes classified as major should be notified to the board and senior management of the Managing Agent for approval. The model change policy should specify a process for notifying Lloyd’s of the potential major change within a defined period of approval by the agent. The process for recording and notification must also be consistent with Lloyd’s requirements.
The managing agent may continue with the development, testing and validation of the development version of the internal model. However, major changes should not become part of the live internal model used to calculate the syndicate SCR until they have been reviewed and agreed by both the board/senior management and Lloyd’s.

**Minor changes**

Minor changes should be recorded and reported to the board and senior management within defined timeframes. These should be notified to Lloyd’s as required. The internal model may be modified for minor changes without prior approval of Lloyd’s. However, agents should be aware of the impact of combining a series of changes, classified as minor, but creating a change that should be classified as major when combined together.

**Internal and external communication**

Managing agents should ensure that all appropriate individuals have been advised of the change and this notification must be wider than the board or committee approving the change. The level of understanding required of changes will vary across the business but sufficient notification and explanation will be key to maintaining a good understanding of the model and its uses.

The model change policy must also cover the requirements for external reporting of changes, in line with the standards and guidance set out in section 5.2 below.

**Change documentation**

Managing agents must ensure that documentation of major model changes addresses the implications for both the design and operational details of the internal model and an assessment of continued compliance with technical quality, robustness, data and use requirements after the model change has been implemented.

When a major change has had a significant impact on the outcome of the internal model, the outcome must be calculated with both the revised version and the previous version of the internal model and the outcomes compared. Any differences arising from the model change must be identified, quantified and documented.

Internal model documentation must be updated to ensure all model changes are recorded, both in terms of historical development of the model and documented methodology. Agents should also consider any update needed to the model change policy itself.

**Validation of changes**

Where changes are made to the internal model, whether major or minor, the model validation procedures will need to be followed to confirm appropriate governance over the application of these changes. As part of reviewing any proposed change and its impact Lloyd’s will expect agents to have carried out a validation process and agents should be able to provide the results to Lloyd’s as part of the change application. This validation process should include consideration of whether the managing agent continues to comply with the requirements to use the internal model post the change. This does not mean that a full validation cycle must be carried out for every model change, but sufficient validation should be completed to provide comfort that the model results post the change are reliable and that the model continues to comply with Solvency II tests and standards (see maintaining compliance section below).

**Changes to the model change policy**

In practice changes to the model change policy are likely to follow the same governance approval process as major model changes, unless they are immaterial.

**Model scope extension**
Changes to the scope of the internal model are considered to be more sensitive than other changes to the model, and are subject to the same materiality criteria or key indicators. All model scope changes require the approval of the board and Lloyd’s, and effectively trigger the major model change process.

**Maintaining compliance**

Managing agents are required to ensure that major or combinations of minor changes to the internal model do not result in failure to comply with any Lloyd’s or Solvency II requirements. This requires that managing agents conduct sufficient validation after any major change, such that they can demonstrate continuing compliance. Such validation must be included in the model change policy, and should cover the circumstances triggering validation and the relationship with the validation policy.

**SCU 5.2**

**Supervisory approval**

Managing agents shall report changes to model scope, the model change policy and the internal model to Lloyd’s and where necessary, external regulatory authorities.

**Managing agents shall:**
- obtain Lloyd's approval of the model change policy;
- apply for pre-approval by Lloyd's of any changes to the model change policy;
- apply for pre-approval by Lloyd's of any extension to the internal model scope;
- apply for approval by Lloyd's of all major changes (including where combined minor changes result in a major change);
- report to Lloyd's all minor changes in accordance with Lloyd's published timetable and in the form prescribed from time to time by Lloyd's; and
- maintain prior versions of the model until major changes/scope extensions are approved by Lloyd's and, where necessary, external regulatory authorities.

**Changes to the model change policy and model scope**

The model change policy should be reviewed regularly (at least annually) and should be re-approved by the board or appropriate committee for continued use. As noted in section 5.1, unless immaterial, changes to the model change policy must be approved by the board and notified to Lloyd’s for review and approval, before being implemented.

Changes to the scope of the internal model will often lead to changes in the model change policy, and so trigger a pre-approval application. Whether a change or extension of scope leads to an amendment of the model change policy or not, it must still be approved by Lloyd’s.

**Major model changes**

Major changes to the internal model must be approved by Lloyd's before the revised model can be considered authorised. All model changes will need to be reported to Lloyd’s but the process will vary according to whether the changes are major or minor. The board or committee responsible for model oversight must decide whether the potential change is major or minor, consistent with the model change policy, and where the change is considered major it must be approved by the board.

Lloyd’s expects agents to estimate the potential effect of any change before the model is amended so that the board or relevant committee can approve further development work on the change, though in some cases, this will be problematic, for example, where a new model platform is to be
implemented. Agents will also be required to notify Lloyd’s at an early stage that a major change is expected.

**Minor model changes**

Minor changes must be reported in accordance with Lloyd’s requirements under Solvency II, which will be issued to managing agents from time to time, and treated in accordance with the authorised model change policy. This will include ensuring that minor changes do not exceed major change tolerances when considered in combination. So long as minor changes are treated in accordance with the model change policy, they do not need pre-authorisation by Lloyd’s, unless they are considered as a major change when combined.

**Use of unauthorised model**

Following a major change to the model, managing agents may have to wait for a period of time before Lloyd’s gives authorisation for that change. In such circumstances, there is a risk that Lloyd’s will not authorise the change, and agents will be required to revert to their previous model, at least for capital setting and regulatory reporting purposes. It is essential that agents are able to revert to previous versions with relative ease, and the governance process should explicitly ensure that the necessary processes are in place.

In the meantime, managing agents are expected to have been using the revised model for internal use, as it must represent their best view of the risk profile.

Further issues may arise where changes to managing agents’ models cause a sufficient change to the LIM to trigger a model change request to external regulatory authorities. In such cases, Lloyd’s will inform agents and indicate any likely delay to authorisation, as soon as possible.

[Details of the process for interaction with Lloyd’s and, where relevant, the PRA will be confirmed in due course]
SECTION 6: DOCUMENTATION

SCU 6.1

Documentation System

Managing agents shall maintain an appropriate system for the storage of internal model documentation.

Managing agents shall ensure that the documentation system:
- contains all internal model documentation; and
- is capable of producing an index of the internal model documentation including mapping of the documents to the Solvency II requirements.

Solvency II requirements do not specify the use of document management systems however Lloyd’s considers that managing agents could experience difficulties managing the volume of documentation required without a well-designed and controlled system.

An electronic storage system, whether wiki, portal or SharePoint style will allow the documentation to be managed in accordance with the documentation policy as detailed in section 6.2. The documents can be tagged with metadata e.g. owner, review date, tiering (see 6.3 for more details) and mapping to Solvency II EIOPA requirements. This allows the agent to establish the full suite of Solvency II documents that they may need to present upon request to the supervisory regulator and/or Lloyd’s. The metadata can be further used to instigate and monitor the annual review of documentation. Many agents have appointed a “librarian” who has responsibility to maintain the documentation management system.

SCU 6.2

Documentation Policy

Managing agents shall maintain a board approved policy for internal model documentation to ensure that all relevant requirements are met.

Managing agents shall maintain a documentation policy covering at least the scope of the internal model. The policy shall:
- cover documentation of all risks within the scope of the internal model and explain how continuing coverage will be ensured;
- demonstrate compliance with relevant requirements, including Article 125;
- address maintenance of a documentation repository, including systems and controls for document ownership, review and update;
- cover regular review of documentation, which shall be at least annual; and
- include a process for ad-hoc revision of documentation in response to feedback from application of the policy.

For the purposes of documentation it is necessary to understand the distinction between these differing types of documents – policy, process and procedure:

Process document

A process document sets out what has to be completed:
• Set of interdependent and linked procedures;
• Process specific and details the steps taken to achieve an objective;
• Defined start and end points;
• A process usually has more than one procedure;
• Consists of a set of predefined actions;
• Defines the users approach to performing the process;
• Consistent approach; and
• Aim is to achieve the requirements of the policy.

Procedure document
A procedure sets out how to complete a series of steps, from inputs through to outputs:
• Specified series of actions or operation;
• Consistent execution of which will produce the same results under the same conditions; and
• The outputs of one procedure may serve as inputs to the next and so on until a known goal or end result is achieved.

Procedure documents are inherently detailed and intended for users who are knowledgeable about the process, for this reason it recommended that procedures are customised to the specific requirements of the department/group with minimal standardisation albeit filename, path and version control.

Policy document
A policy document sets out why things are done in a specific way:
• Background; an indication of reasons, history and intent that led to the creation of the policy for example, change policy;
• ‘Policy Purpose’ outlining why the policy is needed and the desired effect or outcome;
• Scope and applicability; i.e. who or what, including actions, is and isn’t affected. This will ensure focus and avoid unintended consequences;
• Roles and responsibilities; definitions of and any related oversight or governance structures;
• Definitions; providing clear and unambiguous definitions for terms and concepts;
• Guides users in their duties;
• Consistent approach; and
• A policy may have more than one process.

Policy documents are standalone i.e. require no further explanation and should be written to the same standard to ensure consistency.

Managing agents are obliged to maintain a wide range of documents for the purposes of model approval and use and to enable them to demonstrate compliance with both the requirements for Lloyd’s and external regulatory authorities. To meet the requirements of Articles 120-125, managing agents need to do more than merely maintain a specific set of documents in line with the scope of the internal model, no matter how extensive the set is. Managing agents must have effective control procedures in place for model documentation, which should be brought together in a documentation policy document. The control procedures should be based on a precise, transparent document reference system; they should ensure that the documentation is kept up to date and regularly reviewed and provide an audit trail of the implementation of documentation changes.

Internal model use is predicated on users having access to the information needed to understand and make effective use of the model. Managing agents must therefore ensure that such access is provided, using a mechanism such as tiering of documentation (see standard 6.3) into categories appropriate for different audiences. Appropriately categorised information will be good evidence when assessing the use test.
Lloyd’s also believes that the way for managing agents to meet this standard is to approach documentation management by use of a clear, board-approved policy which complies with the documentation requirements against which performance, validation and improvements can be measured.

An approach frequently taken by agents is to manage their entire documentation set to the standards required for internal model documentation, thus ensuring that no relevant document is unintentionally omitted. In that case, the required inventory of documents will include not only all the required documents for the internal model but many more in addition. In this respect the agent should include a flag against internal model document so that should a regulator ask for all internal model documentation this can be simply and easily supplied.

The documentation policy will detail the approach to keeping documentation up to date. This involves regular review and revision, at least annually, of all policies and manuals. There should also be a system for capturing issues arising outside the regular review and making revisions where appropriate. Potential changes should be considered on the basis of materiality before deciding whether to make any ad-hoc revisions.

SCU 6.3

Design & Operational details

Managing agents shall document the design and operational details of the internal model which shall demonstrate compliance with all relevant requirements.

The documentation of the internal model shall be sufficient to ensure that any independent knowledgeable third party would be able to:

- understand the design and operational details of the internal model; and
- form a sound judgement as to its compliance with the requirements relating to internal model design and operation, data, use and validation.

The documentation shall include at least the following information:

- an inventory of all the documents which form part of the documentation;
- the policy for changing the internal model;
- policies, controls and procedures for the management of the internal model, including responsibilities assigned to staff members of the managing agent;
- a description of the information technology used in the internal model, including any contingency plans relating to the information technology used;
- all material assumptions and their justification;
- the explanation of the methodology used to set assumptions;
- the directory of data used in the internal model;
- the data policy;
- the qualitative and quantitative indicators for the coverage of risks;
- a description of the risk-mitigation techniques that are taken into account in the internal model and an explanation of how the risks arising from the use of risk-mitigation techniques are reflected in the internal model;
- documentation of the future management actions taken into account in the internal model;
- the specifications for the profit and loss attribution;
- the validation policy; and
- the role in the internal model of external models and external data and the reasons for their use.
Managing agents shall consider whether further documents are needed in order to comply with requirements (i) and (ii) above.

These are the principal documents explaining how the model is designed and operated so that a knowledgeable third party may understand the model. They form an integral part of the Lloyd’s and regulatory review of the model. Managing agents need to make this documentation available to users presented as appropriate to the differing audiences, as discussed below. Users may need training to ensure that they can access essential information adequately. As part of the structure of the documentation it is important to ensure that it is tiered to the audience for which it is intended for example:

**Executive level** - high level summary suitable for Board members. This could include an outline of the model scope, uses of the model, the risk framework, model governance, and information systems.

**Technical level** - suitable for an independent knowledgeable third party to form a sound judgement as to the reliability of the model. This should include all the content at the executive level plus technical summaries and a description of the operation of the model.

**Specialist level** - suitable for individuals and teams involved in the detail of the model. The specialist level is best evidenced via appendices to the technical documentation and could include granular procedures, formulae, data, parameters, reasonableness checks and validation / sensitivity testing.

This will also help provide evidence that all levels of management understand the relevant aspects of the internal model. The level of understanding for different bodies and personnel would depend on their oversight responsibilities of the internal model.

**SCU 6.4**

**Technical details**

The internal model documentation shall be appropriately structured, detailed and complete and shall be kept up to date.

*Outputs of the internal model shall in principle be reproducible using the internal model documentation and all of the inputs into the internal model. The documentation shall provide a detailed outline of the theory, assumptions, and mathematical and empirical bases underlying the internal model. This shall include a user manual for the operation of the model.*

*The explanation of assumptions should cover the following areas:*

- *the inputs on which the choice of assumptions is based;*
- *the objectives of the choice of assumptions and the criteria used for determining the appropriateness of the choice;* and
- *any material limitations in the choice of assumptions made.*

These documents form the detailed internal model documentation including the information needed by technical specialists, such as the modelling team. Together with the design and operational use documents, they should constitute a complete documentation of the internal model and in total, should provide an adequate description of the model to enable an equivalent model to be built, should the need arise. The SCR methodology document that is supplied to Lloyd’s annually for review does not replace the need for the detailed modelling documentation described above.
The documentation must include a user manual for the operation of the internal model, which would allow a knowledgeable third party to run the model, an important mitigant of key person risk. This essentially means a manual for the calculation kernel, though other elements of the internal model could be included if necessary. The manual should contain sufficient detail of the modelling platform and model design to allow a skilled user to run the model and produce results consistent with previous model output. A user manual does not need to be a single document; it can be a set of documents which can be easily accessed and are known in aggregation as the user manual.

The documentation of assumptions is an essential component of documenting the internal model and should demonstrate the appropriateness of assumptions in light of the syndicate risk profile. Agents should record adequate information about expert judgements forming the basis of assumptions, in order to be able to validate those judgements, and document that validation.

**SCU 6.5**

**Circumstances where the model does not work effectively**

The documentation shall consolidate any circumstances under which the internal model does not work effectively.

When assessing and documenting circumstances under which the internal model does not work effectively, managing agents shall take account of at least the following:

- the risks which are not covered by the internal model;
- the limitations in risk modelling used in the internal model;
- the nature, degree and sources of uncertainty connected with the results of the internal model including the sensitivity of the results for the key assumptions underlying the internal model;
- the deficiencies in data used in the internal model and the lack of data for the calculation of the internal model;
- the risks arising out of the use of external models and external data in the internal model;
- the limitations of information technology used in the internal model; and
- the limitations of internal model governance

The documentation should include a summary of the limitations of the internal model, consolidated in a single document. This document should also include a summary of the work done to identify the shortcomings of the model and any plans for model improvements. Managing agents will then be able to use this as a way of demonstrating continuous model improvement as the issues are addressed.

It is likely that managing agents will maintain separate records of limitations for different elements of the model, aggregation into a single document will assist managing agents, Lloyd’s and external regulators in assessing the materiality of limitations, the appropriateness of the model and the effectiveness of plans to address the limitations.

Managing agents should document both quantitative and qualitative limitations, as far as possible. The documentation should include a description of the process used to identify and document limitations, including the sources of information such as the model validation and the validation report.
Model change documentation

Managing Agents shall document all major changes to their internal model, as set out in Article 115.

*The documentation of the internal model shall include a record of minor and major changes to the internal model, including the following:*  
  - a description of the rationale for each of the minor and major changes;  
  - a description of the implications of each of the major changes for the design and operations of the internal model; and  
  - where a major change or a combination of minor changes has a material impact on the outputs of the internal model, a quantitative and qualitative comparison of the outputs before and after the change relating to the same valuation date.

Model change documentation takes two forms:

**Maintaining up to date model documentation**

Managing agents must ensure that documentation of model changes addresses the implications for both the design and operational details of the internal. The documentation underlying the internal model should therefore be regularly updated for these changes. The timing of the update should tie in with the definition of the materiality of the changes i.e. major changes should trigger prompt updates to documents.

**Reporting of model changes**

In line with the SCR submission dates agents are expected to be able to provide a summary of changes from the last submitted SCR. These documents will form part of both the SCR review and model change review & authorisation process. A pictorial representation of the changes in a bar chart is a useful method of summarising the movements which should then be explained in more detail.

For further information on model change generally please refer to the model change standards.
APPENDIX – LINKS

- ORSA Issues paper:
MS6 – MODELLING DESIGN AND IMPLEMENTATION

MINIMUM STANDARDS AND REQUIREMENTS

These are statements of business conduct required by Lloyd’s. The Minimum Standards are established under relevant Lloyd’s Byelaws relating to business conduct. All managing agents are required to meet the Minimum Standards. The Requirements represent the minimum level of performance required of any organisation within the Lloyd’s market to meet the Minimum Standards.

Within this document the standards and supporting requirements (the “must dos” to meet the standard) are set out in the blue box at the beginning of each section. The remainder of each section consists of guidance which explains the standards and requirements in more detail and gives examples of approaches that managing agents may adopt to meet them.

GUIDANCE

This guidance provides a more detailed explanation of the general level of performance expected. They are a starting point against which each managing agent can compare its current practices to assist in understanding relative levels of performance. This guidance is intended to provide reassurance to managing agents as to approaches which would certainly meet the Minimum Standards and comply with the Requirements. However, it is appreciated that there are other options which could deliver performance at or above the minimum level and it is fully acceptable for managing agents to adopt alternative procedures as long as they can demonstrate the Requirements to meet the Minimum Standards.

DEFINITIONS

EIOPA - The European Insurance and Occupational Pensions Authority.

LCM - Lloyd’s Catastrophe Model.

LCR – The Lloyd’s Capital Return.

LIM – Lloyd’s Internal Model.

MCR - The Minimum Capital

Risk Appetite – Is the level of risk that an organisation is prepared to accept, before action is deemed necessary to reduce it.

SAO - Statement of Actuarial Opinion.

SBF - Syndicate Business Forecast.

SCR – Solvency Capital

The Board - Where reference is made to the board in the standards, agents should read this as board or appropriately authorised committee. In line with this, each agent should consider the
matters reserved for the board under the Governance Standard in order to evidence appropriate full board discussion and challenge on these subjects.

**VAR** - Value-at-Risk.

**YOA** – Year of Account.
SECTION 1: CALIBRATION

MDI 1.1

Full internal model

Managing agents shall use a full internal model to calculate the SCR and SCR to ultimate.

Managing agents shall ensure that the SCR and SCR to ultimate are calculated using a full internal model and therefore will not use a partial internal model consisting of modules of the Standard Formula.

Lloyd’s requires all syndicates to use a full internal model to calculate the SCR and ultimate SCR (see standard 1.3). A full internal model must quantify each element of risk individually, either stochastically or through stress and scenario tests.

A partial internal model which uses one or more modules of the Solvency II standard formula is not permitted.

MDI 1.2

SCR calculation

Managing agents shall ensure that the SCR corresponds to the Value-at-Risk of the own funds\(^1\) of a syndicate subject to a confidence level of 99.5% over a one-year period.

Managing agents shall calculate the SCR:

- on the presumption that the syndicate will pursue its business as a going concern;
- calibrated so as to ensure that all quantifiable risks to which a syndicate is exposed are taken into account;
- to include existing business, for an on-going syndicate, as well as the new business expected to be written over the following 12 months; and
- to exclude exposures relating to market risk arising on excess assets.

Managing agents should provide a regulatory SCR covering one year of new business measuring the risk over a twelve month time horizon at the 99.5% VaR confidence level. This covers existing business, as well as new business expected to be recognised over the next twelve months. The one year SCR is the difference between the current Solvency II balance sheet and what it would be in one year’s time including claims paid during the year, given a 99.5th percentile adverse outcome. This can be expressed as the losses the syndicate would ‘recognise’ or book in 12 months’ time.

The SCRs should be prepared on a going concern basis.

The SCR is based on all quantifiable risks including the market risk arising from syndicate assets at \(t_0\), assuming a net nil balance sheet, plus premium income for the new year of account. Any assets in excess of this should be excluded. However, where a risk type is unquantifiable e.g. reputational and strategic risk, this would normally be excluded from the calculations.

Consequently, the closing premium provision at \(t_1\) should be based on projected emerged experience. In the model at \(t_1\), managing agents will have two pieces of information to estimate the closing premium provision:

\(^1\) Own Funds represent the assets in excess of those required to cover liabilities
1. Their initial estimate of the closing provision based on the SBF assumptions; and
2. The performance of the business over the twelve months from t0 to t1.

The closing premium provision in the model should reflect this information and be estimated accordingly.

**Consistency with TP calculations**

Agents should also note the relationship between technical provisions and the SCR calculation. In particular, through calculation of a best estimate premium provision, expected future profits on existing business will be recognised as part of the technical provision calculation.

**MDI 1.3**

**SCR to ultimate calculation**

Managing agents shall ensure that the SCR to ultimate corresponds to the Value-at-Risk of the own funds of a syndicate subject to a confidence level of 99.5% of one-year of new business with the risk measured to the ultimate run off of the business.

*Managing agents shall calculate the ultimate SCR:*
- on the presumption that the syndicate will pursue its business as a going concern;
- calibrated so as to ensure that all quantifiable risks to which a syndicate is exposed are taken into account;
- to include existing business, as well as new business attaching to the proposed year of account;
- to exclude exposures relating to underwriting years beyond the proposed YOA; and
- to exclude exposures relating to market risk arising on excess assets;

Managing agents are required to produce the SCR of one-year of new business with the risk measured to the ultimate run off of the business. This to ultimate SCR should be provided in addition to the one year SCR number. Both SCRs are required in order to calibrate the LIM and to determine member level capital.

The ultimate SCR takes account of one year of new business in full attaching to the next underwriting year and the risks over the lifetime of the liabilities (“to ultimate”). ‘Ultimate’ is defined as the final realised position – not the most prudent time step path to ultimate. The requirements include risks for all business attaching to the next underwriting year (through Inception Date Accounting).

Lloyd’s requires managing agents to capture Insurance and Reinsurance Credit risk to ultimate. Other risk categories may be modelled over a shorter time horizon (subject to a one year minimum). The modelling time horizon should be clearly set out in the methodology document.

The ultimate SCR considers all risks attaching to the proposed year of account and excludes exposures relating to underwriting years beyond the proposed YOA. This differs from the one year SCR where un-incepted legal obligations on the t1 balance sheet will relate to underwriting years beyond the proposed YOA.

**Member level capital setting**

Lloyd’s will require a one-year to ultimate, as well as the 12 month “balance sheet to balance sheet” one year SCR. The “to ultimate” SCR will be used for setting member level capital requirements.
MDI 1.4

Solvency reporting

Managing agents shall submit their LCR forms and SCR reports at least annually.

Managing agents shall submit their LCR forms and SCR reports:
- in accordance with the Lloyd's timetable; and
- where there is a material change in the syndicate risk profile.

Lloyd’s will require a managing agent to calculate the syndicate SCR using a full run of the internal model at least annually. Additional SCR submissions would be required when there is a significant change to the syndicate’s risk profile, assumptions underlying the model and/or the methodology arising from decisions or business model changes, or to fulfil supervisory reporting requirements.

The LCR captures quantitative information that, alongside the qualitative model validation work, allows agents to demonstrate that they have systems enabling them to identify measure, manage and report risk and calculate the SCR. The LCR provides two figures for the 99.5th percentile: the Solvency II statutory one year balance sheet to balance sheet SCR and also the Lloyd’s risk to ultimate “SCR”. The LCR provides data that forms a direct input into and is used to calibrate the Lloyd’s Internal Model (LIM). The critical data points used are the mean and the 99.5th percentile. The other distribution points are required to validate the parameterisation / calibration produced for the LIM at syndicate level.

The SCR methodology document should be submitted alongside the LCR forms in accordance with the Lloyd’s timetable and instructions; the first LCR submission for the proposed year of account will normally be required in July. It is the responsibility of Managing agents to keep abreast of Lloyd’s guidance for the latest requirements.

In cases where the SCR is required to be calculated more often than annually, approximations are allowed for this purpose. The agent is not required to undertake a full model run, for example, approximations may be used when undertaking MCR calculations.

Syndicates are required to remain adequately capitalised on a continuous basis. Consequently, managing agents are responsible for monitoring their SCR and advising Lloyd’s of material changes. Agents should also be responsible for advising Lloyd’s where syndicate loss experience may reasonably be expected to have eroded member capital to the extent they would be effectively trading materially closer to their regulatory capital requirement. As a guideline, agents should advise Lloyd’s promptly where the ultimate SCR increases by more than 10% or syndicate loss experience is expected to exceed 15% of the latest agreed ultimate SCR. The consideration of capital erosion through syndicate loss should look through to a year of account level to ensure that profits on one year do not offset losses on another, where syndicate membership changes year on year are relevant.
MDI 1.5

Adjustments to model output

Where the calculation kernel is used, managing agents shall derive the SCR and SCR to ultimate directly from the output distribution generated by the calculation kernel.

Where outputs are produced outside the calculation kernel Lloyd’s may allow approximations to be used to calculate the SCR and SCR to ultimate. Where these approximations are used agents must:

- explain how risks are rescaled to 99.5% VaR over one year and one year to ultimate show that this process does not introduce any material bias;
- explain the reconciliation between the outputs of the calculation kernel and the distribution of Own Funds, where the latter is not produced directly from the calculation kernel;
- where a different time period than one year is used, justify the assumptions made in respect of dependencies between consecutive time periods; and
- consider them as part of the internal model.

The approximations referred to in Article 122(3) of Directive 2009/138/EC shall comply with the requirements set out in Articles 121, 124, 125 and 126 of Directive 2009/138/EC.

Lloyd’s expects all managing agents to produce an output distribution generated from the calculation kernel, to derive the SCR and SCR to ultimate directly.

Lloyd’s does not prescribe a particular method for the calculation of the output distribution by agents and allows approximations to be made. Where approximations are made they must be clearly documented and justified. Justification should include reasons and the impact of the approximation, the approximation should not introduce any material bias. One example of where such an approximation could be made is in the derivation of one year risk from the ultimate.

Where the distribution of Own Funds is not produced directly from the calculation kernel reconciliation will be required between the output distribution and the distribution of Own Funds. This demonstrates that there is a clear and transparent link between the calculation kernel and final SCR.
SECTION 2: STATISTICAL QUALITY METHODOLOGY

MDI 2.1
Capital distribution
Managing agents shall ensure that the output distribution from the model should measure the change in own funds.

Managing agents shall ensure that the output distribution from the model shall assign probabilities to changes from best estimate in profit and loss of the syndicate.

Lloyd’s expects all managing agents to produce an output distribution generated from the model which measures the change in own funds.

Lloyd’s does not prescribe a particular method for the calculation of the output distribution by agents and understands that it may not be possible to model all risks stochastically. In theory a stress and scenario test approach can be applied for some risks e.g. operational risk but these are expected to be the exception not the rule. However, other Solvency II requirements may become significantly more difficult under an internal model that does not produce a full output distribution, for example the definition of the output distribution should enable the profit and loss attribution test to be met. If making adjustments to the output distribution refer to the standard Calibration 1.5.

Managing agents should also be aware that the Lloyd’s Internal Model (LIM) is likely to require various points on the distribution. Where the internal model generates fewer data points than a full output distribution Lloyd’s will require additional validation.

MDI 2.2
Appropriateness of methodology
Managing agents shall ensure that the methodology used to estimate the output distribution shall be based upon adequate, applicable and relevant actuarial and statistical techniques.

Managing agents shall ensure:

- that methodology used is based on techniques that are adequate, up-to-date and generally accepted market practice;
- they have a detailed understanding of the theory and assumptions underlying the methodology;
- the internal model captures all the relevant characteristics of the risk profile of the syndicate; and
- the techniques are consistent with the data used for the internal model.

Managing agents should ensure that all methodologies used within the model are appropriate, not simply those used to determine the output distribution. Lloyd’s expects agents to provide detailed commentary on all areas including the following:

- approach for modelling losses over a 12 month horizon in line with the calibration standards of Solvency II;
- granularity of risk modelling;
- insurance claims, including both premium and reserve risk;
- treatment of exposure and business volumes;
- rating variability;
- treatment of reinsurance and associated credit risk;
- correlation, diversification and dependency structures;
- risk margin calculation;
- currency risk; and
- discounting.

The onus is on managing agents to demonstrate the methods used are based upon current and credible information, and to this end regular methodological reviews are required. Managing agents should also demonstrate that they have a process for keeping abreast of progress in modelling techniques and approaches. The methodology should be reviewed at least annually and, when necessary, modified or replaced. This requirement could be captured by the validation exercise. Any issues arising from the validation process that cast doubt on the adequacy of the model should normally lead to a specific action or further review process.

The managing agents should demonstrate that they have detailed understanding of the theory and assumptions underlying the methodology. Lloyd’s expects agents to adequately document their understanding as this will help to ensure that the methodology used is transparent and should reveal the logical connection between inputs and outputs, i.e. not a “black box”.

The internal model should adequately reflect the risk profile of the syndicate. A managing agent should choose methods that are suitable to the modelling goals and accurately reflect the syndicate’s risk profile.

The data used within the internal model may not permit use of some methods; it is therefore important that the methodology is adapted towards the data. Any other data which may affect the methodological basis of the model and information on model assumptions should be collected in line with the model validation process.

Managing agents are expected to provide evidence to Lloyd’s that the basis underlying the methodology of the internal model is credible, based on appropriate criteria, which may include:

- Consistency: there are no internal contradictions;
- Objectivity: a sufficiently large set of information sources is used, characterised by a high degree of independence from the syndicate. Known exclusions are suitably justified;
- Reliability: the source and provider of the information are qualified and its quality is verified; and
- Transparency: the process of generating, processing and providing the information is well-documented, and any ambiguities in it are known.

In assessing the appropriateness of methodology managing agents and Lloyd’s shall have regard to the principle of proportionality. However, agents should ensure that the assumptions and methods used are consistent between internal models for all managed syndicates taking into account the status (live, life, runoff) and risk profile of the individual syndicates.

Simulation error is common to all models. Where applicable, we would expect agents to select from the “middle of the range” when compiling their SCRs and advise us through the methodology document of the potential impact of selecting alternative runs / random seeds. The uncertainty in establishing a 1:200 capital assessment is understood. We would expect agents to select a mean SCR when finalising their figures. The methodology document should identify the key sensitivities affecting the SCR and provide explanations of why the modelling approach is appropriate for quantifying these extreme outcomes. Regardless of the approach used, agents should be able to
demonstrate that they have adequately accounted for the impact of parameter uncertainty on the SCR. Expert judgment will be relevant both in identifying where parameter uncertainty exists, and how to quantify it.

Tests of model functioning are designed to ensure that the model is functioning as intended. Examples include comparisons between the means and standard deviations of the input and output distributions and “as-if” calculations that push a single value of, for example, a cat event through the model and compare gross and net outcomes with those calculated manually. Tests of model functioning would normally be done most intensively during the model build stage.

**MDI 2.3**

**Diversification benefits**

Managing agents shall allow appropriately for diversification effects within the internal model.

*Managing agents shall satisfy Lloyd's that methodology used to allow for diversification effects is adequate by ensuring that the approach used for measuring these within and across risk categories shall take into account:*

- any material non-linear dependence and any material tail correlations under extreme scenarios;
- any material restrictions of diversification which arise from the existence of ring-fenced funds;
- the characteristics of the risk measure used in the internal model; and
- key variables driving dependencies.

The appropriateness of the diversification credit should be demonstrated by justification of:

I. The risk distributions used; and
II. The dependencies between them.

Managing agents should be prepared to provide detailed and explicit information on the impact of diversification within the model. It is likely that Lloyd’s may require agents to provide explanation why diversification credit within their internal model is materially different from that implied by other sources such as the standard formula or market averages where available.

A process to identify, quantify and review the dependencies within their business and those assumed within their internal model should be evidenced. This may take the form of periodic calculations of dependencies seen in historic data, assessment of possible dependencies by persons with relevant experience and use of market data or expert judgement.

For the main types of risks and between classes of business at each of the key aggregation steps in the model (e.g. combining risk types, classes of business) managing agents should consider whether tail correlations are present and should be allowed for within the model.

Syndicates’ should ensure they consider whether they have ring-fenced funds. Lloyd’s considers that overseas trust fund deposits do not fall within the definition of ring-fenced funds and therefore managing agents do not need to take these into account when considering diversification benefits.

Agents should use a dependency structure which is appropriate for estimating the capital based on a 99.5%ile VAR measure. They should also ensure it is appropriate at other percentiles of the balance sheet distribution, which may be more relevant to other considerations such as reinsurance purchase. Agents should justify why the structure is also appropriate for the to-ultimate and one-year time horizons.
The key variables driving dependencies and syndicates’ exposure to them should be identifiable. Depending on the chosen aggregation method, different variables come into consideration, e.g. risk factors, risk drivers for market, credit or insurance risk, economic indicators or overall profits and losses etc.

**MDI 2.4**

**Risk coverage and ranking**

Managing agents shall ensure that all of the material risks to which the managing agent is exposed are modelled and that the model can rank risks.

*Managing agents shall ensure that the SCR shall cover at least the following risks:*

- insurance risk;
- market risk;
- credit risk; and
- operational risk;

*Operational risk as referred to in point (d) should exclude risks arising from strategic decisions, as well as reputation risks.*

*Managing agents shall also ensure that the model can rank risk consistent with the classification of risks used in the internal model and the classification of risks used in the risk management system.*

**Risk ranking**

Managing agents are required under Solvency II to ensure that their internal model is capable of risk ranking for all material risks covered by the internal model. Risk ranking can be defined as quantifying the materiality of sub risks; it is the relative comparability between risks that is important, not the absolute amounts assigned to risks.

Lloyd’s expects risk ranking to be performed at various levels, which may include:

- major risk category (e.g. premium risk, reserve risk, market risk, credit risk etc);
- business unit;
- class of business or product (and possibly at a currency level); and
- operational risk events.

One option is to start from the major risk category and consider the underlying core risk drivers. For example, for underwriting it should be possible to rank by class of business, for market risk rank by asset type and credit risk rank by reinsurer or perhaps reinsurance programme.

A number of approaches could be employed to rank risk, and Lloyd’s recommends that more than one method is applied. This could include:

- capital allocation approach (a wide variety of methods can be applied);
- rank according to standard deviation / variance; and
- rank according to the stand-alone 99.5th percentile VaR or TVaR position (or other percentile).

Agents may find it helpful to consider risk in terms of quantum of total exposure, but also in terms of the risk per unit of exposure.
For risk ranking to have real benefit and act as a model ‘use’, the results should be advised to management and be incorporated within the syndicate's wider risk assessment process. The results of risk ranking should be used to influence management decisions and/or generate discussions around the model output along with possible refinement to the model parameters. It is important that risks of a similar nature are ranked consistently throughout the syndicate and over time to enable appropriate decisions to be made. The overall risk ranking is reconciled with the capital allocation.

**Risk coverage**

The managing agent should ensure that the Solvency Capital Requirement covers all material quantifiable risks to which the syndicate is exposed in order to adequately reflect the syndicates’ risk profile.

As per the standard SQS 1.4, the SCR should cover the following risks:

- insurance risk;
- market risk;
- credit risk; and
- operational risk.

In order for Lloyd’s to be able to compare and aggregate results, syndicates’ should cover risks as set out in the latest Internal Model SCR guidance.

Insurance risk should represent the diversified aggregate of premium and reserve risk. Managing agents should ensure that the 1:200 outcomes on premium and reserve risk should be consistent with the stress on an undiscounted basis.

Managing agents should ensure that premium risk captures the following:

- all underwriting exposures and associated risk from t0 (opening balance sheet position) for all years of account;
- catastrophe risk for all events occurring after t0; and
- all anticipated future underwriting profits.

Lapse risk should be included within reserve risk where it relates to incepted business. Lloyd’s would normally expect this risk to be immaterial, but where it is considered material, please include commentary within the SCR methodology document. This applies to both life and non-life business.

Lloyd’s expects insurance risk to capture the impact of the market cycle on insurance business and as such claims inflation should also be included in insurance risk.

The aggregate credit risk should represent the diversified aggregate of reinsurance credit risk and other credit risk (but not on financial assets). Reinsurance credit risk should exclude dispute risk or reinsurance exhaustion, which should be modelled and reported within insurance risk. Reinsurance credit risk includes all group reinsurances. Credit risk excludes the default risk applying to financial investments, which should be reported within market risk.

Market risk should represent the net 1:200 deterioration from the opening balance sheet at t0. It should include the risk to the value of the assets and liabilities arising from volatility in the level or market prices of the following (Article 105 of the Directive):

- interest rates;
- equities;
- property;
- credit spreads over risk free interest rates;
• credit bond defaults; and
• currency exchange rates.

In addition, market risk should also include the following:

• risk from limited diversification in the asset portfolio or from default of a single issuer or group of issuers of securities;
• risk of changes to the net value of assets and liabilities arising from changes in the risk free rate; and
• liquidity risk.

The expected return in market risk is the total expected returns from the syndicate’s assets, allowing for net nil balance sheet at t0 plus the new premium income, reduced by the total risk free discounting already allowed for in the projected insurance liabilities. The discounting credit at t0 is expected to unwind to ultimate but any associated loss due to unwinding will not be included in insurance risk. Market risk should also include the risk that there are changes to the risk free rate in the valuation of t1 technical provisions in the one year SCR. If not modelling on both a one year and ultimate basis, agents should state clearly the time horizon adopted for market risk when assessing the ultimate SCR and ensure this is consistently applied for expected returns and associated asset risk. Both expected returns and asset risk should exclude capital and surplus syndicate assets.

The risk free discounting credit in the SCR should reflect that existing assets may be depleted more quickly in a 1:200 scenario and consequently the risk free return will reduce compared to best estimate projections.

Operational risk should be analysed between “stand-alone” risks e.g. business interruption through loss of the building or technology and risks associated more closely with other risk categories e.g. mis-reporting of case reserves or rogue underwriter. Agents should be clear in their delineation between operational risk and inclusion of the capital impacts in other risk categories to ensure no duplication or omission. In particular, agents should be explicit in the allowances made in assessing operational risk for historical data considered to capture implicitly such risks e.g. binding authorities exceeding limits or contracting business outside its terms of reference. Group risk should be included within operational risk (this does not include credit risk from group reinsurance covers).

MDI 2.5
Risk mitigation techniques

Managing agents shall take full account of the effect of risk mitigation techniques in their internal model.

Managing agents shall ensure:

• all modelled risk-mitigation techniques align with the managing agent’s risk management policies; and
• risks (e.g. credit risk) arising from the use of risk-mitigation techniques are properly reflected in the internal model.

Risk mitigation techniques

A managing agent should take full account of the effects of risk mitigation techniques (e.g. reinsurance, hedging) if their inclusion in the internal model reflects the following criteria:
• Economic form over legal form, i.e. they deliver a demonstrable transfer of economic risk;
• They are legally effective and enforceable and are adequately documented;
• They are liquid and can be valued under both normal and stressed conditions. They meet documented liquidity requirements under both normal and stressed conditions. They are capable of liquidation (or retention) in the event of counterparty default. They are not double-counted;
• Associated secondary risks (e.g. credit risk, concentration risk, basis risk, legal risk, operational risk), and the interactions between them, are identified, documented and included in the internal model;
• They provide a direct claim on the protection provider and the extent of cover is explicitly referenced to specific exposures or a pool of exposures. To the extent that the protection is not irrevocable or unconditional, this should be reflected in the model or, if not possible, the risk mitigation technique should be excluded from the model;
• Exposure is assessed at both the gross level and net of the effects of risk mitigation techniques;
• Where risk mitigation techniques are used to justify a reduction in the SCR, they should demonstrably reduce risk at 99.5% VaR over one year; and
• Equivalent requirements apply whether or not the protection provider is independent from the syndicate or is part of the same group.

The risk mitigation techniques which satisfy the conditions above should align with the managing agent’s risk management policies. Any deviations from the risk management policies should be documented and where appropriate the relevant policies should be updated to reflect the risk mitigation techniques included within the model.

Recognition of risk mitigation
The primary source of risk mitigation is likely to be reinsurance although other mitigation activities such as derivative hedging are also used.

With regard to reinsurance, managing agents should demonstrate that the reinsurance contracts fully provide the protection that the internal model assumes. Areas to consider should include:

• reinsurance dispute and default;
• policy deductibles and excess points;
• reinsurance coverage (e.g. exclusions and geographical coverage);
• willingness to pay;
• loose policy wording;
• basis risk (e.g. for Industry Loss Warranties);
• matching of coverage (e.g. risks attaching versus losses occurring terms);
• currency mismatch between reinsurance terms and the underlying risk; and
• horizontal and vertical exhaustion; reinstatement provisions.

Agents should consider modifying their internal models to reflect potential shortcomings of reinsurance protection and/or including an allowance within their operational risk assessment.

In cases where the SCR takes credit for a material reinsurance arrangement or programme Lloyd’s requires agents to clearly set out the SCR pre and post the reinsurance programme in the SCR report. Managing agents should document the premium and anticipated recoveries at the underwriting (or reserve) risk level, diversified insurance risk, the incremental reinsurance credit risk and at aggregate level after all diversification between risk categories.
Future management actions

Managing agents shall take account of future management actions that they would reasonably expect to carry out in specific circumstances.

Managing agents shall ensure:

- that all future management actions are allowed for where appropriate, documented, and approved by the Board of the managing agent; and
- assumed future management actions are realistic and consistent with the managing agent’s current business practice and business strategy, including the use of risk-mitigation techniques.

Future management actions can be allowed for within the model where an agent would reasonably expect to carry this out in specific circumstances. Managing agents should document all future management actions which are modelled explicitly within a comprehensive future management actions plan.

Modelling future management actions

Syndicates should not assume that future management actions would be taken that would be contrary to their obligations towards policy holders and beneficiaries, legal provisions applicable to the syndicate, and/or Lloyd’s requirements.

Future management actions that could be modelled might include:

- withdrawal of cover or changes in policy conditions (e.g. for war business); and
- future purchase of reinsurance.

However, the future purchase of reinsurance may pose a particular problem for agents who assume that reinsurance will be bought in line with the business plan. The managing agent needs to evidence that the board is involved in the review and approval of the anticipated reinsurance programme for the next year. The anticipated reinsurance programme is likely to have inception dates at various times of the year (for example 1st of January, 1st of April) and there is the risk that in the event of a catastrophe the planned reinsurance programme may not be placed or placed at a higher cost.

When assessing whether it is appropriate to model a future management action, the agent should consider the materiality of future management actions by calculating their impact on the SCR where practicable.

Future management actions plan

For any management actions that are assumed in the model, Solvency II requires that managing agents produce future management actions plan that should be documented in line with Solvency II documentation standards. It is the responsibility of the board to approve the plan and ensure there is a process in place to maintain the action plan.
SECTION 3: STATISTICAL QUALITY ASSUMPTIONS

MDI 3.1

Modelling assumptions

Managing agents shall identify material relevant assumptions upon which the model is based.

Managing agents shall ensure that assumptions are realistic and justifiable to Lloyd's by satisfying the following conditions:

- the agent has a suitable and justifiable explanation for the use of assumptions and that this is documented; and
- understanding of when the assumption could be considered false.

In line with the documentation standard, Lloyd’s requires all assumptions and expert judgements upon which the model is based to be explained and documented in detail and in a well-reasoned manner, including how expert judgement is challenged and reviewed/monitored against actual experience wherever possible. The extent to which judgement has been applied to assumptions should be clear along with the underlying rationale. The documentation should consider both the significance and uncertainty of the assumption. It will not always be necessary to identify and justify assumptions individually; in some cases it will be appropriate to do so collectively.

Managing agents should identify those model assumptions which are particularly sensitive and critical to the overall SCR figure, and the associated documentation should be commensurate with the impact of the model parameter. The process of determining the materiality of assumptions should be evidenced. Lloyd’s expects agents to perform sensitivity tests reporting the impact of changes to key assumptions, reporting the results in numerical tables. The sensitivity testing will also form part of the materiality assessment.

Where assumptions are deemed material, agents should consider the incremental capital required for each change in key assumptions and provide commentary on the results. Lloyd’s also expects agents to comment on the incremental impact of adding risk categories to the dominant risk. For example, include an analysis of the impact of adding new business (premium risk and associated credit and operational risk etc.) to the capital required solely to run-off the business contracted at the balance sheet date.

There may be certain, limited, circumstances which may arise whereby the assumptions in the model are considered false, and these circumstances should be clearly documented.

The methodology used to derive the assumptions should be clearly documented with the level of detail proportionate to the materiality of the assumption. To ensure the assumptions remain appropriate, a process should exist for assessing the assumptions at regular intervals and updating the documentation where necessary.

Model assumptions regarding diversification effects are regarded as key assumptions and are therefore subject to the requirements of material assumptions. Diversification effects are typically very hard to estimate and validate. The assumptions underlying the approach used for measuring diversification effects on an empirical basis are often based on expert judgement which will require further validation. Sensitivity analysis and stress testing should be performed as part of the validation
process. The results of the validation exercise and any additional justification for the assumptions should be clearly documented and readily understood by those responsible.

MDI 3.2

Future management actions assumptions

Managing agents shall be able to verify that assumptions about future management actions are realistic.

Managing agents shall demonstrate that assumptions are realistic by completing the following actions:

- a comparison of assumed future management actions with management actions taken previously by the managing agent; and
- a comparison of future management actions taken into account in the current and past calculations of the internal model.

Agents shall document and be able to explain any relevant deviations in relation to the above points.

Assumptions for future management actions in the internal model should be objective, realistic and verifiable. The assumptions should take account of the time needed to implement the management actions and any expenses caused by them.

Future management actions which are allowed for in the model should be validated, agents should compare assumed future management actions currently allowed for in the model with those undertaken historically. Where these differ, Lloyd’s would expect these to be documented and justified.

Significant deviations from planned future management actions should be reported to Lloyd's, along with details of the reasons for the deviation and its consequences for the syndicate's SCR. We would expect the model to be re-run in such circumstances, however if the model is not re-run then capital add-ons may apply where additional risk is perceived. Agents should note that such deviations may be deemed inconsistent with the Use Test. Previous deviations from planned management actions will be considered by Lloyd's in deciding whether to approve a new or changed set of future management actions.
SECTION 4: STATISTICAL QUALITY CONSISTENCY

MDI 4.1

Consistency of methodology and assumptions

Managing agents shall use consistent methodology and assumptions.

*Managing agents shall ensure that the methodology used for completing the following are on a consistent basis:*

- SCR;
- SBF;
- LCM;
- Assets and liabilities for the Solvency II balance sheet; and
- Technical Provisions including contract boundary definitions.

Managing agents should ensure that the methodologies and assumptions used to calculate the output distributions are consistent with methodologies and assumptions seen in other areas. Any inconsistencies should be identified and justified with the potential impact detailed.

The SBF and SCR should be on a consistent basis at the start of the process but this does not mean that this is necessarily the case at the end. The premium volume and loss ratio assumptions for new business within the SCR submissions should be consistent with the relevant SBF they accompany (either July or September). However, the loss ratio assumptions need not be consistent with the business plan. The principle underlying the business plan review is that loss ratios are "realistic and achievable" whereas the principle underlying the expected loss ratio selection for capital setting is that of a best estimate (i.e. mean) outcome. These two concepts are similar goals but may not always be the same and as such the two may differ. In addition, underwriting profits emerging on new business should be consistent with the loss ratio assumptions used to set capital. Note that the SCR will include both new business and the expected outcome on contracts bound prior to the balance sheet date that will be recognised within the opening Solvency II balance sheet.

The assets in the opening balance sheet in the model should be consistent with the projected balance sheet as at the year end. If agents expect to make changes to their investment profile they should allow for this in projected balance sheet and therefore the opening balance sheet at t0 in the model as well.

The detailed process to produce the Solvency II technical provisions should be consistent with the projected balance sheet technical provisions that reserve actuaries determine. The stresses applied to the technical provisions within the internal model should also be consistent with assumptions used to determine them e.g. given technical provisions are discounted at the risk free rate the stress should be applied to the risk free rate.

When preparing the mean balance sheet to ultimate (or to one year), Lloyd’s expect that modelled insurance premiums and claims for contracted business (excluding any risk margin) will run-off at the projected figures included in the opening balance sheet – i.e. no gain or loss arises. Consequently, there should be no concept of “reserve margins” as the Solvency II technical provisions are assumed to be set at pure best estimate and these should be treated as a surplus asset. Technical provisions should also be subject to discounting at the risk free rate and after inclusion of the risk margin.
Agents must have in place a process by which the consistency of methodologies and assumptions can be verified (in particular with respect to business plans and the technical provision calculation process). This process must highlight the areas where there are inconsistencies and should ensure that these are justified and their impact detailed. This process should also review the methodology to ensure credibility is maintained.
SECTION 5: MODEL RESULTS

MDI 5.1

Reasonable results

Managing agents shall ensure that the model is capable of producing results that are reasonable and respond appropriately to changes in the risk profile over time.

Managing agents shall ensure the following conditions are met:

- in running the model more than once there is stability in results;
- there is a validation process that supports the modelled outputs;
- modelled output can be tiered and explained sufficient for Board understanding; and
- there are formal processes to communicate material uncertainties to the Board.

The outputs of the internal model should reflect the risk profile of the syndicate and be capable of reflecting changes to the risk profile.

Lloyds requires syndicates to produce an SBF, SAO and capital requirement on an annual basis. Changes to the risk profile should be reflected in the business plan and consequently reflected in the capital requirement. This annual cycle ensures that the model results reflect both internal and external changes.

Managing agents are also encouraged to produce a bridging analysis which identifies the drivers of changes in the capital requirement year on year. This ensures that small changes in the input data should not result in large changes to the capital requirement. It also helps demonstrate that the results are reasonable and increases transparency.

Simulation error is common to all models. Where applicable, Lloyd’s expect agents to select from the “middle of the range” when compiling their SCRs and advise us through the methodology document of the potential impact of selecting alternative runs / random seeds. The uncertainty in establishing a 1:200 capital assessment is understood. Lloyd’s would expect agents to select a mean or median SCR when finalising their figures. In view of this uncertainty and the duty of Lloyd’s to set capital equitably, Lloyd’s would expect agents to understand that a different view may well have merit, where it, for example, may sit within the agent’s own range of foreseeable SCRs. Lloyd’s do expect models to demonstrate stability in results.

Validation of the model results, including reverse stress tests is important and ensures that the results are reasonable.

In order to ensure senior management awareness and understanding of the potential for uncertainty there needs to be a formal process to provide an indication of the nature and extent of any material uncertainty inherent in the modelled results which will tend to be presented as point estimates. The uncertainty inherent in point estimates could be indicated through the use of ranges, sensitivity analyses or other quantitative means.
SECTION 6: INTERNAL MODEL DATA

The data standards fall under two categories – underwriting data standards and internal model data standards. It should be noted that there are three data standards with requirements that apply consistently across both underwriting and internal model data (UW 7.1 = MDI 6.1, UW 7.2 = MDI 6.2 and UW 7.4 = UW 6.3 respectively) and although there is consistency in the wording of both the standards and requirements, guidance is different to reflect the different subject matter. There are also additional data standards that are specific to underwriting (UW 7.3) and internal model (MDI 6.4, MDI 6.5 and MDI 6.6). The standards are presented in this way to differentiate that there are two distinct areas of data.

MDI 6.1

Data Governance Framework

Managing agents shall ensure that they have appropriate data governance structures and procedures in place for internal model.

Managing agents shall:

- appoint a nominated director(s) with accountability for oversight of the governance framework for internal model data;
- have appropriate written policies and procedures in place to allow effective management, recording and production of internal model data, which are reviewed annually;
- ensure that policies are agreed by the board;
- ensure that the data governance framework allows for the regular and appropriate reporting of internal model data for executive management, the board and Lloyd's; and
- ensure that roles, responsibilities and reporting lines, for the management of internal model data are clearly defined, approved by the board and reviewed annually.

The data governance framework should capture the structures and procedures, including triggers for escalation, to support the quality of data used within the internal model and in the setting of insurance reserves. Managing agents should have a framework in place which shows clear oversight of the quality of data, responsibilities and accountabilities throughout the organisation, from the Board down. Managing agents should also ensure that the necessary management information is produced to determine whether the syndicate is meeting strategic plans, Syndicate Business Plans, budgets, forecasts and other model uses, such as operating within risk appetite.

The data governance framework should set the tone and provide appropriate oversight of the implementation of the data policy with regard to data necessary for sound decision making. In addition it should ensure appropriate, accurate, complete and timely reporting to support required governance and management decision making processes together with prompt detection of issues.

The data governance framework is part of the managing agent’s general governance framework and should be included in the relevant policies and governance reviews. Managing agents should consider data governance, controls and limitations within the internal model validation process. [Link to validation standards]

Lloyd’s expects managing agents to ensure that written data policies, procedures and standards are kept under regular review, at least on an annual basis and that this approval process is appropriately represented throughout a managing agent’s governance structure. These documents should include
the responsibilities and accountabilities of the various stakeholders across the managing agent and the quantity and quality of data metrics reported to management.

**MDI 6.2**

**Systems and Processes**

Managing agents shall have systems and processes in place to record relevant Internal Model data and use the output for reporting to management and to Lloyd's.

Managing agents shall have systems and processes in place:

- to record internal model data which is sufficient in granularity and coverage to appropriately monitor performance against strategic plans, Syndicate Business Plans, budgets and forecasts;
- with relevant data from models and forecasts built into the data infrastructure for the production of internal model data returns to Lloyd's; and
- to meet other appropriate external regulatory requirements and guidelines.

Managing agents should ensure that they have systems, modelling tools and analysis methodologies in place to meet the requirements of all aspects of the business. It is important that systems and processes relating to internal model data can produce timely and accurate returns to executive management, the board and ultimately to Lloyd’s and external regulators in the required format.

Lloyd’s expects managing agents to give due consideration to IT systems with regard to data so that the quality and integrity of the data and its processing is not compromised. Managing agents should document the use of IT systems within data management.

The resources involved in Data management will need the relevant skills and experience to ensure that there is:

- Familiarity with systems, processes and tools;
- Recognition of market groups within the Lloyd’s market and external service providers who could assist with data solutions; and
- Consideration of any tools / techniques suggested by Lloyd’s.

**MDI 6.3**

**Quality Control**

Managing agents shall have processes in place to review the systems and controls framework ensuring internal model data is accurate and complete.

Managing agents shall ensure that:

- there is regular exception reporting to identify potential variances or control failures in recording and producing internal model data and these are investigated and escalated as appropriate;
- the quality of internal model data is continuously assessed to ensure accuracy, completeness and appropriateness; and
- the systems and controls framework for internal model data is subject to regular and appropriate internal audit review.

Throughout the production process of data, from recording to reporting, there must be controls in place to ensure the accuracy, appropriateness and completeness of data, which can include, for example, data error reports, validation reports and exception reports. As a further example,
exception reports may address unusually large data items, entries with unusual currencies for the syndicate, or blank data fields where information would be expected to have been entered. Many other types of exceptions will be identified by managing agents.

There should be a process of checking the quality of data on a timely, frequent and ongoing basis with due regard to the materiality and the potential risk associated with inaccuracies. Where data entry is outsourced, accountability and responsibility remains with the managing agent who should also have a process of quality checking.

Managing agents are expected to have an appropriate internal audit programme in place. Internal Audit are required to undertake regular reviews of the systems and controls for data for the production of management information and returns to Lloyd’s and other appropriate external regulatory and accounting returns. This programme should include:

- Data validation and consistency;
- Data completeness;
- Effectiveness of analysis procedures; and
- Process of converting data to Management Information;

EIOPA guidance gives some insight into the meanings to be ascribed to completeness, accuracy and appropriateness, as applied to data used in internal models and technical provisions.

Accuracy requires freedom from material error, consistency over time and timely and consistent recording.

Completeness requires sufficient granularity and adequate historical information to identify trends and assess data characteristics. Such data must be available for all key risk groups and all relevant data must be utilized.

Appropriateness requires consistency of the data with its uses, that there is sufficient data to exclude undue estimation error. Moreover, the data must not be able to falsify the assumptions made in the internal model or technical provisions calculations, and must reflect appropriately the risks to which the syndicate is exposed.
MDI 6.4

Data Policy and Directory

Managing agent shall establish, implement and maintain both a written data policy and a data directory for the internal model.

With regard to data used in the internal model, managing agents shall have a data policy and data directory which:

- defines complete, accurate and appropriate in relation to data management;
- defines the frequency of data updates;
- defines the process of using and documenting expert judgement; and
- includes all items of data used in the internal model and calculation of the technical provisions and specify at a minimum:
  - source;
  - characteristics; and
  - usage.
- include explicit reference to other data frameworks, processes and procedures.

Data Policy

Managing agents must establish a data policy, setting out requirements on data quality and data update. As with all other policies this sits under each managing agent's documentation governance process and changes to this should be informed to Lloyd’s based on each Managing Agent's model change policy. The minimum requirement for the data policy is to cover the scope of the internal model and also technical provisions, if they are not included within the scope of the internal model. It is the choice of the managing agent to define the internal model and the degree to which data standards are applied outside the internal model. Solvency II requirements imply that the data policy should be extended to cover the wider flow of data that feeds the internal model, including source systems and databases.

The data policy should include explicit reference to detailed frameworks, processes and procedures for the collection, processing and application of data. For example, a data policy could specify the requirements that data processes outside the internal model need to meet, in order to feed that data into the internal model. Where the internal model does not include technical provisions, a separate document on the data policy for technical provisions would also be required. Lloyds expects agents to consider whether it may be appropriate to prepare a separate policy for different applications of the data or to create an overarching data policy.

The data policy is a key document and the guidance below provides further detail on the potential contents. This guidance is not intended to be prescriptive but instead provides an example of the potential content.

A data policy document should outline, at a high level, the overall intent of the data within the managing agent. The policy need not cover detailed processes provided that the processes which the agent has in place for checking and validating data quality are documented elsewhere in detail. It would, for example, be reasonable for a managing agent to have one data policy over a number of syndicates so long as the features and issues pertaining to that data were relatively similar.
## Example Data Policy Format

<table>
<thead>
<tr>
<th>Proposed section header</th>
<th>Example fields</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title page</td>
<td>With Managing agent/Syndicate name</td>
</tr>
</tbody>
</table>
| Approval record and document history                        | Document owner, author, date and version number.  
Person(s) approving the Policy, date and version.  
Version history, changes made, date and author.                                                                                                                                                                                                                                                                                                 |
| Table of contents                                            | Summary of all headings and sub headings with applicable page number.                                                                                                                                                                                                                                                                               |
| Purpose and scope of the Policy                             | Why the Policy is needed and its desired outcome?  
What is in scope of the data policy?                                                                                                                                                                                                                                                                                                            |
| Executive summary                                           | Background (explain the need for the Policy).  
Business objectives for the Policy.  
Policy ownership.  
Key stakeholders, signatories and period for Policy review.  
Communicating key uncertainty.                                                                                                                                                                                                                                                                                                               |
| Terminology                                                  | Interpretation of the following terms to managing agent:  
Materiality;  
Consistency;  
Proportionality; and  
Accurate, complete, appropriate.                                                                                                                                                                                                                                                                                                               |
| Ownership & controls                                         | Data ownership.  
Data controls / checks.                                                                                                                                                                                                                                                                                                                        |
| Policy maintenance                                           | Policy update process & frequency.                                                                                                                                                                                                                                                                                                                |
| Expert judgement                                             | Definition of expert judgement.  
Overall view on reliance on expert judgement.  
Details of who has authority to act in the capacity of an expert, and where the expert judgement can be applied.  
Details of independent review process.                                                                                                                                                                                                                                                                                                          |
| Data quality and deficiency                                 | Data quality management:  
- Data quality criteria to be applied (including accuracy, completeness and appropriateness);  
- Details of data limitations;  
- Data thresholds;  
- Roles and responsibilities;  
- Details of data audit processes;  
- Detailed processes for monitoring and validating data quality;  
- Data deficiency process;  
- Roles and responsibilities; and  
- Reference to other data frameworks, processes and procedures not covered here.  
Detailed process for application to external data.                                                                                                                                                                                                                                                                                         |
| Data update processes                                        | Data update frequency standards:  
- For regular data updates; and  
- For unscheduled data updates.  
Details of process for recording and auditing data updates and adjustments.                                                                                                                                                                                                                                                                     |
| Evidencing                                                   | Methodology for the validation of data.  
Guidance on appropriateness of validation test.                                                                                                                                                                                                                                                                                                   |
The process specifications should include a precise description of the various methodologies in use, the determination of responsibilities and the frequency of application.

**Data Owners**

It is unlikely that managing agents will be able to achieve and sustain acceptable levels of data quality without formal accountability for data quality. Responsibility for the quality of specific data items and data sets should be assigned to specific “Data Owners”. A Data Owner should be someone who understands the meaning and daily uses of the data, with sufficient authority to ensure adequate quality procedures and processes are implemented and followed.

**Data update**

Data updates should be related to the frequency of model use, but all data must be reviewed at least annually and updated where appropriate. Normally, more frequent updates will be required.

The data update process should be a well-defined and consistent process for refreshing or updating all data items in line with the data policy. The process must include appropriate change controls (automated or manual) that take into account any material impact (individually or in aggregation) on the internal model. MI should be produced to evidence the data update process.

The data policy should include details of the data update process, roles & responsibilities, triggers and any dependencies which may impact the update frequency.

**Implementation of the policy**

Managing agents should also be able to evidence the practical implementation of the policy across the organisation and the governance around the policy. This should include the frequency of the review of the data policy, associated procedures and standards.

The managing agent should be able to demonstrate that the data policy has been approved by management and has received an appropriate degree of challenge and oversight prior to approval. Where there is inadequate oversight of the development and implementation of the data policy, there is an increased risk of poorly informed decision making and non-compliance with the required quality and standards.

Managing agents must establish and maintain a data directory in order to meet Solvency II standards. It should cover all data used to operate, validate and develop their internal model, specifying source, characteristics and usage at a minimum.

**Data Directory**

The minimum requirement for the data directory is to cover the internal model related data, however so defined. It is the choice of the managing agent to define the internal model, and the degree to which data standards are applied outside the internal model. However, the data standards, including the data directory, should also apply to the data used in the calculation of the technical provisions. This guidance is not intended to be prescriptive but instead provides an example of the potential content.

The table below summarises the possible template column headings for a managing agent’s Data Directory divided into the required elements:
<table>
<thead>
<tr>
<th>Data directory field</th>
<th>Description</th>
</tr>
</thead>
</table>
| Source               | Data Origin: Where the data originated from e.g. broker, assured.  
Data Storage: Where is the data stored e.g. data warehouse and if there are multiple copies.  
Data Owner: The Owner of the Data (this may change at varying stages of data use/ transformation). |
| Characteristics      | Granularity of the data e.g. line of business level, by year of account and currency.  
Data Type: What form the data is in e.g. frequency and severity.  
Currency of data: what currency to store data in, and relevant exchange rates to apply.  
Data Quality Standard.  
Data Quality Judgement / Comment: Commentary on quality of the data set i.e. completeness, accuracy and appropriateness.  
Materiality: A comment of how material is that data set in relation to the total model output e.g. significant driver of the SCR. |
| Usage                | Risk Type: What risk type is this data used to quantify / validate / develop e.g. Insurance Risk.  
Model Area: More granular use of data e.g. Gross Underwriting Losses.  
Data Usage: What is the data used for in relation to the internal model i.e. operate, validate or develop.  
Data transformation: aggregation, augmentation, enrichment and derivation processes. |

Lloyd’s expects agents to perform a risk and impact (sensitivity) assessment for each data set to identify:

- Whether the impact of poor quality data (individually or in aggregation) on the internal model is material;
- The points in the data flow from source to internal model where likelihood of data errors is the greatest, and therefore, what specific data quality controls are required; and
- Tolerance threshold beyond which a data error could become material (individually or in aggregation).

In addition to the items above, there should be further documentation working through the detail of how data has been adjusted, parameters selected and methodologies chosen.

The directory should be used to help demonstrate other internal model requirements, including but not limited to:

- The consistency of data through clear definitions of data sets (no internal contradictions);
- Identifying data sets for focused demonstration of complete, accurate and appropriate data; and
- Data transparency.

It is important that there is a clearly defined link between the data directory and model change to ensure the data directory remains consistent with model design and development.

Using and producing the data directory should help agents understand the uses and hence the materiality of each data item to the final modelling process and result. This should help ensure that efforts in relation to data cleansing are focused on areas where the most material benefits can be gained. Such a directory should also help agents to understand where data is updated or adjusted using judgement.
The lineage of data is an important concept in demonstrating an understanding of data within the agency. Data directories may include details of this lineage to explain fully the journey that data goes through from the original data entry through to use in the internal model. Each managing agent will decide the most appropriate format for the data directory depending on its specific requirements. The following are all possibilities: relational database, flowcharts, spreadsheets, word-processed documents.

With regards to the data journey, it would be reasonable to draw a dividing line between data up to and including a data warehouse and data used after that point through to use in the internal model. The distinction between the two is the former should be factual with little by way of judgement or interpretation. The latter is subject to these adjustments. Major system / data flows from source databases into the internal model should be understood and documented as part of the overall internal model documentation.

Managing agents may or may not choose to include the former element in the data directory itself. Notwithstanding this, the data warehouse would still be subject to data requirements on documentation and it cannot be assumed that data within the data warehouse is exempt from data validation.

**MDI 6.5**

**Data Consistency**

Managing agents shall ensure the consistency of data assumptions used throughout the internal model and in the calculation of technical provisions.

*Managing agents shall ensure that:*

- assumptions made in collection, storage, processing and application of data must be consistent;
- data is used consistently throughout the internal model and in the calculation of the technical provisions;
- they document where there are inconsistencies in the use of data and justify these; and
- data is used consistently over time.

It is important that data required for different uses is consistent. For example, it is evident that capital requirements are impacted by the size of the balance sheet, and so insurance reserves must be calculated consistently with capital, which includes a requirement for consistency of data across the two areas. The assessment of data accuracy should include appropriate cross-checks and tests as to its consistency with other relevant data and with the same data at different points in time. The expectation is that the same data sets will be used for both the internal model and technical provision calculations.

Lloyd’s undertakes validation on data submissions received to check for the consistent use of data. Queries are raised with agents where this is not the case and consideration is taken as to the impact on the agent’s compliance with the Solvency II requirements and remedial action needed.
MDI 6.6

Data Limitations

Managing agents shall document appropriately any material limitations of the data used in the internal model and any resulting adjustments or approximations made via expert judgement.

With regard to data used in the internal model, managing agents:

- shall document data limitations, which will include both weaknesses in data and absences of data;
- may adjust the data to overcome weaknesses, in which case they shall store the original data and document the nature of and reason for the adjustments;
- may use data approximations to overcome limitations, in which case they shall document the nature of and reason for such approximations;
- ensure that expert judgement is appropriately documented and justified; and
- shall ensure that limitations and any resulting adjustments or approximations are subject to appropriate governance oversight.

The data used in the internal model and technical provisions may present limitations and where material these limitations should be documented appropriately. The documentation of limitations shall include:

- A description of the limitation, including information of materiality, duration and impact;
- How such limitations will be remedied where possible; and
- The functions within the governance system of the syndicate responsible for this process and date.

Managing agents are required to document all data limitations both in terms of weaknesses and absences of appropriate data. In order to achieve this, managing agents could consider the use of a Data Deficiencies Log or similar recording mechanism.

In considering the appropriate use of data, in particular where limitations are present, there may be instances where data needs to be adjusted or approximated. Where data is adjusted or approximated, this should be documented. In particular, data is likely to be adjusted as part of the internal modelling process by way of making historical data appropriate for prospective use.

Some possible reasons for this are:

- past or future management action affecting the portfolio;
- allowance for past and expected future trends;
- changes in terms and conditions of business written;
- changes in the legal environment; and
- changes in inuring reinsurances.

Where data is adjusted or approximated for use in model development, parameterisation or validation the documentation should include the details of the adjustments made and the reasoning behind them. For example:

- what data has been included / excluded and why?; and
- what adjustments have been made for trend, line size etc. and the reasoning behind these.

Where adjustments are required to the data or expert judgement used, then these adjustments should be documented as to the rationale for the adjustment and appropriateness of the expert where judgements are being used.
[See expert judgement standard for more detail]
MS7 - VALIDATION

MINIMUM STANDARDS AND REQUIREMENTS

These are statements of business conduct required by Lloyd’s. The Minimum Standards are established under relevant Lloyd’s Byelaws relating to business conduct. All managing agents are required to meet the Minimum Standards. The Requirements represent the minimum level of performance required of any organisation within the Lloyd’s market to meet the Minimum Standards.

Within this document the standards and supporting requirements (the “must dos” to meet the standard) are set out in the blue box at the beginning of each section. The remainder of each section consists of guidance which explains the standards and requirements in more detail and gives examples of approaches that managing agents may adopt to meet them.

GUIDANCE

This guidance provides a more detailed explanation of the general level of performance expected. They are a starting point against which each managing agent can compare its current practices to assist in understanding relative levels of performance. This guidance is intended to provide reassurance to managing agents as to approaches which would certainly meet the Minimum Standards and comply with the Requirements. However, it is appreciated that there are other options which could deliver performance at or above the minimum level and it is fully acceptable for managing agents to adopt alternative procedures as long as they can demonstrate the Requirements to meet the Minimum Standards.

DEFINITIONS

GAAP - Generally Accepted Accounting Principles.

LCR – The Lloyd’s Capital Return.

SCR – Solvency Capital Requirements is the amount of funds that insurance and reinsurance undertakings are required to hold in the European Union.

The Board - Where reference is made to the board in the standards, agents should read this as board or appropriately authorised committee. In line with this, each agent should consider the matters reserved for the board under the Governance Standard in order to evidence appropriate full board discussion and challenge on these subjects.
MODEL VALIDATION GUIDANCE

Agents should refer to Lloyd’s “Solvency II Model Validation Guidance” issued in June 2012 for more detailed guidance on model validation requirements and Lloyd’s expectations of agents. Agents should note that it sets out good practice and gives a great deal of useful advice but it does not seek to define minimum standards.

SECTION 1: VALIDATION POLICY

VAL 1.1

Maintenance of a validation policy

Managing agents shall establish, implement and maintain a validation policy which sets out the way in which they will validate the internal model, and explains why their approach is appropriate.

Managing agents shall ensure that the validation policy specifies at least:

- the purpose and the scope of the process;
- the processes and methods used to validate the internal model;
- for each part of the internal model, the frequency of regular validations and the circumstances which trigger additional validation;
- the persons who are responsible for each validation task;
- the procedure to be followed in the event that the validation process identifies problems with the reliability of the internal model and the decision-making process to address those concerns;
- an assessment by the managing agent of the quality of the validation process; and
- an assessment of the independence of the validation process.

Managing agents shall include any other material matters relevant to their approach to validating the internal model as satisfactory coverage of these elements alone does not guarantee compliance with the tests and standards.

The validation policy must set out the validation tools that are used. The broad description of a validation tool is “any approach designed to gain comfort that the internal model is appropriate and reliable”. It is up to each managing agent to decide which tools will be used. Various validation processes and tools that a managing agent may choose to employ are set out in section 4 below. Many of the validation processes and tools described are mandatory under level 2 guidance, including stress and scenario testing, sensitivity testing, and back testing. It is strongly recommended that these tests should be applied to every major risk module of the standard SCR formula in order to validate the model including comparison against the standard SCR calculation. The use of the model for ‘risk ranking’ should also inform agents as to which risk areas should be tested as a priority.

A key element of the validation process is the setting of pass/fail criteria for validation tests, since failures could indicate problems with the reliability of the internal model. The validation policy must set out how such cases are to be managed, including escalation as far as the Board, if appropriate. Validation failures may also lead to the recognition of model limitations, the escalation process for which should also be covered by the validation policy.
The validation policy must demonstrate that it sets out an independent validation process and must explain how independence is achieved.

SECTION 2: VALIDATION GOVERNANCE

VAL 2.1

Independence and objective challenge

Managing agents shall ensure that the validation process shall be independent from the development and operation of the internal model and subject to objective challenge.

Managing agents shall ensure that:

- the validation process and outcomes shall be subject to a level of objective review and challenge sufficient to justify the conclusions reached on the quality of the validation process;
- the validation process shall incorporate governance to ensure that validation results are escalated where necessary;
- the escalation path for validation results shall also be independent of the development and operation of the internal model; and
- the risk management function has responsibility for testing and validating the internal model.

The agent’s definition of “independence” should be detailed and explained. One possible interpretation is that it is reviewed by individuals who were not involved in the model’s design, development, parameterisation or operation, which could include external and internal staff. Independence does not require that only those with no connection to the model should be involved in the validation, only that all aspects of validation should have independent review. This certainly allows for the modelling team to conduct validation which can be used in the independent validation process, provided an adequate independent review element is incorporated.

Article 44(5) of the framework directive sets out that the risk management function shall be tasked with testing and validating the internal model. Owing to the wide ranging scope of the internal model and of the validation of the internal model, it may be that the risk management function is not always in the best position to perform the tasks set out in the validation policy. It may be more practical in some cases for other parties to complete some of the tasks required in the validation process. The risk management function must remain responsible for co-ordinating the completion of the various tasks.

The independent review will require various skills and expertise and agents must be able to demonstrate that the process involves sufficient skills in all areas of the model to be validated. The managing agent should also explain the role of the internal audit function in the validation of the model where they are involved, and show that it is not incompatible with the normal “third line of defence” role. Third party reviewers should have terms of reference making clear the nature of their role.

Agents must also consider how independence is maintained over time. As an example, if model changes are implemented in response to an independent review, the review of the change by the same reviewer in future validation cycles may result in a decrease in independence over time. A proportionate approach to maintaining independence over time needs to be taken to ensure that it is manageable.
Assessment of independence should explicitly cover as a minimum:

- in relation to the internal validation process, the responsibilities and reporting structure of the persons involved in the process; and
- in relation to any external validation process, the remuneration structure of the persons, including where applicable their employees or other persons acting on their behalf, who are involved in the process and any other mandates of these persons relating to the agent or syndicate.

The existence of objective challenge is crucial in maintaining an effective validation process. It is the responsibility of the risk management function to ensure that the tasks set out in the validation policy create and maintain independence, as noted above.

Managing agents must be able to demonstrate the existence and use of a clear escalation path setting out how the results are escalated within the governance structure of the internal model. The escalation procedure followed for failed tests must be undertaken in compliance with the validation policy.
SECTION 3: VALIDATION PROCESS

VAL 3.1

Frequency and scope

Managing agents shall ensure that the internal model validation shall be carried out on a regular cycle and cover all components of the internal model.

Managing agents shall ensure:
- the validation process shall apply to all parts of the internal model and shall cover all requirements set out in Articles 101, 112, 120 to 123, 125 and 126 of Directive 2009/138/EC;
- they test the results and key assumptions of the internal model at least annually; and
- they test the results and key assumptions following events as identified in the model change policy.

The scope of validation is wide, and covers the full scope of the internal model and not just the calculation kernel. For example any IT systems defined as being included within the internal model should by default be considered for inclusion within the scope of the validation. Managing agents will need to consider carefully where to draw the line between validation policies within the scope of the internal model and policies and processes that are linked to the internal model but outside the scope of the approval process. All areas within the scope of the model must be covered by validation.

The level 2 guidance requires the validation process to at least cover the following areas (alongside each, examples of what validation might look like are given):

<table>
<thead>
<tr>
<th>AREA OF VALIDATION</th>
<th>EXAMPLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data</td>
<td>Accuracy, appropriateness and completeness checks, data reconciliations</td>
</tr>
<tr>
<td>Methods</td>
<td>Selected statistical distributions are supported by the data (or at least are not contradicted by past history)</td>
</tr>
<tr>
<td>Assumptions</td>
<td>Validated against actual experience or market data</td>
</tr>
<tr>
<td>Expert Judgement</td>
<td>Actuarial judgement is challenged by underwriters' views and vice versa</td>
</tr>
<tr>
<td>Documentation</td>
<td>Evidence that it has been read and approved by relevant staff</td>
</tr>
<tr>
<td>Systems/IT</td>
<td>Appropriate systems controls, file back-ups and security in place</td>
</tr>
<tr>
<td>Governance</td>
<td>Evidence that validation output is reviewed by appropriate committees</td>
</tr>
<tr>
<td>Use</td>
<td>Evidence that the model is genuinely used and appropriate for the use. Show minutes, supporting analysis and any workflow history. Show how use influences model design and subsequent changes</td>
</tr>
</tbody>
</table>

Full cycle validation is considered to contain:
- the application of the validation test or tool;
- the analysis of test results;
- the escalation of test results to appropriate individuals in the business; and
- the implementation of any changes necessitated by the validation test outcome.
The full cycle of validation of the internal model must be at least an annual process, which does not necessarily mean every part of the validation occurs strictly every twelve months, as some parts may be more frequent, or triggered by events, such as changes in the business plan. Where there has been no change to an external model methodology from the last validation cycle then confirmation of this suffices to meet the full annual validation cycle. The timing of the validation cycle also needs to be capable of supporting both model change and the submission of LCR reports to Lloyd’s and external regulatory authorities.

VAL 3.2

Compliance and confirmation

Managing agents shall conduct internal model validation in compliance with the validation policy, in order to give the confirmations required by Lloyd’s.

Managing agents shall ensure that:
- the validation process shall be conducted and validation tools selected and applied in compliance with the validation policy; and
- the validation report shall be written and authorised in compliance with the validation policy, and shall support managing agents in making the following confirmations:
  o the validation has been conducted in compliance with the validation policy;
  o the validation process has been conducted with sufficient independence;
  o the internal model is reliable and its results appropriate; and
  o all material components and risks have been tested.

Managing agents must have a validation policy containing all the elements required by level 2 guidance (see standard VAL1.1), and must manage the process in compliance with the policy, in order to achieve the level of comfort set out in the policy and give the confirmations required by Lloyd’s.

Lloyd’s may amend and re-issue the required confirmations from time to time. The aim of the confirmation statements is to provide an explicit confirmation that the objectives of the validation process have been met. Managing agents’ boards will be required to provide the confirmations based on the validation report, but the confirmations do not form part of the report itself.

VAL 3.3

Validation results

The validation process shall support conclusions about the appropriateness and reliability of the internal model.

Managing agents shall ensure that the:
- validation tests shall result in conclusions about the appropriateness of the area being validated;
- tests giving results outside pre-defined requirements shall be addressed in accordance with the validation policy and shall be subject to escalation and further validation, if appropriate; and
- the validation process shall cover all material limitations in the internal model and their impact on the appropriateness and reliability of the model.
Validation is considered to be a critical part of demonstrating that the internal model is suitable for the expected uses, and in particular, setting capital for regulatory purposes. The validation process must lead to results which enable the board to determine the reliability and appropriateness of the model for each of those uses. This means that:

- validation tests should have clear criteria for determining whether the result is satisfactory. Normally, this will mean that pass/fail criteria should be set before conducting the test; and
- failed tests must lead to appropriate action. This may mean improving the model or identifying a limitation in the model or possibly the validation itself. Failures in material areas should trigger an escalation process, so that the resulting action is properly reviewed and authorised.
SECTION 4: VALIDATION TOOLS

VAL 4.1

Basis of validation

Actuarial and statistical methods shall be tested on current information and practice and a detailed understanding of the model.

The validation of the actuarial and statistical methods referred to in Article 124) of Directive 2009/138/EC shall be based on:

- current information, including actuarial progress and the generally accepted market practice; and
- a detailed understanding of the theory and assumptions underlying the methods.

Managing agents are required to use current actuarial methods and techniques and relevant, up-to-date information in validating internal models. This is essential in ensuring that managing agents can continuously improve their models. This does not imply that internal models should always be based on the most popular methods; managing agents remain under a responsibility to seek out the best approach for reflecting the business and risk profile of their syndicates.

Managing agents should demonstrate their detailed understanding of the theory and assumptions underlying their models in the design and application of a specific, detailed and appropriate validation programme including the use of relevant tools. This understanding should be supported by the design and operation of the validation process, and validation failures should be used to improve understanding, as well as enhancing the model itself.

This area forms an integral part of the validation testing undertaken by an agent to ensure that the actuarial approach is appropriate. The validation report is the tool by which the managing agent’s appropriate committee and board obtain comfort that this has been undertaken together with the escalation process for any tests that are failed.

VAL 4.2

Experience

Managing agents shall ensure that appropriate testing of the internal model against experience is undertaken.

Managing agents shall:

- test the results and the key assumptions of the internal model against experience and other appropriate data to the extent that data are reasonably available;
- apply the tests to aggregated results and appropriate single elements of the results;
- identify the reason for any significant divergence between assumptions and results; and
- ensure actuarial and statistical methods are tested against current data and market practice based on a detailed understanding of the model.

The testing of results of the internal model against experience is used to assess the variances between forecasts made by the model and actual outcomes. Where actual outcomes may not be directly available, the model forecasts may be compared to those made on the basis of a
comparable data set. Such datasets may include, for example, market level data, data from other parts of the group or data based on other business deemed to have similar characteristics.

Managing agents should justify why the chosen comparable data set is appropriate. The reliability of the test depends on the selection of data used and specific attention to the data selection will increase the comfort managing agents obtain from the test.

This type of test against experience, or "back-testing", can be used to find various kinds of discrepancies. The objective of the analysis is, for example, to determine whether differences come from omission of material risk factors from the model, whether they arise from errors from other aspects of the model specification such as the dependency structure including the assumptions of linearity, or whether the discrepancies are purely random and thus consistent with acceptable performance of the model.

One way to use back testing is to test statistically the hypothesis that the observed frequency of exceptions equals the expected frequency, subject to the availability of adequate data. Managing agents should use back-testing widely, as it offers useful information about the model which is relatively easily understood by directors and other model users.

An important element of backtesting involves comparing actual outcomes for selected key variables with the modelled distribution, in order to assess what percentile the actual outcome represents. If there is an unusual frequency of extreme percentiles, an unusual lack of extreme percentiles, or a clustering of results within a limited range of percentiles, this may indicate an issue with the model.

**VAL 4.3**

**Sensitivity Testing**

The sensitivity of the internal model results to changes in key assumptions shall be tested.

*Managing agents shall:*

- assess the effect on the results of the internal model of changes in the key assumptions underlying the model; and
- where the results of the internal model are highly sensitive to an underlying assumption, be able to explain the underlying reasons and how this is taken into account in their decision-making process.

Sensitivity testing is a required test which aims to challenge the internal model by testing the sensitivity of the results to changes in key underlying assumptions including future management actions. For example, a distribution fitted on the basis of, say, 10 data points could be randomly sampled to produce an alternative set of 10 data points. The fitting process could be repeated on these alternative data points and the simulations rerun on the resulting distribution to give an indication of how sensitive the model is to statistical fits based on limited data. The analysis may be performed by introducing small changes to the assumptions such as to the parameters, but also to some more structural aspects of the model like mathematical methods or statistical distributions. For instance, to test the sensitivity of the results to the choice of a particular statistical distribution selected, agents may use a range of alternative distributions and measure and analyse the impact that the change of the distribution has on the results.

Sensitivity testing can also be used in validating parts of the internal model which place reliance on expert judgement, to assist in determining the dependencies between risks.
Sensitivity tests may also examine the effect of making changes in a number of parameters or assumptions at the same time in order to validate the model for unexpected interactions, particularly if interactions between different variables are complicated, though this could also be considered as scenario testing.

Testing the sensitivity of the internal model may also be useful to identify cases where a small difference in the input leads to significant changes in the output. In those cases, and where such behaviour can be justified, particular attention will be given to the modelling.

Whilst agents are required to use sensitivity testing where appropriate, they should be aware that sensitivity testing alone does not provide sufficient challenge and comfort, so should seek to apply additional validation tools.

**VAL 4.4**

**Required tools**

Managing agents shall ensure that the validation process shall be conducted using appropriate validation tools to provide comfort that the internal model is appropriate and reliable for internal use and for the SCR calculation.

*Managing agents shall consider using qualitative and quantitative tools to achieve the required comfort, including but not limited to those required below:*

- The model validation process shall include an analysis of the stability of the outputs of the internal model for different calculations of the internal model using the same input data;
- Agents shall develop and carry out their own stress tests and scenario analysis, taking into account their particular business and risk profile;
- The model validation process shall include a reverse stress test, identifying the most probable stresses that would threaten the viability of the syndicate;
- The validation process shall include an analysis of the results of the profit and loss attribution referred to in Article 123 of Directive 2009/138/EC;
- The validation process shall include any approximations referred to in Article 122(3) of Directive 2009/138/EC; and
- The stress testing and scenario analysis and their results shall be monitored and assessed by agents on an ongoing basis and updated at least annually.

Managing agents are expected to be able to demonstrate use of a wide range of appropriate and effective validation tools, based on defined and documented selection criteria. They should be able to explain how the selected tools meet the validation objectives and why they are more appropriate than alternatives.

The following tools can be used in the validation process:

<table>
<thead>
<tr>
<th>Validation Process</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Stress and scenario test</td>
<td>Construct hypothetical extreme scenario (or combination of scenarios) and assess the loss (earnings) impact</td>
</tr>
<tr>
<td>2 Reverse stress test</td>
<td>Determine the level of loss which would lead to insolvency (or failure to deliver the plan) and work backwards to determine the scenario(s) which might lead to that level of loss</td>
</tr>
<tr>
<td>3 Back test</td>
<td>Compare actual results with modelled distribution – do they fall within the range expected by the model?</td>
</tr>
</tbody>
</table>
Managing agents should have a documented process in place to choose the appropriate suite of validation tools in order to ensure a robust validation process; this may be covered adequately in the validation policy in some cases. The following characteristics or issues should be considered when selecting the validation tools:

- Level of sophistication – validation tools range from simplified techniques to sophisticated methods;
- Nature – validation tools may be qualitative, quantitative or a combination of both;
- Knowledge required - The extent of knowledge required by the persons doing the validation;
- Independence - The level of independence required by the persons doing the validation;
- Information Available - The extent of the types of information available for external versus internal validation; and
- Cycle of validation – Validation will be performed at different stages of the internal model from development, to implementation, to operation.

The PRA places considerable emphasis on the use of stress and scenario testing to validate the model. Managing agents should refer to PRA papers PS09/20 and CP08/24 for further detail, with annexe 3 of PS09/20 setting out the PRA’s views on good practice in stress testing. It is clear that stress testing should not be considered as an inferior or secondary exercise to stochastic modelling and should be seen as a core part of the risk management system. In particular stress and scenario testing is an important mechanism through which senior management can engage with and challenge the output of the internal model (thereby contributing to demonstrating that the ‘use’ test is being met).

In addition to managing agents developing their own suite of stress tests, Lloyd’s may specify market-wide stress and scenario tests, including the existing Realistic Disaster Scenarios.

As a required tool, stress and scenario tests will be reviewed at least annually as part of the validation process, but Lloyd’s takes the view that managing agents should reconsider their scenarios whenever the circumstances or information on which they depend changes materially. Managing agents should document the circumstances under which scenarios will be reviewed.
VAL 4.5

Profit and loss attribution

Managing agents shall demonstrate an understanding of the causes and sources of profits and losses, show how they are explained by the categorisation of risk in the internal model and make appropriate use of the profit and loss attribution within the business.

Managing Agents shall, when conducting the Profit & Loss attribution:
- define the profit and loss in terms of the economic balance sheet;
- explain sources of profit and loss in respect of the major business units of the syndicate;
- explain profit and loss based on the categorisation of risks chosen in the internal model and show how this explains the results by business unit;
- ensure that it is performed at least annually;
- ensure it is used in the management of the business and demonstration of use test; and
- ensure it is used to in the validation process, as a minimum to validate that the internal model appropriately reflects the risk profile of the syndicate.

Definition and explanation of profits and losses

The definition of profit and loss in the attribution needs to be consistent with the SCR, which means that it must be based on the economic balance sheet movement. Managing agents can use GAAP profit and loss for P&L attribution, if they consider that this is better understood within the business, but it is essential in that case that the GAAP basis can be demonstrated to be consistent with the economic basis. Managing agents must be able to show that users understand whether they are using a GAAP or economic basis, and, where appropriate, the reasons for doing so.

Lloyd’s will expect to see consistency over time in the attribution of profits and losses, and in the relationship of profits to the internal model. Optimistic profit assumptions should not occur routinely if profit and loss testing is applied appropriately.
SECTION 5: VALIDATION REPORT

VAL 5.1

Documentation of validation process

Managing agents shall ensure that the validation results are documented in a validation report.

- the validation report shall include the validation results, and conclusions and consequences from the analysis of the validation results;
- if parts of the validation have been delegated to internal or external parties, the data, tools and results shall be documented in the validation report;
- the validation report shall describe the validation tools used and the reasons for selecting them;
- the validation report shall include a description of known limitations in the internal model and the validation of the internal model, including the impact and materiality of the limitations. Action taken to mitigate the effect of the limitations shall be described; and
- the validation report shall describe the actions taken to ensure the adequacy of independence and objective challenge.

The primary purpose of the validation report is to demonstrate that agents have completed sufficient work to gain confidence that the model is capturing all the risks to which syndicates are exposed, that these risks are modelled appropriately, and that key stakeholders have a thorough understanding of the materiality and sensitivities around each element of risk. Validation is a fundamental part of acceptance of the internal model into the business and the validation report should reflect this.

The validation report should be primarily an internal document that the agent uses to give its Board comfort that the internal model and corresponding SCR calculation are appropriate for the business and meet the relevant regulatory requirements. For this reason, Lloyd’s does not intend to mandate the exact format or content of the validation report. Agents should first and foremost produce a validation report that is appropriate for their business and internal model structure.

Agents should refer to Lloyd’s Solvency II Validation Report Guidance Notes, updated June 2011 for more detailed guidance in the design and contents of a validation report.

[Link can be found in the Appendix at end of this document]

This gives detailed guidance on good practice but agents should note that it does not set out minimum standards.

Managing agents should note also that Lloyd’s has issued confirmation statements to be made by the board in which the validation report plays a key role in the board being able to make these statements. [See standard 3.2 above].
SECTION 6: RISK INDICATORS

VAL 6.1

Risk indicators

Managing agents shall ensure that all material, quantifiable risks are covered by the model and adequately validated.

The internal model shall be able to rank all material quantifiable risks within the internal model scope and managing agents shall reconcile the ranking to the capital allocation.

The assessment of whether all such risks are covered shall take into account an appropriate set of qualitative and quantitative indicators specified by the managing agent.

The qualitative indicators shall include at least the following:
- the identification in the own risk and solvency assessment of risks other than those that are covered by the internal model;
- the existence of a dedicated risk management process for risks other than those that are covered by the internal model; and
- the existence of dedicated risk mitigation techniques for risks other than those that are covered by the internal model.

The quantitative indicators shall include at least the following:
- the capital allocation;
- the amount of profits and losses which cannot be explained by the risks covered by the internal model; and
- the results of stress testing and scenario analysis and any tool in the model validation process.

Managing agents must be able to show that all material, quantifiable risks are covered within the scope of the internal model, and hence within the capital calculation. The risk ranking must be of sufficient quality, i.e. accuracy and consistency that the managing agent can rely on it to make decisions about model use, validation and other business functions, such as risk management. The approach mandated in the requirements of this standard is to define and monitor a set of risk indicators designed to signal any issues with the risk ranking.

Managing agents must document the risk ranking, the risk indicators and the governance and controls applied to them. There must be an escalation process, and a feedback loop to support continuous improvement both of the ranking and the internal model.
APPENDIX – LINKS

- Lloyd's Solvency II Validation Report Guidance Notes:
  
MS8 – INVESTMENT MANAGEMENT

MINIMUM STANDARDS AND REQUIREMENTS

These are statements of business conduct required by Lloyd’s. The Minimum Standards are established under relevant Lloyd’s Byelaws relating to business conduct. All managing agents are required to meet the Minimum Standards. The Requirements represent the minimum level of performance required of any organisation within the Lloyd’s market to meet the Minimum Standards.

Within this document the standards and supporting requirements (the “must dos” to meet the standard) are set out in the blue box at the beginning of each section. The remainder of each section consists of guidance which explains the standards and requirements in more detail and gives examples of approaches that managing agents may adopt to meet them.

GUIDANCE

This guidance provides a more detailed explanation of the general level of performance expected. They are a starting point against which each managing agent can compare its current practices to assist in understanding relative levels of performance. This guidance is intended to provide reassurance to managing agents as to approaches which would certainly meet the Minimum Standards and comply with the Requirements. However, it is appreciated that there are other options which could deliver performance at or above the minimum level and it is fully acceptable for managing agents to adopt alternative procedures as long as they can demonstrate the Requirements to meet the Minimum Standards.

DEFINITIONS

EIOPA - The European Insurance and Occupational Pensions Authority.

SBF - Syndicate Business Forecast.

The Board - Where reference is made to the board in the standards, agents should read this as board or appropriately authorised committee. In line with this, each agent should consider the matters reserved for the board under the Governance Standard in order to evidence appropriate full board discussion and challenge on these subjects.
SECTION 1: INVESTMENT STRATEGY, GOVERNANCE AND USE

INV 1.1

Investment risk documentation

Managing agents shall establish and maintain comprehensive investment risk documentation.

*The investment risk documentation shall:*
- include an investment risk policy;
- describe the investment objectives;
- define comprehensive limits for investment risk;
- set out the responsibilities for the management of the investment of syndicate assets;
- describe the processes and procedures which will operate to ensure compliance with the policy;
- allocate responsibility for maintenance and implementation of investment strategy;
- incorporate the requirements of the “prudent person” principle; and
- describe the processes and controls to ensure compliance with all relevant UK and overseas statutory, regulatory and trustee requirements.

Lloyd’s expects all managing agents to have appropriate documentation to effectively manage investment risk. There is no specific set list of documentation titles that an agent should hold but there are a number of areas that an agent will be expected to cover in their investment risk documentation as discussed below. The level of detail in which the agent will address these areas should be proportionate to the risk involved. The only exception to this is the investment risk policy. Under the requirements of Articles 44 and 132 of Solvency II Directive, a managing agent’s risk management policy should cover certain considerations with regard to investments. Lloyd’s consider these to be more conveniently contained within a separate investment risk policy.

Managing agents shall set out the limits of acceptability for any assets to be held as syndicate assets, consider the appropriate mix of assets, overall risk tolerance levels, concentration limits and counterparty exposure limits. Managing agents shall describe the procedure for the identification and assessment of mismatches between assets and liabilities, at least with regard to terms and currency and any limits on such exposure.

Managing agents shall state how the appropriate level of liquidity for the syndicate’s business is determined and how this is related to cash flows and realistic disaster scenarios. The managing agent must ensure that the trust funds are sufficiently liquid and secure so that the syndicate is able to meet liabilities as they fall due.

More detail regarding the Solvency II requirements can be found in EIOPA-CP-13/08, “Guidelines on System of Governance” (¹), guidelines 22 to 24 (which cover asset-liability management, investment risk management and liquidity management).

Managing agents shall state the investment objectives, which is a statement of what level of risk and profitability is being aimed for on the entire portfolio of assets and how it is planned for this to be achieved.

The investment risk documentation shall include appropriate processes and procedures to enable the managing agent to assess, manage, monitor, control and report the risks to which syndicate assets are exposed.

In accordance with Article 132 of Solvency II Directive, the managing agent shall develop a system of governance over the risks arising from its investment of syndicate assets which incorporate the “prudent person” principle. More details can be found in EIOPA-CP-13/08, “Guidelines on System of Governance”(1), guidelines 25 to 30.

The managing agent must invest the trust funds with due regard to any appropriate UK or overseas statutory or regulatory requirements. The managing agent must comply with trust law and the terms of Lloyd's trust deeds. In exercising its powers under the trust deeds, the managing agent has fiduciary duties and duties of skill and care.

INV 1.2
Investment strategy

Managing agents shall operate an investment strategy which is consistent with the investment risk policy.

The investment strategy shall:
- be consistent with the Syndicate Business Forecast (SBF); and
- be approved and reviewed regularly by the Board, or an appropriate sub-committee.

Managing agents shall establish an investment strategy for investments within the parameters of its investment risk policy which shall be consistent with the Syndicate Business Forecast (SBF). Lloyd’s acknowledges that there can be an extended time between original submission of the SBF and the finalisation of Syndicate’s capital submission. Lloyd’s also acknowledges how rapidly investment conditions change, so that actual investment dispositions may diverge from the SBF. Managing agents should consider when such circumstances may be material enough to trigger a resubmission, although this is unlikely for the majority of syndicates where market risk is not a material risk driver.

Managing agents shall clearly establish responsibility for the implementation of the investment strategy and provide for accurate, informative and timely reporting to management.

The strategy shall be communicated to the Board or an appropriate sub-committee and be reviewed regularly and as business or market circumstances change.

INV 1.3

Governance

Managing agents shall maintain an effective governance and control framework for the management of syndicate investment assets.

Managing agents shall ensure that:
- syndicate investments are properly recorded, monitored and controlled;
- investment activity shall be monitored against defined parameters;
- processes will be maintained to address any exceptions;
- the authority and reporting lines of the investment staff are clearly delineated and documented;
- there is a process providing monitoring and challenge of investment activity.

Managing agents shall ensure that it has adequate controls to ensure that syndicate investments are properly recorded, monitored and controlled and that the investment activity remains within the parameters that it has set. There shall also be a process to identify when these parameters are breached, an escalation of such breaches to the appropriate body (the Board or an appropriate sub-committee) and a mechanism for correcting such breaches within a reasonable timeframe.

Managing agents shall ensure that the authority and reporting lines of the investment staff are clearly delineated and documented so that each relevant member of staff has an adequate understanding of the extent of their investment authority. This applies whether the function is outsourced or not.

Managing agents shall have a process for providing monitoring and challenge for investment activity. This should be performed by individuals other than those making the day to day or operational investment decisions. This provides the necessary independence without having to be a separate function within the managing agent or an external third party.

INV 1.4

Use test

Managing agents shall comply with Solvency II use test requirements.

Managing agents shall:
- demonstrate that their internal model is consistent with their investment governance, risk management and decision making processes.

As part of the use test (Article 120), managing agents are responsible for ensuring the ongoing appropriateness of the design and operation of their internal model, and that their internal model continues to reflect appropriately the risk profile of the insurer. Lloyd’s therefore expects that managing agents will be able to demonstrate that the risks incurred by their investment activity should be consistent with and properly reflected in their internal model.

The above should not limit managing agents in the other uses to which the internal model may be applied in the management of investment risk. These uses may for example include risk appetite
monitoring or strategic asset allocation decision making, but Lloyd’s does not consider them to be part of the minimum standard when applying the use test to the management of investment risk.
SECTION 2: OUTSOURCING

INV 2.1

Outsourcing

Where investment functions are delegated to third parties, managing agents shall maintain appropriate oversight and control.

Managing agents shall:

- ensure that outsourced investment arrangements are fully documented (i.e. an investment management agreement as a minimum) and regularly reviewed; and
- retain overall responsibility for the management of syndicate assets.

Where managing agents delegate investment management to a third party investment manager, it shall ensure that the appointment is subject to a written investment management agreement and that it regularly reviews the investment manager's performance and compliance with the agreed investment mandate.

Lloyd’s requires managing agents to be able to demonstrate that it has followed the managing agent’s own internal policies on outsourcing.

Notwithstanding any such delegation, managing agent retain overall responsibility for the management and investment of the syndicate assets.
SECTION 3: VALUATION AND REPORTING

INV 3.1

Valuation and reporting

Managing agents shall comply with the requirements of the Solvency II Framework Directive regarding valuation and reporting of assets.

Managing agents shall:
• ensure that all asset valuations and calculations of own funds comply with the Solvency II directive; and
• provide Lloyd's with asset disposition returns which are timely, accurate and complete.

Relevant articles to the calculation of own funds include Articles, 87 to 91, 93 to 96 and 98 among others.

Lloyd's asset disposition return requirements will continue to be published to the market by the usual market bulletins and are available on Lloyd’s.com.
MS9 - RESERVING

MINIMUM STANDARDS AND REQUIREMENTS

These are statements of business conduct required by Lloyd’s. The Minimum Standards are established under relevant Lloyd’s Byelaws relating to business conduct. All managing agents are required to meet the Minimum Standards. The Requirements represent the minimum level of performance required of any organisation within the Lloyd’s market to meet the Minimum Standards.

Within this document the standards and supporting requirements (the “must dos” to meet the standard) are set out in the blue box at the beginning of each section. The remainder of each section consists of guidance which explains the standards and requirements in more detail and gives examples of approaches that managing agents may adopt to meet them.

GUIDANCE

This guidance provides a more detailed explanation of the general level of performance expected. They are a starting point against which each managing agent can compare its current practices to assist in understanding relative levels of performance. This guidance is intended to provide reassurance to managing agents as to approaches which would certainly meet the Minimum Standards and comply with the Requirements. However, it is appreciated that there are other options which could deliver performance at or above the minimum level and it is fully acceptable for managing agents to adopt alternative procedures as long as they can demonstrate the Requirements to meet the Minimum Standards.

DEFINITIONS

AFR - Actuarial Function Report
GQD - Gross Quarterly Data
MI - Management Information
MRC - Market Reserving and Capital team at Lloyd's
NEDs - Non-Executive Directors
ORSA - Own Risk and Solvency Assessment.
QMC - Quarterly Monitoring Return Part C
SAFs - Syndicate Actuarial Functions
SAO - Statement of Actuarial Opinion
TAS - Technical Actuarial Standards
The Board - Where reference is made to the board in the standards, agents should read this as board or appropriately authorised committee. In line with this, each agent should consider the matters reserved for the board under the Governance Standard in order to evidence appropriate full board discussion and challenge on these subjects.
TPD - Technical Provisions Data
SECTION 1: BOARD RESPONSIBILITY

RS 1.1

Board Responsibility

The board of the managing agent shall be responsible for setting reserves.

The Board of the managing agent shall:
- be responsible for setting reserves for both Financial Accounting and Solvency;
- provide objective challenge to the recommendations made by the reserving function; and
- ensure there are consistency and links between reserving, pricing, capital modelling and financial reporting.

Reserving is the responsibility of the managing agent’s board. In many managing agents, there is a reserving committee that brings together the appropriate experts and makes a recommendation for the board to consider. Lloyd’s supports the use of such a structure when the managing agent believes it works best, but the existence of an expert reserving committee does not remove the onus on the board to give due consideration to the reserve decisions and to be ultimately responsible for the result. The board should allocate sufficient time to consider reserves themselves, and must provide an objective challenge to the proposals brought to them. Lloyd’s may require copies of board packs and minutes to review the discussions that were held, and will look to the board as the ultimate authority for questions on reserves. As well as asking for board minutes, Lloyd’s may request access to independent non-executive directors (NEDs).

Lloyd’s would expect the audit committee and internal audit to review the reserving process periodically and may ask for copies of their reviews, to know what information they were given, and possibly for access to them.

The board’s responsibility for setting reserves extends to those reserves set for unexpired risks – which under Solvency II may be less than the unearned premiums. Boards should be aware of relevant actuarial standards.

The reserving process must be consistent with the treatment of reserve risk in the capital model. The duty to demonstrate consistency between the setting and modelling of reserves lies with the risk management function but the reserving function should contribute to that process. It should also be ensured that there are links between the reserving and pricing functions and consistency with financial reporting.
# SECTION 2: STATEMENT OF ACTUARIAL OPINION

## RS 2.1

### Statement of Actuarial Opinion

Managing agents shall ensure that a Statement of Actuarial Opinion (SAO) is obtained.

*Managing agents shall ensure that:*

- the SAO complies with Lloyd’s Valuation of Liabilities rules;
- an SAO is provided annually in respect of each open year of a syndicate;
- the SAO results are considered by the Board; and
- there is an appropriate relationship between reserve margins signed off in the SAO and those reported to Lloyd’s in the QMC.

Currently Lloyd’s requires a Statement of Actuarial Opinion (SAO) to be provided by a suitably qualified actuary in respect of each open year of every syndicate. This includes holding a relevant practising certificate issued by the actuarial profession. The latest criteria including qualifications for practising certificate actuaries are described on the actuarial profession’s website and include requirements that the actuary is qualified in the UK (or holds an equivalent qualification) and has recent experience in relevant areas. SAO actuaries may be employed by the agent or be external consultants.

The SAO must comply with the Valuation of Liabilities Rules issued by Lloyd’s. The SAO system is under review with the introduction of Solvency II, and any changes will be flagged in good time.

Lloyd’s reviews each SAO report, including having regard for relevant actuarial standards, and provides feedback to the provider of the report. Lloyd’s will also use the SAO reports to validate reserve margins reported by managing agents in the QMC. Managing agents should ensure that margins reported in the QMC are not larger than those signed off in the SAO. Lloyd’s will question syndicates where the QMC margin is larger than that in the SAO and capital loadings will be applied if suitable explanation is not provided.

Managing agents and signing actuaries (or their firms) should consider the merits of rotation of the SAO actuary periodically, and document the rationale if the same individual provider continues to sign the SAO for more than four consecutive years.
SECTION 3: ACTUARIAL FUNCTION

RS 3.1
Actuarial Function

Managing agents shall ensure that an Actuarial Function is in place.

Managing agents shall ensure, in respect of coordination of the calculation of technical provisions, the Actuarial Function carries out the duties required to meet all Solvency II tests and standards. In particular:

- ensuring the use of appropriate methods and assumptions;
- ensuring the accuracy, completeness and appropriateness of data for use;
- undertaking an analysis of actual versus expected experience as well as other appropriate validations; and
- producing a report at least annually to the board (‘The Actuarial Function Report’) documenting all tasks undertaken, identifying deficiencies and making recommendations to remedy these deficiencies.

Under Solvency II there is a requirement for all firms to have an ‘Actuarial Function’ in place. As Lloyd’s ensures managing agents operate at Solvency II equivalent standards, these requirements extend to agents in their management of syndicates.

Managing agents will have in place Syndicate Actuarial Functions (SAFs). The function should consist of individuals suitably knowledgeable and experienced to conduct the role. They may be provided by resource internal or external to the managing agent but should be familiar with the managing agent’s business and the risks it faces.

Lloyd’s has set out its requirements and expectations for SAFs; the latest position is provided on the Lloyd’s website.

In addition to the above requirements of SAFs in respect of technical provisions, SAFs are also expected to produce opinions on the underwriting policy and adequacy of reinsurance arrangements in respect of their managed syndicates as well as setting out, in their report, how they have contributed to the risk management system, with particular regard to the ORSA and internal model. These additional requirements should be captured in the annual reporting of SAFs but need not be at the same time as the technical provision reporting. For example, SAFs may wish to provide their opinion on the underwriting policy during the business planning process for the coming underwriting year.

To fulfil its market oversight duties, Lloyd’s will collect all SAF board reports for review annually.
SECTION 4: BOARD INFORMATION

RS 4.1

Board Information

Managing agents shall ensure that sufficient information is supplied to the Board on reserves.

Managing agents shall ensure that information provided to the Board:
• is accurate;
• is sufficient for challenge to be made;
• is accompanied by analysis from the reserving function;
• includes escalation of relevant information provided by Lloyd’s; and
• includes discussion of key issues, uncertainties and market conditions.

In order for the board to reach their own conclusions on reserves and provide the necessary objective challenge they should be provided with appropriate management information (MI). The MI should be sufficient and sufficiently accurate to support these important decisions.

The MI should cover the syndicate’s own experience and also information on market conditions. Relatively high risk areas should be covered in more detail. Examples of high risk include: large accounts, lines of business with greater inherent uncertainty, new lines, accounts with higher claims than usual or than expected, lines where there has been a deterioration since the previous reserve analysis and lines with special reinsurance characteristics such as a risk of exhaustion. This list is not exhaustive.

The information on market conditions is important because reserves set at times of weak market conditions for underwriting have historically been seen to be more prone to deterioration than those set at stronger points in the cycle. The board should be aware of this cycle feature and its deliberations should include the impact of the cycle where this is relevant.

The MI should be accompanied by analysis from the reserving function – whether actuaries or not – and this report should be fit for purpose. The analysis should include emerging experience and movements in the period on reserves previously set.

MI should consider claims and reserves gross and net of reinsurance, with detailed analysis relating to outward reinsurance where it is a material issue.

Claims information, including for example narrative regarding large claims and information on material actual or potential reinsurance disputes, is a normal component of reserving MI.

If an external actuary has recommended reserves, for example through the SAO process at year end, the board should consider the external actuary’s analysis and the external actuary should normally present this in person. A good practice is for non-executive directors to meet the external actuary without the executive board members in attendance.

Lloyd’s may ask for MI, but will endeavour to restrict this to material that has already been prepared. The board should be aware of any benchmark or similar feedback information relevant to reserving provided to the syndicate by Lloyd’s and the board is responsible for responding to concerns raised by Lloyd’s.

Lloyd’s oversight of reserves includes regular reviews and analyses such as the reserve benchmarking exercise. Lloyd’s will actively engage with syndicates in the market and will provide
regular communications on reserving topics. Information provided by Lloyd’s should be escalated to the board where relevant.

Lloyd’s feedback includes:

- annual reserve benchmarking packs;
- requirements such as contained in the Lloyd’s Valuation of Liabilities Rules;
- specific and market wide feedback and commentary; and
- feedback to SAO and AFR providers.

Lloyd’s may comment on the quality and completeness of information provided to boards where appropriate.

Lloyd’s also provides several overseas regulators with information on the reserving requirements associated with situs funds, and will communicate with agents about their exposures in territories for which funds are required.

Lloyd’s will also look to agents to help keep information up to date on reserving themes that agents are much closer to, and where possible, will feed back on wider or thematic reserving issues.

Engagement with Lloyd’s should not be seen as prima facie evidence of perceived reserving issues as it is a normal part of Lloyd’s reserve oversight and should be expected.
SECTION 5: RESERVING PROCEDURE

RS 5.1
Reserving Procedure
Managing agents shall ensure they have a robust reserving procedure.

The managing agent shall ensure that:

- those conducting the reserving analysis have appropriate skills and knowledge; and
- internal audit periodically review reserving processes including validation of methods and results.

Whether the formal SAO work is done internally or by an external actuarial firm, the managing agent should have their own technical reserving team. This does not have to be staffed by actuaries, but typically it will be and the team must have appropriate skills. The reserving team should produce recommendations on reserves supported by argument and analysis, and these should be compared against other views, for example from claims and underwriting staff. In some cases, the reserving team may review or produce a parallel run to the reserves produced by others, such as underwriters, with both feeding into the decision making process.

There is no prescribed or required structure for the validation of the reserves. The board must take its own view having considered the various views, including the process for validation of the reserves. It is expected that the reserving process, methods and results will be subject to a periodic review from the managing agent’s internal audit function.

Managing agents should be clear on the roles and responsibilities. Terms of reference for each function involved in the reserving process would be expected.

Usually, several methods for estimating liabilities will be considered and the final choices must be justified clearly with reasons and limitations set out. The methods used by the technical reserving team should be properly validated especially when they depart from the methods normally used, and the results too should be carefully analysed for reasonableness. In particular, Lloyd’s attaches considerable weight to analyses of emerging experience against the expectation contained in previous analyses. Where experience is worse than predicted, the reasons need to be identified and understood and if it is material or part of a trend there is a strong prima facie argument that reserves should be strengthened. Lloyd’s is likely to ask to see analyses of emerging experience as a first step in any more detailed review.

The technical reserving team will be expected to know the relevant Lloyd’s and other regulatory requirements, and in particular should pay careful attention to market bulletins and the Lloyd’s Valuation of Liabilities rules, issued annually. Lloyd’s will engage directly with the reserving team and will take the head of that team to be the first point of contact on reserving matters. Lloyd’s will provide feedback to the team, and benchmarking information will be supplied.

In view of the importance of syndicate technical reserving teams to Lloyd’s oversight of the market’s reserve strength, Lloyd’s would expect any prospective change in the leadership of the team to be flagged to Lloyd’s as early as possible. Lloyd’s would normally expect to meet a new head of reserving or chief actuary when they were appointed for an informal introduction and may require the opportunity to review such senior appointments before they are confirmed.

Where Lloyd’s perceives that a syndicate may have an inadequate reserving process or practice then Lloyd’s may impose some requirements on the syndicate such as explicit capital loads or more stringent reporting.
The reserves are set by the board of the managing agent. If Lloyd’s believes there is an unduly high risk that these reserves will prove inadequate, Lloyd’s will engage closely with the agent.

Initially when there are concerns, Lloyd’s will ask to meet the main protagonists at the agent – the chief actuary or head of reserving, and if necessary the finance director or chief executive. As noted this will involve review of internal MI and documentation to help assess the position, and Lloyd’s may require specific extra analyses although will endeavour not to do this; good internal MI should be sufficient for our purposes. It is expected that staff and materials will be made available in a timely manner and access granted to external advisers where appropriate.

If the issue is not immediately resolved, then usually a quarterly meeting will be set up to dovetail with the quarterly reserving cycle. Each quarter’s reserves are important: the half year reserves form the basis of the solvency position used in coming into line in November and for interim results; the third quarter reserves are often a springboard for the year end; the year end is the primary solvency analysis; and the first quarter reserves give an early indication of how a year has progressed. When engaging quarterly, Lloyd’s will wish to understand and potentially influence the thinking of the head of reserving in good time, often before the quarter’s reserves are finalised.

Lloyd’s will Endeavour to resolve all issues, but exceptionally may require an agent to have an (additional) external review carried out.

Lloyd’s will identify syndicates of concern through benchmarking, observation of trends, the exposure of syndicates to thematic issues, for example by line of business, or by perceived issues in syndicate processes such as those indicated by inability to supply adequate and accurate data. A “very prudent” reserve with a poor process would still be a concern.

Concerns about reserving will be fed into the capital review process, and may lead to Lloyd’s making adjustments to solvency reserves or to loss ratios assumed in the capital model, or to explicit loadings in capital required.

Ultimately Lloyd’s can require a loading to be applied to the solvency reserves of the syndicate. However this option would not be exercised until all avenues had been explored.
SECTION 6: DOCUMENTATION

RS 6.1

Documentation

Managing agents shall have an appropriately documented reserving process.

Managing agents shall ensure that the documentation of the reserving process is completed in accordance with the Technical Actuarial Standards.

The documentation should enable boards and any reviewers to assess the reserves. It should contain an analysis and an estimate of reserve uncertainty, and explanations of the methods used especially where these are non-standard. The judgements should be identifiable and should be justified.

There must be appropriate disclosure to auditors and SAO-signing actuaries and the documentation should show what has been disclosed and how. Lloyd’s may ask to see this.

Actuaries will have to meet the various requirements of the actuarial standards, and it is also expected that non-actuaries providing reserving advice to the board would adhere to equivalent standards. Lloyd’s will have regard to relevant actuarial standards as part of the review process.

A syndicate SAO actuary must provide a formal actuarial report in support of the SAO. Lloyd’s will review these reports and feed back to the providers and may ask for internal documents for review as well.

Under Solvency II, actuarial functions must provide a formal report to the board and Lloyd’s review these reports in a similar fashion.
RS 7.1
Data
The managing agent shall ensure that reserving data submissions to Lloyd’s are appropriate.

The managing agent shall ensure that the reserving data is:
- reported through the Technical Provisions Data (TPD) and Gross Quarterly Data (GQD) in accordance with current instructions;
- reconciles to the syndicate accounts (where required); and
- is reported at the required level of granularity.

A proper reserving analysis requires a range of data inputs, and these must be of good quality and appropriate for the task. Any data issues or changes to processes which may impact reserving, such as claims handling, should be brought to the attention of the board. Data management is often a separate responsibility and it is expected good practice that there is a clearly identified owner of the data used. The technical reserving team should have a strong input into what is collected and how it is stored, and should review the data carefully before relying on it.

The grouping of data should be suitable to the portfolio, taking account of the requirements of homogeneity and credibility of data. As a minimum, the reserves must be able to be stated in the categories required by Lloyd’s by class and currency. The Technical Provisions Data (TPD) annual return is of great importance to Lloyd’s and must reconcile with both the audited annual returns and the reserve analyses. The Gross Quarterly Data (GQD) is used by Lloyd’s for interim monitoring and data provided must comply with current instructions. Lloyd’s will examine submissions carefully, challenging any apparent inconsistencies.

There should be a clear reconciliation, which Lloyd’s may ask to see, between the reserves on all the bases used by the agent – these are likely to include at least solvency, business planning and financial accounting bases.

Under Solvency II the actuarial function will be required to assess data for completeness, accuracy and appropriateness.
LLOYD’S MINIMUM STANDARDS
MS10 - REGULATORY STANDARDS
JULY 2014
MS10 - REGULATORY STANDARDS

MINIMUM STANDARDS AND REQUIREMENTS

Lloyd’s expects that managing agents will operate in compliance with all applicable UK and international laws and regulations and do business according to accepted ethical standards, thereby supporting Lloyd’s globally recognised brand and reputation, and meeting the increasing expectation of UK and international regulatory regimes to be able to evidence compliant and ethical conduct. Managing agents should demonstrate that they can meet these expectations and have systems and controls to ensure that they:

- Conduct all discussions with regulators in an open and transparent manner, recognising the need for Lloyd’s to coordinate such relationships;
- Do business in accordance with Lloyd’s UK and international licensing permissions and with due regard to applicable laws and regulations;
- Have due regard to business conduct standards and embedding principles of integrity and fairness in all dealings with customers;
- Gather accurate data on the firm’s business and make accurate and timely submissions;
- Comply with applicable financial crime, anti-money laundering, sanctions and trade embargo regimes.

Within this document the standards and supporting requirements (the “must dos” to meet the standard) are set out in the blue box at the beginning of each section. The remainder of each section consists of guidance which explains the standards and requirements in more detail and gives examples of approaches that managing agents may adopt to meet them.

GUIDANCE

This guidance provides a more detailed explanation of the general level of performance expected. They are a starting point against which each managing agent can compare its current practices to assist in understanding relative levels of performance. This guidance is intended to provide reassurance to managing agents as to approaches which would certainly meet the Minimum Standards and comply with the Requirements. However, it is appreciated that there are other options which could deliver performance at or above the minimum level and it is fully acceptable for managing agents to adopt alternative procedures as long as they can demonstrate the Requirements to meet the Minimum Standards.

DEFINITIONS

- **Risk Locator Tool** - will help Lloyd’s market participants establish the correct ‘location(s) of risk’. Risk locations determine the territories whose laws, regulations and tax rules apply to an insurance contract.

- **Lloyd’s ‘Crystal’ database** - Crystal provides Lloyd’s market participants with quick and easy access to international regulatory and taxation requirements.

- **The Board** - Where reference is made to the board in the standards, agents should read this as board or appropriately authorised committee. In line with this, each agent should consider the matters reserved for the board under the Governance Standard in order to evidence appropriate full board discussion and challenge on these subjects.
SECTION 1: RELATIONSHIP WITH REGULATORS

REG 1.1

Relationship with regulators

Managing agents shall conduct all discussions with regulators in an open and transparent manner, recognising the need for Lloyd's to coordinate such relationships.

Managing agents shall:

- have an open and transparent relationship with UK and international regulators;
- consult Lloyd’s before engaging with international regulators and advise Lloyd’s promptly of significant and/or non-routine interactions with the PRA or FCA;
- recognise the importance of resolving regulatory inquiries and the need to support Lloyd’s in its management of those; and
- inform Lloyd’s promptly of any issue of which Lloyd’s would reasonably expect notice, including issues which may generate complaints, receive regulatory or significant press attention or concern the misuse or potential misuse of Lloyd’s name or brand.

Regulatory interaction

The maintenance of Lloyd’s licensing capability worldwide rests on the confidence of UK and international regulators that the Market is able to trade in a compliant manner. This requires significant relationship building by Lloyd’s to assure regulators that its unique structure strengthens rather than diminishes that compliant behaviour. Part of this is ensuring that communication with regulators is conducted in a consistent way and with reference to the context of other discussions that may have taken place. In this, the cooperation of managing agents is crucial.

In instances where managing agents are contacted by an international regulator or if managing agents are aware of an issue of which Lloyd’s or an international regulator would reasonably expect notice, they should promptly contact the Lloyd’s International Trading Advice team for further information on the appropriate contact point at Lloyd’s.

Lloyd’s acknowledges that managing agents will have interactions with the PRA and FCA routinely and does not expect to be advised of such interactions as a matter of course. However, Lloyd’s does expect the Standard to apply to significant and/or non-routine interaction with the PRA or FCA. Lloyd’s expects managing agents to consult in advance with Lloyd’s if the need to engage with international regulators arises. This is important in supporting Lloyd’s management of its international licences and trading rights. Where a managing agent is meeting an international regulator with regard to their company operation and the discussion moves on to the Lloyd’s entity, the managing agent should promptly advise Lloyd’s retrospectively of the discussion.
**SECTION 2: LICENSING AND MARKET ACCESS**

**REG 2.1**

Licensing and Market Access

Managing agents shall conduct business in accordance with Lloyd’s UK and international licensing permissions and with due regard to applicable laws and regulations.

*Managing Agents shall:*

- set clear underwriting guidance as to what business can be written compliantly under Lloyd’s licences, making reference to the Risk Locator and Crystal compliance tools;
- demonstrate appropriate levels of knowledge about Lloyd’s licences and those areas where restrictions or exceptional processes apply; and
- establish clear escalation procedures and criteria, for use in cases where underwriting decisions require further scrutiny pre-bind or where a potential breach is identified once a risk is bound;

**Building compliance expertise**

Lloyd’s takes very seriously the need to protect the market’s licence platform by ensuring business is undertaken in a compliant manner. Managing agents bear responsibility for ensuring that all employees, representatives or agents have a clear understanding of compliance requirements, encouraging use of the Lloyd’s compliance tools, Risk Locator and Crystal, and other compliance information resources. Using these resources, all those carrying on insurance business should do so equipped with appropriate levels of knowledge of compliance requirements. Further support is available using Crystal Assist, which demonstrates how to use the Crystal system.

**Compliance procedures**

Managing agents should adopt clear procedures for identifying and escalating cases where more detailed compliance scrutiny is required before a risk is bound. These should include clear criteria for heightened scrutiny including, but not limited to, the following factors:

- The sensitivity of the business class involved, (for example, income protection insurance);
- The expertise or vulnerability of the customer;
- The regulatory environment of the country concerned;
- The distribution mechanism for the product (for example, a master policy);
- The compliance capability of any party to whom underwriting authority is delegated; and
- The managing agent’s own risk appetite and expertise.

Equally, escalation procedures should be established for cases where a potential breach of compliance requirements is identified. The understanding and use of both procedures by employees should be validated.

*[See also Lloyd’s Minimum Standards on Conduct Risk]*
SECTION 3: INFORMATION AND REPORTING

REG 3.1

Information and Reporting

Managing agents shall gather accurate data on the firm’s business and make accurate and timely submissions.

Managing agents shall:

- be transparent in their dealings with stakeholders, supplying necessary information about their business, and be responsive to deadlines and communications about prudential and regulatory information;
- have appropriate systems, processes and controls to ensure that complete, accurate and timely information is available to meet Lloyd’s prudential and regulatory obligations, including those operated by others on its behalf; and
- meet all Lloyd’s prudential funding and asset requirements.

Lloyd’s has international prudential obligations imposed by the relevant regulatory authority in most overseas territories where Lloyd’s is licensed, and in some territories where Lloyd’s does not hold a licence.

Stakeholder interaction

Managing agents should inform Lloyd’s immediately if there is or may be an issue impacting the completeness, accuracy or timeliness of Lloyd’s reporting.

Where managing agents are approached directly by regulators or other relevant bodies or wish to initiate direct communication regarding data, reporting or funding issues, Lloyd’s expects that this will be discussed and agreed with Lloyd’s first.

Systems, processes and controls

Systems, processes and controls should be commensurate with the risk, adequately understood by all appropriate staff, robust, reviewed regularly and provide managing agents with the ability to answer targeted questions concerning information and reporting adequately.

Managing agents are expected to note and adhere to all appropriate guidance, generally available via Market Bulletins and the Crystal business tool of global trading information.

Managing agents should ensure that, where relevant, copies of reports submitted directly to regulators or other relevant bodies are forwarded to the relevant Lloyd’s office according to the timetable specified.

Relevant sources of information and guidance available to managing agents concerning prudential and regulatory obligations should be shared and utilised internally.

Managing agents should give consideration to reflecting the responsibilities of staff for any controlled functions required in respect of funding and reporting requirements in appropriate role profiles.
Prudential funding and asset requirements

Managing agents should have regard to the following:

- Assets must be admissible in compliance with local requirements as well as UK requirements; and
- Managing agents must ensure compliance with all terms of the relevant trust deeds.

Funds must be available to meet funding requirements when such funding requirements fall due.
SECTION 4: FINANCIAL CRIME

REG 4.1

Financial Crime

Managing agents shall comply with all applicable financial crime legislation, including that related to anti-money laundering, anti-bribery and corruption, and international sanctions.

Managing agents shall:

- have systems and controls in place to identify and manage effectively all financial crime risks in compliance with legislation concerning international sanctions, anti-money laundering, anti-bribery and corruption, paying due regard to Lloyd’s guidance;
- deal with Lloyd’s and law enforcement agencies in an open, responsive and cooperative way, supporting the resolution of financial crime concerns and issues; and
- commit to defending the Lloyd’s brand against the misuse of Lloyd’s name or misrepresented coverage, including by its agents, clients or other parties involved in the arranging of (re)insurances.

Lloyd’s has zero appetite for a financial crime breach and expects managing agents to give due consideration to policyholders and Lloyd’s reputation and brand when managing financial crime risks. For the purposes of this guidance, a financial crime risk or breach should be regarded as including anti-money laundering, anti-bribery and corruption, and international sanctions legislation.

Systems and controls

The management of financial crime risk requires, as with any risk, the identification and assessment of the risk and the implementation of appropriate systems and controls to mitigate that risk. In recognition that Lloyd’s has no appetite for any breach of any financial crime legislation, managing agents should be able to evidence a risk framework which routinely assesses and documents the effectiveness of its systems and controls to reduce the financial crime risks they face and which are reasonable to counter the risk that they may be used to further financial crime.

The anti-financial crime control governance framework and systems and controls should be supported and endorsed by each managing agent’s board, reflecting appropriate ‘tone from the top’. Anti-financial crime is an integral part of any managing agent’s control framework. Managing agents should review Governance standard [GOV 3.7] which explains matters that require full board involvement including the control framework. Lloyd’s expects managing agents to be able to demonstrate how the full board has been involved in its anti-financial crime management.

Managing agents are expected to review and implement as appropriate Lloyd’s guidance as and when it is issued.

Notification

Managing agents are expected to notify Lloyd’s immediately of any suspected or actual incidents of financial crime (excluding claims fraud activity which is not required to be notified to Lloyd’s, unless money laundering or bribery and corruption suspicions are also present).
Brand and reputation

Managing agents are responsible for ensuring that the application of this financial crime standard applies to any entities acting with delegated authority on their behalf. If any incidents of misuse or misrepresentation by those acting on behalf of managing agents, or their policyholders, are identified, managing agents are expected to take robust steps to correct any misuse or misrepresentation of any coverage they have provided to Lloyd’s satisfaction.
APPENDIX – LINKS

- Crystal
  http://www.lloyds.com/the-market/tools-and-resources/tools-e-services/crystal

- Market Bulletins
  http://www.lloyds.com/the-market/communications/market-bulletin-search
LLOYD’S MINIMUM STANDARDS
MS12 - OPERATING AT LLOYD’S

JULY 2014
MINIMUM STANDARDS AND REQUIREMENTS

These are statements of business conduct required by Lloyd’s. The Minimum Standards are established under relevant Lloyd’s Byelaws relating to business conduct. All managing agents are required to meet the Minimum Standards. The Requirements represent the minimum level of performance required of any organisation within the Lloyd’s market to meet the Minimum Standards.

Within this document the standards and supporting requirements (the “must dos” to meet the standard) are set out in the blue box at the beginning of each section. The remainder of each section consists of guidance which explains the standards and requirements in more detail and gives examples of approaches that managing agents may adopt to meet them.

GUIDANCE

Whilst a guidance document has been established for this set of standards, Lloyd’s considers that no further guidance is required to support the majority of the minimum standards or requirements for operating at Lloyd’s which are considered self-explanatory.

DEFINITIONS

CMR - Core Market Returns

HMRC - Her Majesty's Revenue and Customs

I.T. – Information technology

IPT – Insurance Premium Tax

KPIs - Key Performance Indicators

PAYE – Pay as you earn

The Board - Where reference is made to the board in the standards, agents should read this as board or appropriately authorised committee. In line with this, each agent should consider the matters reserved for the board under the Governance Standard in order to evidence appropriate full board discussion and challenge on these subjects.
SECTION 1: OPERATIONS & IT

OP 1.1
IT Security and Infrastructure

Managing agents shall have appropriate IT systems and resilience for the management of the agency.

Managing agents shall:
• have appropriate IT infrastructure to manage the business;
• have appropriate technology to meet the business process and link with counterparty systems;
• have appropriate IT techniques in place to reduce the risk of cyber-attack;
• have appropriate controls to ensure data meets the requirements of the Data Protection Act 1998;
• be able to use the data held on their systems to populate both Lloyd's and PRA required returns; and
• give appropriate consideration to the necessary hardware and software to ensure the IT structure remains appropriate for the business.

No specific guidance has been written for these standards and requirements which are self-explanatory.

OP 1.2
Operational processes

Managing agents shall have appropriate operational processes for effective management of the business.

Managing agents shall:
• ensure that all key operational processes are properly documented;
• ensure all staff understand the operational and business processes relevant to their role;
• operational targets and KPIs are set, reviewed and acted upon as necessary;
• adequate records are kept; and
• ensure that the board give adequate attention to the operational and business processes.

No specific guidance has been written for these standards and requirements which are self-explanatory.
SECTION 2: FINANCE

OP 2.1
Finance operations

Managing agents shall have appropriate finance resource for the management of the business.

Managing agents shall:
- ensure appropriate, skilled staff are available for the operation of the finance function;
- complete the Lloyd's financial returns through CMR as and when required;
- have appropriate credit control and management procedures in place for the collection of premium; and
- ensure all appropriate HMRC returns are correct and accounted for including IPT and PAYE.

No specific guidance has been written for these standards and requirements which are self-explanatory.

SECTION 3: HUMAN RESOURCES

OP 3.1
Training

Managing agents shall ensure they have appropriate resource to support the Managing Agency.

Managing agents shall ensure that:
- staffing levels are appropriate to the size and complexity of the business;
- all staff understand their roles and responsibilities and are appropriately appraised; and
- staff understand the regulatory requirements that apply to their role.

No specific guidance has been written for these standards and requirements which are self-explanatory.
SECTION 4: REPORTING

OP 4.1
Reporting

Managing agents shall complete all returns required to Lloyd's and the PRA.

Managing agents shall:
• complete all return as identified in the Lloyd's business timetable and ad hoc returns when requested;
• complete returns via CMR in accordance with the instructions posted where applicable;
• arrange for appropriate sign off whether internal or external; and
• understand the penalties imposed for late submission.

No specific guidance has been written for these standards and requirements which are self-explanatory.

SECTION 5: BRAND, ETHICS & REPUTATION

OP 5.1
Brand, Ethics & Reputation

The managing agent has effective arrangements to act ethically and protect Lloyd's reputation and brand.

Managing agents shall demonstrate that:
• the board and senior leaders establish the ethical culture of their organisation.
• they (and their agents) use Lloyd's name and brand in accordance with the relevant guidelines and requirements issued by Lloyd's;
• they inform Lloyd's in good time of material issues of which it would reasonably expect notice. Including:
  i. material issues relating to the managing agent or to the syndicates it manages that may generate complaints or receive regulatory or significant press attention; and
  ii. issues relating to the misuse or potential misuse of Lloyd's name or brand.

An ethics based culture should be promoted through an ethics programme which works to embed ethical values in to business behaviours, strategy, decision making, processes and operations, as well as manage the risk of ethical misconduct.

Lloyd's considers that the following would form a good basis to meet these requirements:

• A clear statement of ethical values and an ethics policy and/or code of ethics which create the expectation of just and fair behaviour by both businesses and people that work for them. They also create the framework by which those expectations are met.
Managing agencies should have mechanisms in place to support high ethical standards such as a **process for raising concern and reporting misconduct**.

An **ethics programme** might also consist of training and communications activities, including ethical criteria in recruitment and performance appraisal process and detailed policies such as Discrimination, Bribery and Corruption, Gifts and Hospitality and Conflicts of Interest.

Serious consideration should be given to how ethical values apply to all of a managing agent’s activities.

Managing agents should evidence these values in the conduct of their activities and establish a process by which their validity is reviewed.

Information and resources are available from the Institute of Business Ethics:

[www.ibe.org.uk](http://www.ibe.org.uk)