

2024 LCR instructions

Instructions for submission of the 2024 YOA Lloyd's Capital Return and supporting documentation

July 2023

Contents

1	Purpose	5
2	Submission requirements and deadlines	5
2.1	Overview	5
2.2	Lloyd's capital guidance	6
2.3	Focus areas	6
2.4	Foreign exchange	7
2.5	Analysis of change	8
2.6	LCR resubmissions	8
2.7	LCR form changes	9
3	Lloyd's review process	10
	Capital review	10
	Reserve review	12
	Capital loads	12
3.4	Principles for doing business at Lloyd's	15
4	Lloyd's model tests	16
	Capital model tests	16
	Reserving model tests	19
4.3	Exposure Management model tests	20
5	Focus areas	22
5.1	9	22
5.2		24
5.3		24
	Geopolitical risk	25
	Macroeconomic factors	27
5.6	Other focus areas for the 2024 YoA	28
6	Appendix 1: Definition of metrics for Fast Track	30
7	Appendix 2: Definition of claims inflation	31

Abbreviation	Description
AEP	Aggregate exceedance probability
AORG	Actuarial Oversight Review Group
ASR	Annual solvency return
CPG	Capital Planning Group
CRA	Catastrophe risk appetite
ESG	Economic scenario generator
ECA	Economic capital assessment
FNL	Final net loss
FX	Foreign exchange
IMO	PRA internal model output return
KPI	Key performance indicators
LCM	Lloyd's catastrophe model
LSM	Lloyd's standard model
MCQ	Model completeness questionnaire
MDC	Market data collection
MIH	Making it happen
MRC	Market reserving and capital
Principle(s)	Principles for Doing Business at Lloyd's
QCT	Quarterly Corridor Test
QSR	Quarterly Solvency Return
RDS	Realistic disaster scenario
RI	Reinsurance
RICB	Reinsurance contract boundaries adjustment
RITC	Reinsurance to close
SAO	Statement of actuarial opinion
SBF	Syndicate Business Forecast
SCR	Solvency Capital Requirement

SIAB	Syndicate in a box
SST	Sum of squares test
TPs	Technical provisions
ULR	Ultimate loss ratio
WWAP	Worldwide all perils
YOA	Year of account

1 Purpose

This document provides instructions for the submission of the 2024 Lloyd's Capital Return (LCR) and any supporting documents required. It also provides information in respect of the structure and timing of Lloyd's review and any specific focus areas for Lloyd's in 2023.

These instructions should be considered in conjunction with the <u>Lloyd's Capital Guidance</u> and the Capital Principle (<u>Principle 7</u>) under Principles for Doing Business at Lloyd's (Principles), which sets out the fundamental expectations of syndicates related to internal modelling, with differentiated expectations for syndicates based on their expected maturity. This guidance should also be considered in conjunction with Lloyd's <u>Validation</u> and <u>Model Change</u> guidance.

2 Submission requirements and deadlines

2.1 Overview

The LCR captures quantitative information that, alongside the qualitative validation and documentation, allows managing agents to demonstrate that they have systems enabling them to identify, measure, manage and report risk and calculate Solvency Capital Requirements (SCRs).

A full submission is required for all syndicates with a business plan or any open year of account at the time of submission, including those in run-off or underwriting Reinsurance to Close (RITC) business only. The exception are syndicates who do not have an approved internal model. This group of syndicates, which mainly comprises of Syndicate in a Box (SIAB) syndicates and new entrants to the market going through the Making it happen (MIH) process, will set capital using the Lloyd's Standard Model (LSM) (see the Requirements for New Entrants). Syndicates planning to close all years of account at the balance sheet date and cease existence do not need to submit an LCR, as long as the receiving syndicate includes any ceded business in its LCR submission (see Section 5.8 of the Lloyd's Capital Guidance). This also holds for syndicates ceding certain years of account or classes – more details are contained in the 2024 Legacy Reinsurance Instructions.

The phased approach for business plan and capital submissions will continue for 2024. Each syndicate has been given a specified return submission date based on its capital structure and Lloyd's risk-based approach. Syndicates will follow one of four submission phases, which has been confirmed by the Account Managers. Non-aligned syndicates will submit their plan and capital information in the first two phases. Further details can be found in Market Bulletin Y5400.

The table below provides the requirements for each element of capital reporting. Deadlines are 1pm on the day each item is due. Please note that resubmissions of documents may be required if syndicates do not adhere to the naming conventions. For data protection and security Lloyd's uses SecureShare and Market Data Collection (MDC). Where possible syndicate data submissions are downloaded automatically and so manual intervention is required if our naming conventions are not followed. Uploads to SecureShare should go into the Syndicate Capital Setting folder. The "free text" part of the name can be used as syndicates wish.

Item	Description	Submission	Deadline	Naming convention
LCR	Quantitative capital return	All forms complete on MDC	Phased submission LCR deadline	N/A
Methodology document	Qualitative document supporting the LCR submission	Attachment in MDC	Phased submission LCR deadline	Methodology2024_0000_free text (0000 representing the syndicate number)
Analysis of change	Document supporting the LCR submission	Attachment in MDC	Phased submission LCR deadline	AoC2024_0000_free text (0000 representing the syndicate number)

Item	Description	Submission	Deadline	Naming convention
Focus areas	Spreadsheet return on Lloyds.com	Attachment in MDC	Phased submission LCR deadline	FocusAreas2024_0000_free text (0000 representing the syndicate number)
Model change template	Spreadsheet return on Lloyds.com	Upload to SecureShare	Phased submission LCR deadline	MCT2024_0000_free text (0000 representing the syndicate number)
Validation	Documentation providing model validation	Upload to SecureShare	One week after LCR deadline, except for phases 2 and 3 which is the same as the LCR deadline	ValidationReport2024_0000_ free text (0000 representing the syndicate number)
New SBF no LCR template	Spreadsheet return on Lloyds.com	Upload to SecureShare	Two working days after an SBF resubmission, if applicable (see Section 2.62.6)	NewSBFnoLCR_0000 (0000 representing the syndicate number)

In certain circumstances, syndicates should fill in the sum of squares template (available on <u>Lloyds.com</u>), and submit this with their LCR submission as an attachment in MDC. Further details can be found in Section 4.1. Please note that the template for negative contributions for market risk has been removed and replaced by focus area data collection this year.

As per our requirements last year, syndicates only need to provide a validation signposting template if they are specifically requested to provide one. These are expected to only be for a handful of syndicates where Lloyd's may complete a review of the validation report and process in December and they will be contacted at least four weeks prior to the requested submission deadline (and in all cases we will aim to give more notice).

Information on the documents/returns above can be found in Sections 5.2 and 5.9 of the <u>Lloyd's Capital Guidance</u>. The September/October return should be submitted on the basis of the expected business outcome at 1st January 2024. More information about the basis of reporting of the LCR return can also be found in Section 4.2 of the <u>Lloyd's Capital Guidance</u>.

The final SCR submitted to Lloyd's must be approved by the Board or an appropriately authorised committee depending on the syndicate's governance arrangements, and in line with the Governance, Risk Management and Reporting Principle (Principle 11). Board members should ensure they are aware of all issues raised during the review process and recognise that following Lloyd's review of the SCR loadings might be applied.

2.2 Lloyd's capital guidance

The <u>Lloyd's Capital Guidance</u> for 2024 year of account (YOA) (issued in January 2023), alongside these instructions, are the requirements in force for the 2024 LCR submissions.

2.3 Focus areas

Lloyd's will continue to use the focus areas return to provide advance notice to managing agents of specific areas of review focus. Lloyd's has published the focus area return in the Templates and Scoring Sheets section of the Internal Model SCR page on Lloyds.com.

Syndicates will need to download an excel version of their submitted LCR and link this to their focus areas return, as several of the questions in the focus areas return rely on latest figures in the LCR. Agents will be able to do this using the "data – edit links" functionality in excel to ensure that the correct reporting figures in the LCR are pulled through into the focus areas return.

The 2024 YOA focus areas return requests responses across several areas, including:

Focus area	Focus area template tab	Which syndicates need to complete this	LCR instructions reference
Geopolitical risk	Geopolitical	All syndicates	Section 5.4
Macroeconomic risk	Macroeconomic	All syndicates	Section 5.5
Inflation	Macroeconomic, Q4	All syndicates	Section 5.5
Market risk	Market risk	Only syndicates that breach our requirements for the negative market risk template: 1. Syndicates that have any negative contribution from market risk to the SCR on an ultimate basis; and / or 2. Syndicates that have a negative contribution on a one-year basis where the contribution is larger (on an absolute basis) than the benefit from discounting in the TPs. Syndicates that do not breach these requirements are not required to complete this tab.	Section 5.3
LCR back-test, feedback and loadings	General queries, Q1 – Q3	All syndicates	Section 5.6
LIM data request	General queries, Q4 – Q5	All syndicates are required to complete Q4 Q5 is optional, however syndicates with non-aligned members are highly encouraged to complete the information	Section 5.6

2.4 Foreign exchange

The LCR must be reported in converted sterling. Submissions made prior to year-end must use the published prior 30 June rates, set out in Market Bulletin <u>Y5402</u>. Submissions made post year-end must use the 31 December rates. As part of the capital setting process the final agreed SCRs will be converted to the latest quarter rates for the quarterly corridor tests and June 2024 Coming into Line (CIL). This means that the SCR that agents submit in September and their approved SCR in the Capital Planning Group (CPG) letter might be different due to the foreign exchange (FX) conversion. The Quarterly Corridor Test (QCT) process is described in Section 5.5 of the <u>Lloyd's Capital Guidance</u>.

The managing agent may prepare its underlying model in any currency and present figures in the methodology document in US dollars where that is the dominant currency of exposure. All figures in the LCR submission must be reported in converted sterling.

The syndicate should make clear what currency and units are used in its reporting at any point. The analysis of change (AOC) must include at least an executive summary covering key movements from the previous submission in pound sterling. This should include at least headline figures of high-level risk category figures that reconcile to figures reported in LCR form 309, plus any other key material metrics appropriate for that submission, such as the impact of FX conversion on model changes reported in the model change template (MCT).

2.5 Analysis of change

The analysis of change (LCR form 600) remains unchanged this year from the version in the 2023 YOA LCR. Syndicates should ensure that their AOC documentation explains the movement in these figures. Lloyd's expects syndicates to provide commentary on how the model represents the risk profile, with reference to recent experience and any emerging features of the risk profile. Movements will not be accepted by virtue of being the consequence of input updates or simulation error and must be analysed in full to ensure they are clearly understood for both one-year and ultimate capital. Further detail can be found in Section 16 of the Lloyd's Capital Guidance.

As previously mentioned, a requirement for the analysis of change is to include a description of movements by risk category in £GBP, at an executive summary level as a minimum. Some syndicates model and complete this document on a \$USD basis. A high-level £GBP summary will allow Lloyd's to unpick FX impacts and reduces the scope for follow-up with syndicates.

Further, when Lloyd's reviews the AOC compared to movements in the MCT and between LCRs in £GBP, it can be difficult to bridge between the two due to the impact of changes in currency exchange rates over the year. For example the impact of an MCT change could be different in terms of magnitude or direction compared to what is reported in \$USD in the AOC. Syndicates must check the consistency of information reported in the AOC compared to the £GBP information reported in Lloyd's returns.

2.6 LCR resubmissions

If a Syndicate Business Forecast (SBF) resubmission is required during the review process, the managing agent must assess the capital impact of this change. A resubmission of the LCR return may be required depending on impact, as set out in Section 5.3 of the <u>Lloyd's Capital Guidance:</u>

- Downwards capital movement:
 - Less than 10%: not required, the managing agent has the option to resubmit an LCR return. Lloyd's will not adjust capital downwards without a full resubmission.
 - Greater than 10%: Resubmission required.
- Upwards capital movement:
 - Less than 5%: No update required.
 - 5-10%: Managing agents can resubmit, or a high-level adjustment can be applied by Lloyd's instead.
 - Greater than 10%: Resubmission required.

Lloyd's may restrict LCR resubmissions if the timing of it does not allow us to complete our review within the required timeframe for CPG. This may mean we ask agents to delay an LCR resubmission until after CPG and up until January 2024.

In some special cases syndicates will be required to submit additional information following an SBF resubmission. Lloyd's review of the additional information may lead to an LCR resubmission. This is outlined in more detail in the next section.

Additional information request for SBF resubmissions with a plan loss ratio increase

There may be cases where syndicates resubmit an SBF with a material change in plan loss ratios that do not trigger an LCR resubmission. For the 2024 YOA Lloyd's requires these syndicates to provide additional quantitative information from the capital model. This is to manage the risk of plan resubmissions, combined with waived loads, leading to market level capital becoming understated.

Lloyd's definition of material in this case is where the total net net loss ratio (net of acquisition costs and net of reinsurance) has increased by at least 1% (in absolute terms).

The additional information should be provided within two working days of the SBF resubmission in the "New SBF but no LCR" template via SecureShare. The template can be found on the Lloyd's website in the <u>internal model</u> SCR section, under templates and scoring sheets. The following information will be collected:

- The impact of the change on uSCR and one-year SCR
- Updated plan and modelled loss ratios for the 2024 YOA, which take into account the increase in plan loss ratio in the resubmitted SBF:
 - These should be stated at an overall syndicate level and on a net of reinsurance, net of acquisition
 costs basis i.e. on the same basis as is reported in the total row in LCR form 561, table 1, columns
 F and G.
- If the plan loss ratio has increased above the modelled loss ratio, syndicates are expected to explain and justify this, with reference to Lloyd's requirement that the model loss ratio must be at least as high as the plan loss ratio
- If there is a decrease in self-uplift since the 2023 YOA submission of more than 1%pt, syndicates must provide rationale for this and explain why the modelled loss ratio remains appropriate.

Based on Lloyd's review of information in the template, there may be cases where Lloyd's will apply a capital adjustment. This is where the impact of the SBF resubmission on capital plus any waived loads exceeds 5% of capital. Lloyd's will contact these syndicates to let them know if they are affected by this shortly after the template has been submitted to and reviewed by Lloyd's. We note that the capital adjustment applied by Lloyd's would be a temporary adjustment only, given the short timeframes in the CPG window. However the affected syndicates will also be required to complete a full LCR resubmission on MDC to match the new SBF by 1 November 2023. The purpose of this is to provide an up-to-date start point for analyses of change in future capital reviews.

The LCR resubmission should be such that the new uSCR and one-year SCR numbers are consistent with the SCR reported to Lloyd's in the "New SBF but no LCR" template. It should reflect data as at Q2 wherever relevant. For example, the Q2 position should be reported for the RICB, this will later be updated in the standard QCT process.

2.7 LCR form changes

There have been no significant changes made to the LCR form this year. Minor changes which have been made are documented in the 2024 YOA LCR specification, which can be found on <u>Lloyd's.com</u>, in the internal model SCR section, under guidance.

3 Lloyd's review process

3.1 Capital review

The first step of the capital review process after LCR submission is to triage syndicates into review categories. Syndicates will either enter the "capital Fast Track" route with a light review or be subject to a more detailed review. All review levels will consider:

- Model test results mentioned in Section 4.1; and
- Responses to previous loadings and feedback in particular for syndicates not 'meeting expectations' for the Capital Principle
- Focus area template responses.

Fast Tracked reviews focus on high-level movements in risk type and risk vs exposure metrics. In general, requests for further information from the Fast Tracked syndicates will be limited.

The more detailed reviews for non-Fast Tracked syndicates will focus on understanding the full scale of movements in capital, as well as risk-to-exposure metrics across all risk types and classes. The likelihood of requests for further information is higher for these reviews.

Outperforming syndicates

Outperforming syndicates will typically be fast-tracked, even if they marginally breach the Fast Track risk-to-exposure metrics (see below). This is a change from last year, meaning fast track will be extended to a greater number of syndicates than before. However Lloyd's will remove any outperforming syndicate from Fast Track if we identify reasons to perform a more detailed review of its capital submission.

All other syndicates

For all other syndicates, these will be considered for a Fast Track review if the following criteria are met:

- **Principle dimension rating**: The Principle dimension rating is 'Meeting Expectations' or 'Marginally Below Expectations'.
- **Key risk-to-exposure metrics**: The risk-to-exposure metrics move within the tolerances set out by Lloyd's. The metrics to be used for the 2024 YOA remain unchanged from last year and are outlined later in this section.

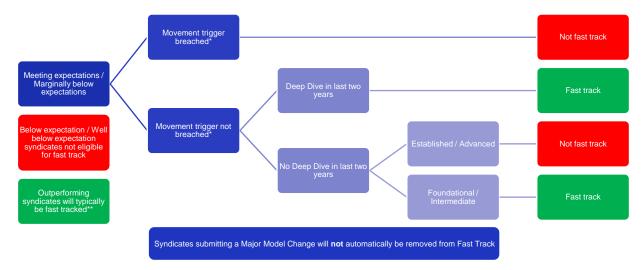
If the criteria above are satisfied, a syndicate will be eligible for Fast Track. To be accepted on to Fast Track, Lloyd's considers two further factors which are the depth of recent reviews and the expected maturity for the Capital Principle:

- If the syndicate has been subject to a Deep Dive or an Internal Model Approval Process (IMAP) review (to transition from LSM to an internal model for setting capital) in the last two years, the syndicate enters Fast Track, regardless of materiality; or
- If the syndicate has not been subject to a Deep Dive or IMAP review in the last two years, the syndicate enters Fast Track if the expected maturity is Foundational or Intermediate. Syndicates with higher maturities (i.e. larger ultimate SCRs (uSCR)) in this bucket will not enter Fast Track.

In previous years a Major Model Change (MMC) submission would usually result in a syndicate being removed from Fast Track. This will not be the case this year, as in some cases MMC submissions will also be Fast Tracked.

The Fast Tracking of an MMC will depend on factors such as the syndicate's Expected Maturity and Capital Principle dimension rating; nature and complexity of the MMC; and when Lloyd's last did a detailed review of the syndicate's internal model. If a syndicate's LCR qualifies for Fast Track review but its MMC does not, Lloyd's may defer review of the MMC to after CPG. In this case the syndicate's LCR will receive a light review in September and the MMC will be reviewed in detail later.

The process is represented by the following flow diagram:



^{*} Movement triggers for key risk-to-exposure ratios are noted in the table below

The process is intended to make it clear to syndicates how Fast Track status is determined. However Lloyd's will consider other relevant information (for example from other oversight teams) and apply judgement when determining the final status. This may result in qualitative overrides being applied to the status mechanically implied by the flow diagram. This could be to take a syndicate off Fast Track status due to a potential oversight issue but equally to put a syndicate on to Fast Track status when it doesn't meet all of the required criteria. In general, Lloyd's aims to minimise the use of overrides to the standard process. The dimension rating used by Lloyd's to calculate Fast Track status will be based on the expected maturity calculated from the 2024 YOA uSCR. For further information about this refer to Section 3.4.

Risk-to-exposure metrics

Market Reserving and Capital (MRC) will carry out an initial assessment of movements in key risk-to-exposure metrics since the most recent LCR submission (which could be a MMC, Deep Dive, IMAP submission or the last LCR review) to determine whether these exceed certain pre-defined thresholds.

The principles used in determining the most appropriate metrics are:

- The stress amount (i.e. 99.5th percentile less mean) is the most appropriate risk measure to represent change in view of risk.
- Measures involving claims (rather than premium) are most appropriate to measure change in view of underlying risk.

Risk-to-exposure metrics are laid out below. Exact definitions from items on LCRs are contained in Appendix 1.

#	Metric	Eligibility requirement for Fast Track
S 1	uSCR stress to exposure measure	This ratio must not reduce by more than 10%
S2	Ultimate premium risk stress to exposure measure	This ratio must not reduce by more than 20%
S 3	Ultimate reserve risk stress to exposure measure	This ratio must not reduce by more than 20%
S4	One-year SCR stress to uSCR stress	This ratio must not reduce by more than 20%

^{**} In order for a syndicate to have an overall rating of 'outperforming' the dimensions for all Principles for Doing Business at Lloyd's need to be rated as meeting expectations - syndicates can confirm their overall rating with their Lloyd's account manager

For Fast Track status, the key risk-to-exposure metrics will be reviewed with the initial LCR submission and with any subsequent LCR submissions (for example triggered by a SBF resubmission). If a syndicate qualified for Fast Track with the initial LCR submission, but the subsequent LCR resubmission led to the key metrics changing materially, the syndicate may be removed from Fast Track review. The exact circumstances of the LCR resubmission will be considered by Lloyd's when determining whether a syndicate remains on Fast Track, but the starting position in this case is that the syndicate no longer qualifies for Fast Track.

Initial completeness checks

After the Fast Track triaging process, Lloyd's will carry out initial completeness checks to highlight to the managing agent early on if the submission does not meet Lloyd's requirements. The result of the initial completeness checks will be communicated within 10 working days of the LCR submission. It will cover:

- Any missing documents from the submission against the list above in Section 2.1.
- Data inconsistencies between returns, for example the consistency of risk margin and Reinsurance Contract Boundaries (RICB) between LCR and Quarterly Solvency Return (QSR), as well as the consistency of premium, claims and profit between LCR and SBF.
- · Agents will be informed if their submission will be Fast Tracked
- The scheduled timing for the Actuarial Oversight Review Group (AORG), which would be the point at which
 indicative loads, if there are any, would be communicated to the agent
 - Due to complexity of the scheduling and compressed timeframe to complete reviews ahead of CPG sign-off, AORG timings may change following the initial completeness checks. We don't expect this to happen in many cases and if it does the relevant Lloyd's reviewers or capital points of contact will notify affected agents.

3.2 Reserve review

The following components of the reserving assumptions are reviewed, with further detail provided in Section 4.2:

- Model loss ratio assumptions
- Model opening reserves (balance sheet projection)
- Best estimate reserves
- Earned margin and unearned profit tests.

3.3 Capital loads

If Lloyd's review identifies a limitation in the modelling approach, analysis and/or documentation that introduces an uncertainty associated with the level of projected capital, Lloyd's will apply a loading to address this uncertainty until it can be fully resolved by the agent. Loadings may be applied in response to particular uncertainties, concerns around governance and processes and/or in response to Solvency II compliance issues.

Solvency II loads

Where Lloyd's has identified weaknesses in syndicate models that may have an impact on a syndicate's Solvency II compliance, a Solvency II load will be considered. A key consideration will be the extent to which the syndicate's modelling approach may result in potential under capitalisation that would need to be rectified by the application of a load. A Solvency II load will usually be set at 20% of uSCR, however a smaller load may be considered depending on the extent of the model weakness(es) identified.

Control loads

Control loadings were introduced for the first time in 2021 with the 2022 LCR submissions as Lloyd's moved towards a principles-based approach. The controls load process continues to apply in Lloyd's oversight framework. Controls loadings are applied as an intervention for concerns about the governance and controls that are in place at a syndicate. These are applied by CPG for issues identified in one or more of the Principles, by one or more of Lloyd's oversight teams where an issue or aggregation of issues is considered to be material, but falling short of a failure to comply with Solvency II requirements.

As the loading is not in place to address a specific modelling issue, it is calculated as a percentage of uSCR, with the percentage to be determined by CPG based on the severity of the issue(s) identified. It is expected that the starting point for any controls loading will be 10% of uSCR.

Other loads

Other capital loads can be raised where Lloyd's is unable to get comfortable with an uncertainty in a submission. A common reason for capital loads to be raised is a lack of justification or explanation for material model changes or capital movements since the previous submission. The size of the load will vary and depend on the specifics of the Lloyd's concern. The calculation methodology will be outlined to syndicates via the loads communication process.

Communication of loadings

All loading proposals applied by Actuarial Oversight follow the process outlined below, except where loads are below a minimum materiality threshold, as outlined in the waived loads section.

The reviewer might ask clarifying questions throughout the review process, however these will be kept to a minimum due to the short turnaround time for CPG. Results of the review will be presented to and discussed at an AORG, which is a technical review group in place to challenge review outcomes. Any proposed loadings will be sent to the capital/reserving team at the syndicate, if there are any, following the AORG. Account managers will communicate these to the executive of the syndicate.

Loadings are indicative in nature and are designed to address uncertainty surrounding the capital numbers if certain areas of the submission are not well enough explained or cannot be satisfactorily understood. Lloyd's will communicate potential measures that could address the reasons for the loadings and the timescales required so that responses can be reviewed again by AORG ahead of final recommendations being presented to CPG. When communicating loads to syndicates, Lloyd's will outline the following:

- · The amount of the loading to the ultimate and one-year SCRs
- The area of the model or model test to which the loadings are applied
- A description of the loading and how it has been derived, unless it is a formulaic loading from a model test
- · A timeframe to respond to the load so that it can be reviewed by Lloyd's in time for CPG sign-off.

Lloyd's aims to give syndicates five working days to respond to indicative loads.

If upon Lloyd's review capital loads are applied, this will be communicated to syndicates after CPG and the loading information will be included in capital feedback letters. This will include the reasons for the load; what Lloyd's expects to be considered in order to address the load; and required timeframes. Feedback letters will be sent to syndicates by the end of November 2023 at the latest. The letters will include any changes to the status of the Principle ratings for Principles 6 and 7 as a result of Lloyd's review.

Waived loadings

In line with Lloyd's principles-based approach, a minimum threshold will be applied to the aggregate capital loading for a syndicate. Total loadings below the minimum threshold will be waived. The minimum threshold is set at 5% of the syndicate's submitted ultimate SCR as a default. This is subject to review on a case-by-case basis.

Some loadings are exempt from this minimum threshold, i.e. they will always be applied. These non-waived loads are:

- Catastrophe Risk Appetite (CRA) loadings applied by Exposure Management. These are covered in Section
 4 3
- Thematic loads. Presently, this includes:
 - Non-modelled natural catastrophe / model completeness loadings. These are covered in Section 4.3; and
 - Q1 2024 reserving model loss ratio loadings (retrospective loadings) that may be applied for performance below plan over 2023.

Waived loadings will be communicated to the syndicate as part of capital feedback after the CPG process. The feedback will include detail about the areas where loads were waived.

Agents are required to continually monitor their capital requirements throughout the year and notify Lloyd's when SCR moves by more than 10% compared to the previous submission; the calculation of movement in capital should include waived loadings for syndicates with a uSCR over £250m.

Waived loadings will be taken into account in March when LCR reassessments are due. Large syndicates (with uSCR over £250m) will be contacted if their waived loadings and SCR movement (submitted in the March reassessment template) in aggregate is close to or exceeds 10%. The syndicate will be asked to either provide information that addresses the waived loading or to resubmit their LCR in March. This is restricted to large syndicates only and enables Lloyd's to manage the risk of significant market movements in capital. Waived TP roll-forward loads will not be taken into account in March, as these will become irrelevant following year-end reassessment of balance sheets.

Where further information has not been requested for waived loadings, Lloyd's expects that agents will address Lloyd's feedback on waived loadings with the next LCR submission, either through model adjustments or by providing further information that addresses the reasons for the loading.

Here are three examples of how the minimum threshold works in practice:

- Example 1: For a syndicate with uSCR over £250m, a load which is 3% of uSCR is identified. No other
 loads are identified by Lloyd's. Lloyd's chooses to waive the load and no loads are communicated to the
 syndicate during the CPG review period.
 - The syndicate is notified of the waived load after CPG approval in the capital feedback letter. The syndicate may provide further information to Actuarial Oversight ahead of the March reassessment to address the area of concern, if the adjusted uSCR increases by more than 7%. If information is considered sufficient to address the area of concern, the loading will be removed and the capital feedback letter will be reissued. If the syndicate does not provide further information and the March reassessment template shows an adjusted uSCR movement of more than +7%, the syndicate will be requested to submit a new LCR in March.
- **Example 2**: Actuarial Oversight identify a potential load to uSCR, and Outwards Reinsurance (ORI) identify an additional potential load to uSCR. The total of the two loads is greater than the 5% threshold, and therefore the loadings are both applied and are communicated to the syndicate in accordance with the communication of loads process outlined earlier in this section.
- Example 3: Actuarial Oversight identify a potential model loss ratio assumptions load to uSCR which is below the minimum threshold. The syndicate is also subject to a CRA load. As the Actuarial Oversight load is below the minimum threshold, Actuarial Oversight will waive the load but the CRA load is still applied, as CRA loads are not additive with other loadings. The same considerations as per Example 1 now apply.

Syndicates who do not address waived loadings by the required submission period and do not provide reasonable justification for not doing so are at risk of receiving a controls load from CPG

Co-ordination with other teams

The capital review process involves a number of different teams in Lloyd's. The overall review is conducted by the Actuarial Oversight team with input from other teams such as Treasury, Exposure Management, Syndicate Planning and Outwards Reinsurance.

Loadings regarding the CRA, model completeness and other catastrophe risk related tests are proposed by the Exposure Management team. Questions regarding these loadings should be directed to your Exposure Management point of contact. Account Managers can provide additional information on the process.

The Exposure Management review process involves reviewing the LCR/Economic Capital Assessment (ECA) along with the SBF and Lloyd's Catastrophe Model (LCM) forecast returns. The LCM forecast returns include simulations for the following year's catastrophe losses, a sensitivity test to calculate the impact on SCR of an increase in catastrophe risk and a bridging analysis of the catastrophe losses provided to Exposure Management and those recorded in LCR form 313. Further details on these returns will be released in July. The Exposure Management team will also take into account the outcome of their review of syndicates' model completeness questionnaires.

3.4 Principles for Doing Business at Lloyd's

The Syndicate Capital team will assess the maturity of each syndicate's Capital Principle under the principles for doing business at Lloyd's in each and every capital review. Syndicates that are on the Fast Track are, by definition, syndicates that are rated as either meeting expectations or marginally below expectations. As outlined in Section 3.1, the level of our review for syndicates on Fast Track is limited, and thus it is unlikely that these ratings will be changed. Syndicates who are not on Fast Track will receive a more detailed review, and therefore as a result the assessed maturity may be changed (in either direction).

Our assessment will consider every aspect of the review, for example timeliness of the submission, quality of the submitted materials (e.g. focus area and analysis of change documentation), responses to prior feedback, quality of validation testing applied to material model areas and issues leading to capital loadings and new material feedback. This is not an exhaustive list of factors that Lloyd's considers when determining Principle ratings.

Treatment of Principle rating changes

In some cases the expected maturity rating for a syndicate will change following a submission, as it is a function of the size of uSCR. For example, for a syndicate with uSCR of £450m, growth in the reserves and business plan volumes could increase uSCR to £550m, which changes the expected maturity from Established to Advanced. Lloyd's will consider the expected maturity when this happens on a case by case basis. For example, in some exceptional cases if a syndicate only just crosses over a threshold for a new expected maturity, Lloyd's may override the standard process and keep the syndicate in its original expected maturity bucket. In these exceptional cases there would need to be a strong rationale for not following the standard procedure. In all other cases the syndicate will henceforth have a new expected maturity.

Following CPG review, the most up-to-date Lloyd's expected and assessed maturities will be communicated to syndicates in the capital feedback letters. This may indicate that a syndicate's dimension rating changes to not meeting expectations, due to a change in one or both of the expected and assessed maturities. Syndicates not meeting expectations following CPG review should liaise with their Lloyd's point of contact after receiving their feedback letter to discuss a plan to address the change in dimension rating.

15

4 Lloyd's model tests

Lloyd's will run a number of model tests which flag areas to question with the syndicate. If any of the tests are failed, Lloyd's expects to see robust justification to support the model output. Loadings will be applied if the justification is deemed insufficient. Please note that passing the model test does not necessarily mean that Lloyd's has no further questions on the area in question, as these only constitute a baseline for the model outputs. Some tests are relatively simple and automated while others like the model loss ratio tests have been agreed upon with the market in advance of the submissions.

4.1 Capital model tests

As noted in Section 2.3, these tests will be flagged in the 2024 focus areas return. Justification for failed model tests must be provided together with the focus areas return. Syndicates will not receive a further opportunity to address any loadings associated with failed model tests.

Insurance risk - modelled class volatility

The ratio of losses to mean premium should be greater than 100% for the standalone premium risk for each modelled class of business at the 99.5th percentile, i.e. each class should make a loss at a 1 in 200 return period relative to the expected premium.

This test checks that the 99.5th net claim percentile for premium risk including catastrophes is greater than the net premium, for each modelled class. These correspond to LCR form 502 Q1 Col I and LCR form 502 Q1 Col A. The ratio is also automatically calculated in LCR form 503 Q1 99.5th ultimate loss ratio (ULR) including catastrophes, and it must be greater than 100%.

Diversification - within premium risk

The contribution to the 99.5th percentile of premium risk from each modelled class should be greater than the mean for the class. This test is designed to ensure that a minimum level of correlation is applied between all classes for premium risk.

This test checks that the 99.5th post diversified claims for premium risk including catastrophes is greater than the mean net claims for each modelled class. These correspond to LCR form 502 Q1 Col I(i) and LCR form 502 Q1 Col B. The ratio is also automatically calculated in LCR form 503 Q2 Post diversified claims, and it must be greater than 100%.

Managing agents should note that while the model test is applied to premium risk including catastrophes (LCR forms 502 and 503), the same minimum criteria apply for the Premium risk excluding catastrophes (LCR forms 500 and 501).

Of course, this test does not directly check the level of correlations applied. Lloyd's might use other information (e.g. the output correlations between classes supplied in the PRA Internal Model Output (IMO) returns) to check correlation levels. Syndicates should be prepared to provide the minimum modelled level of correlation between classes and years (output and input) to Lloyd's on request.

Diversification - within reserve risk

Contributions from reserve risk by modelled class of business to the 99.5th percentile of reserve risk should be greater than the mean for the class. This test is designed to ensure that a minimum level of correlation is applied between all classes for reserve risk.

This test checks that the 99.5th post diversified claims for reserve risk is greater than the mean net claims for each modelled class. These correspond to LCR form 510 Q1 Col F(i) and LCR form 510 Q1 Col A. The ratio is also automatically calculated in LCR form 511 Q1 post diversified claims, and it must be greater than 100%.

Of course, this test does not directly check the level of correlations applied. Lloyd's might use other information (e.g. the output correlations between classes supplied in the IMO returns) to check correlation levels. Syndicates should be prepared to provide the minimum modelled level of correlation between classes and years (output and input) to Lloyd's on request.

Impact of reinsurance

The level of reinsurance credit risk modelled should be considered in the context of the materiality of reinsurance to the SCR. The relatively binary nature of reinsurance default means that this risk can appear low (especially on a one-year basis) and/or well diversified. It is expected that any limitations associated with modelling this risk (e.g. including exhaustion) are clearly understood and quantified and stress/scenario tests are used to validate the level of risk.

The test checks that the movement in the benefit from reinsurance reported in LCR form 530 Q2 Row 3 is consistent with the movement in contribution to capital from credit risk (LCR form 541 Q2, reinsurance credit risk) as a percentage of capital (LCR form 309, Table 1, B1).

Reinsurance credit risk - loss given default

Lloyd's expects managing agents to apply a loss given default of at least 50% at the 99.5th percentile. This is in line with the standard formula. However, when assigning the loss given default ratios, Lloyd's expects syndicates to also consider:

- Positive and negative risk features of the syndicate's reinsurers (e.g. financial strength rating, current aged debts or regulatory action)
- Positive and negative risk features of the syndicate's reinsurance contracts (e.g. contract clarity, current disagreements or disputes)
- The probability that loss given default ratios would increase under stressed scenarios, including with the scale of the unpaid recovery.

It should be noted that the loss given default probability should be applied to the unpaid recovery at the point of default. Collateral can be taken into account, but only if the collateral has not already been used as a positive risk offset when considering default/impairment probabilities. Syndicates must be able to justify the assumptions in this area, in particular when the 50% loss given default probability is lowered for some simulations, noting the lack of data in this area.

The model test applied by Lloyd's checks that the ratio of the 99.5th reinsurance (RI) credit risk loss on RI recovery (LCR form 530 Q1 F1) over the 99.5th RI recovery (gross) from defaulting counterparties (LCR form 530 Q1 F3) is equal to or greater than 50%. The ratio is also automatically calculated in LCR form 531 Q1 99.5th RI credit risk loss vs. RI recovery (gross) - defaulting counterparties.

Foreign exchange risk mean profit

Lloyd's will only allow a maximum profit of £1m on mean FX risk regardless of the contribution from market risk. This rule will apply to all syndicates, including those with positive market risk contributions to ultimate and one-year SCR.

This test will simply check that the FX risk ultimate mean (LCR form 314 Table 2 D5) is greater than -£1m. If the syndicate capital level is such that £1m is material to the result, agents should take appropriate action to minimise this profit.

Contributions to capital

Contributions to capital from all risk types should be positive (except for market risk under certain circumstances).

This test simply checks that post-diversified capital contributions from all risk types (LCR form 541 Q2) are positive. Market risk contributions will also be reviewed in more detail based on separate data collection in the focus areas.

Diversification: The sum of squares test

It is well understood that the level of dependencies included in syndicates' internal models is a material driver of capital, both on an ultimate and one-year basis.

There are many methods of introducing dependencies between classes of business and risk categories, e.g. copulas, common drivers, tail drivers. Lloyd's does not prescribe the use of any particular dependency structure.

However, Lloyd's does require consideration to be made of the potential for dependency effects to be greater within the tail of distributions than in the body. When considering the appropriateness of tail drivers, syndicates should take into account the impact of these tail drivers on capital, rather than relying solely on their presence in the modelling.

The unique and complex nature of many dependency structures means that it is often difficult to consistently assess from a bottom-up analysis whether any particular approach is appropriate. As a result, Lloyd's also examines the output of internal models to ensure that sufficient dependency has been introduced.

A working group of Lloyd's and market representatives concluded in 2019 that the sum of squares test is a useful high-level test to use, but further information can be considered alongside it if it indicates an issue with diversification.

There are five areas where the Sum of Squares Test (SST) is applied by Lloyd's:

- 1. Overall ultimate SCR: The modelled SCR 99.5th percentile must be greater than the SST SCR 99.5th percentile (both in LCR form 521 Q6).
- 2. Insurance risk including catastrophes: The modelled Insurance risk adjusted 99.5th percentile must be greater than the SST insurance risk adjusted 99.5th percentile (both in LCR form 521 Q5).
- Insurance risk excluding catastrophes: The modelled insurance risk excluding catastrophes adjusted 99.5th percentile must be greater than the SST insurance risk excluding catastrophes adjusted 99.5th percentile (both in LCR form 521 Q7).
- Premium risk excluding catastrophes: The modelled total net claims 99.5th percentile (LCR form 500 Q1 Col I total) must be greater than the SST total net claims 99.5th percentile (LCR form 501 Q3 99.5th net claim percentile total claims SST).
- Reserve risk: The modelled total net claims 99.5th percentile (LCR form 510 Q1 Col F total) must be greater than the SST total net claims 99.5th percentile (LCR form 511 Q2 99.5th net claim percentile total claims SST).

Where any test fails, agents are required to fill in the <u>Sum of Squares Test Template</u> and submit this with their LCR as an attachment in MDC. The template tests how risk categories are aggregated to insurance risk and overall capital. It collects information such as:

- The use of randomised simulations for premium, reserving and insurance risk in order to assess model output against "true" independence (also referred to as scrambled sims)
- Spearman's rank correlation of model output
- Using an alternative measure, the average percentile contribution, on both randomised and modelled sims to assess contributions to the tail.

Average percentile contribution examines premium/reserve risk contributions in the 99.5th percentile tail of insurance risk and expresses these as a percentile of the standalone premium/reserve risk distribution. Randomised simulations are required to provide a baseline to measure dependency.

This information will allow Lloyd's to assess dependency within internal models using different metrics against truly independent distributions. However, Lloyd's considers this level of dependency to be an absolute minimum rather than a test of adequacy.

The template includes instructions for completion in the "Information" tab.

Franchise Guidelines relevant to capital

For 2024 LCR submissions, Franchise Guidelines continue to be in place to restrict excessive risk that syndicates may pose to the central fund (i.e. beyond their 1 in 200 uSCR requirements). This was noted in Market Bulletin Y5375 in June 2022. These requirements apply to all syndicates, including SPAs. There is a guideline on the maximum net line size which will be monitored by Exposure Management, and the guideline on tail risk will be monitored by Actuarial Oversight. These two guidelines are:

The maximum net line size that a syndicate may have on an individual risk cannot exceed 30% of ECA plus
profit, where profit is defined as 'profit/loss for the period' on an ultimate basis in the approved year of
account SBF (Item 16 of SBF Form 100s).

- A restriction on the amount of tail risk that a syndicate can be exposed to. This operates as follows (depending on whether a syndicate has an internal model and submits an LCR to Lloyd's or not):
 - For syndicates with an internal model that submit an LCR, the 99.8th percentile (1-in-500) of the insurance claims shall not exceed 135% of the 99.5th percentile (1-in-200) of insurance claims. Both measures refer to the total modelled insurance claims net of reinsurance on an ultimate basis as reported to Lloyd's in LCR form 311.
 - For syndicates that do not have an internal model or submit an LCR, the 99.8th percentile of final net LCM WWAP losses shall not exceed 135% of the 99.5th percentile of final net LCM Worldwide All Perils (WWAP) losses and the 99.8th percentile of final net LCM WWAP claims shall not exceed ECA plus Profit.

The tail risk guideline for syndicates that do not use an internal model or submit an LCR will be monitored by Lloyd's Exposure Management.

As with other Franchise Guidelines, syndicates that do not meet these requirements will either be required to apply for a dispensation or make appropriate changes to remove the need for a dispensation request. These changes could include, for example, adding a management adjustment into their LCR submission, or adjusting their business plan to purchase tail risk RI cover and resubmitting their SBF/LCR. Any dispensation requests should be discussed with the Exposure Management/Syndicate Capital contacts before the submission.

A request to exceed Franchise Guidelines, i.e. a request for dispensation, may result in a capital loading if that request is not agreed by CPG.

4.2 Reserving model tests

Beyond information included in this section of the instructions, syndicates should consider the <u>reserving tests of uncertainty guidance</u> that was published on Lloyds.com in June 2023.

Model loss ratios

Prospective year modelled loss ratios

For the 2024 YOA LCR reviews, there continues to be an expectation that the prospective loss ratio for capital setting should not be below the SBF loss ratio. On a gross net (gross of reinsurance, net of acquisition cost) basis, this should apply by class of business and at syndicate level. On a net net basis, this should apply at the overall syndicate level. This is tested in the focus areas return, and agents are required to provide robust justification in any circumstance where this test is failed, or a capital loading will be applied.

Additionally, Lloyd's will query any syndicates where the total 'self-uplift' has decreased by more than 1% since the prior year. 'Self-uplift' is defined as the difference between the modelled and plan loss ratios reported in LCR form 561. A loading may be applied if justification is considered to be inadequate by Lloyd's. This will also be tested in the focus areas return.

Details on the timelines are provided in the "Reserving Tests of Uncertainty – 2024 Process" pack, which can be found on the <u>Lloyd's Reserving Guidance and Support Materials</u> page.

Retrospective capital loading

There will be a continued focus this year on the performance of the current underwriting year and the appropriateness of the capital as submitted. Where there is a material deviation of the actual experience as reported at year-end 2023 compared to the modelled loss ratio this will receive greater oversight from Lloyd's and may result in a retrospective adjustment to capital after CPG in September/October 2023. Further details of this process, in particular the specific timelines around the testing, for 2024 will be provided during Q4 2023 via the Actuarial Oversight quarterly update email communication, in line with previous years.

Model opening reserves

Lloyd's expects that managing agents will have robust processes in place for performing the roll-forward of their latest audited technical provisions data when obtaining the T0 balance sheet. In particular, managing agents are expected to consider the actual versus expected balance sheet positions and to correct their methodology where systematic under-/over-statement is identified, particularly where this is found to be material.

As part of the 2024 SCR, Lloyd's will be asking a subset of the market to fill in the roll-forward template for their syndicate for the last three roll-forward exercises. This will be based on a syndicate's historical ability to accurately project a Q4 balance sheet at Q2, over a 3-year period.

If methodology changes are being made to the roll-forward process, the managing agent is expected to clearly highlight the changes made within their modelling documentation submitted to Lloyd's. The managing agent is also expected to back-test (re-forecast) any changes in methodology against the last three years of historical QSR returns to evidence the process improvements being made. The "impact" column within the roll-forward template gives managing agents the opportunity to explain any gaps in historical actual versus expected analysis that they believe should be credited as part of the test. These will be reviewed on a case-by-case basis by the Syndicate Reserving team.

Any remaining under-statement that falls outside of the thresholds set for this test will be loaded to avoid understating the LCR. The percentage load is calculated using the average residual for the last three roll-forward exercises.

Syndicates are expected to provide the validation conducted on the opening balance sheet at an overall level as well as on the following component parts: reserves, future premiums and expenses. The objective in this case is to provide a summary of the analysis undertaken/testing performed to ensure appropriateness of opening balance sheet e.g. back-testing to ensure consideration is given to the actual versus expected opening balance sheet positions of historical years (or by component part). The validator should consider whether the approach used to roll-forward the balance sheet to the year-end is reasonable and where a change in approach has been taken consider the appropriateness of that change.

Best estimate reserve reviews

The best estimate reserving process of syndicates is reviewed by the Actuarial Oversight team throughout the year based on various metrics used by Lloyd's to monitor the market, including Lloyd's assessment of syndicates for the Reserving Principle. The best estimate reserving reviews are specific in nature, dependent on the specific deficiency that has been highlighted and needs resolution. Lloyd's will engage with the actuarial function at the syndicate for queries/meetings and provide timely feedback and raise any additional queries.

Syndicates in scope of a best estimate review ahead of year-end capital approval will be informed in July 2023. Any potential loads will be determined on a case-by-case basis. Where judged to be necessary, loadings will be recommended to CPG.

Earned margin and profit in unearned premium

For the 2024 process, Lloyd's will continue to only perform the earned margin and unearned profit tests for the March reassessed capital, based on the Q4 audited Annual Solvency Return (ASR). Details of these tests are provided below:

Earned margin: If the earned margin being claimed in the ASR submission is greater than that calculated by the signing actuary as part of the year-end Statement of Actuarial Opinion (SAO), the reserve risk within the LCR submission may be understated.

Profit from unearned premium: If the associated profit from unearned premium (as derived from the loss ratio on unearned premium) being claimed within the ASR submission is greater than that calculated by the signing actuary as part of the year-end SAO, the premium risk within the LCR submission may be understated.

If the above cannot be adequately explained for either the earned margin or profit from unearned premium, the ASR is expected to be re-submitted to correct for any shortfall. In such cases, consideration should also be given to any other adjustments required to the SCR, for example additional reserve risk related to a change in the earned margin.

Further guidance on this is available as part of the ASR submission and review process.

4.3 Exposure Management model tests

There are four principle types of Exposure Management-related capital loadings:

Catastrophe risk appetite

- Model completeness
- · Internal model sensitivity
- Franchise Guidelines.

Catastrophe risk appetite

The CRA is defined as the ratio of the LCM5 1:200 aggregate exceedance probability (AEP) final net loss (FNL) to ECA plus profit. Any *increase* in the LCM5 1:200 AEP FNL will need to be at a maximum ratio agreed by Lloyd's; where this is not met, Lloyd's Exposure Management will recommend a loading in order to achieve the required ratio.

Model completeness

In June 2023 Lloyd's Exposure Management issued an updated Model Completeness Questionnaire (MCQ), providing syndicates with the opportunity to update their responses to the MCQs from 2021 and 2022. This return will be evaluated by Exposure Management and any remaining material deficiencies in syndicates' LCM submissions may result in a capital loading in line with the guidance issued in 2021 and 2022.

Please note that syndicates are required to ensure that the addition of previously non-modelled risks is additive to capital, in line with the general principle that additional risk should add to capital.

Internal model sensitivity

Syndicates submit a sensitivity test to Lloyd's Exposure Management that assesses the impact of parameter error on the SCR. Any unusually high result will be reviewed in depth and the syndicate may attract a capital loading in extreme or unexplained cases.

Franchise Guidelines

Within SBF Form 452, syndicates provide projections for future Realistic Disaster Scenarios (RDSs). These are compared against ECA plus profit, and the result must fall within Franchise Guidelines (these are outlined in the guidance found here). A request to exceed Franchise Guidelines, i.e. a request for dispensation, may result in a capital loading if that request is not agreed by CPG.

21

5 Focus areas

Focus area data collection is used by Lloyd's to aid oversight of issues and uncertainties that have the potential to lead to issues with market-wide capitalisation.

5.1 Setting the scene

Recent years have shown that consequences of geopolitical conflicts and tensions are rarely self-contained. They can encroach on spheres of economics and politics in a way that can be significant and felt on a global scale through impact on trade, market volatility and social unrest. Emergence of new geopolitical conflicts or escalation of existing ones is likely to directly or causally impact businesses/insureds. Combined with other developments, such as knock-on impacts from a global pandemic and central bank responses to tackle economic stability, we find that macroeconomic uncertainty is potentially heightened when compared to the recent past.

Syndicates are required to ensure this heightened uncertainty and the drivers of it are appropriately captured in their internal models. Events of the past may no longer be a realistic barometer for how future events could play out. Syndicates are required to think beyond experience when parameterising and validating their model approaches.

The focus areas data collection is split into three areas to aid Lloyd's oversight of how syndicate modelling approaches are responding. These are:

- Market risk contribution to SCR
- · Geopolitical risk; and
- Macroeconomic risk.

Market risk contribution to SCR

In the market risk section of the focus areas, syndicates are required to demonstrate that market risk behaves as expected and does cater appropriately for volatility in the current economic environment. In general terms, if expected returns have increased we would expect standalone market risk volatility to increase as syndicates should be allowing for higher credit spreads and a higher probability that interest rates could drop compared to before.

In general additional risk should add additional capital to the SCR. However, in the case of market risk the contribution to capital might be negative (i.e. market risk reduces capital) in some limited circumstances for some risk profiles. This requires investment returns to outweigh the risks from liquidity, FX and credit issues.

Syndicates must consider and validate how the model should respond now in an environment where the expected inflation and interest rate levels have increased and how market risk should interact with other risks. In particular, syndicates must convey how they have considered insurance events leading to market volatility. There should not be an over-reliance on the past, where evidence of this may be limited. Stress and scenario testing should be deployed to ensure the models dependency structure is appropriate. Syndicates are also encouraged to interrogate simulations in the tail of the capital distribution and sense check that extreme insurance events do coincide with downside market risks (for example due to liquidating assets in unfavourable conditions or credit issues).

Geopolitical risk

Lloyd's recognises the significant challenge to develop potential scenarios and decide which return periods they should fall into, particularly as the geopolitical landscape has continued to evolve. This involves a high degree of subjectivity. As such, we expect syndicates to think carefully and holistically about how their models capture the risk of fall-out from existing and potential conflicts, including dependencies within and between risk categories. This should include consideration of impacts due to short-term volatility, for example due to sanctions and central bank attempts to grapple with inflation, as well as potential medium to long-term impacts as a result of political, economic and environmental instability.

Syndicates should consider this area more broadly than focus on existing conflicts. Geopolitical risk should cover issues which could happen, for example resulting from changes in political regimes underpinning major geographies.

As ever, this will require capital modelling teams to consult with other business teams that have the most insight into the risks the syndicate is exposed to (for example: underwriting teams who know the scope and terms of insurance coverage; and investment/ALM teams who understand the asset portfolio and its interaction with liabilities). Input from all areas of the business should be considered as part of model development, whether or not this results in model changes or aids validation and testing of the model. Areas where there are material or highly subjective judgements being applied should be visible at the Board level. Lloyd's expects that probability levels selected in the capital model and validation exercises should be aligned to the Board's view. If there is a difference in view this should be understood.

Some areas that we expect syndicates to consider, at a minimum, are highlighted below:

- · Which classes could be affected and how this could vary depending on the conflicted territories
- Conflicts may drive increased tail dependence between certain classes that are not parameterised to have this dependency
- There are a lot of unknown unknowns, which may need to be considered more broadly in the dependency, parameter error and ENID frameworks
- Class volatilities and model drivers may need to be adjusted if the likelihood of certain types of events has increased
- Event aggregation should be considered (for example pandemic, geopolitical conflict and natural disasters occurring at the same time)
- If only linking market risk with insurance risk on financial classes, this may not be appropriate, particularly as economic uncertainty right now is driven by the combination of factors which are not directly caused by financial markets (e.g. geopolitical uncertainty and supply chain disruption)
- Operational and transactional risks associated with retrieving funds from and providing insurance in affected areas.

Macroeconomic risk

In the macroeconomic risk section of the focus areas, Lloyd's expects syndicates to outline how the internal model has been adjusted for the most up-to-date view of risk, which means how the Economic Scenario Generator (ESG) is being used (in most cases) and how macroeconomic uncertainties are reflected in areas outside of market risk. This includes but is not limited to the following considerations:

- The likelihood of a recession may be different now to what has been previously parameterised
- A "financial" recession in 2008 may not be an appropriate data point for a recession induced by supply chain and geopolitical issues
- There may be an impact on casualty classes such as litigation and a slow-down in the time to settle cases
- Government and political intervention on policy may impact insurance liabilities in unexpected ways
- The risks associated with banking contagion, following several recent banking sector failures
- Appropriateness of the creditworthiness assumptions modelled for highly rated counterparties across the
 investment portfolio and reinsurers, for example are highly rated counterparties really as safe from downside
 risks as they have previously been perceived to be?
- Increased uncertainty in whether interest rates will go up or down and the risks associated with either movement
- The nature and impact of central bank responses will vary by geography and therefore could impact
 exposures differently
- Increased uncertainty in investment markets should result in higher asset return volatility
- ESG limitations should be understood and mitigated, for example,
 - Does the ESG appropriately capture volatility in how inflation and interest rates could move up and down in a "new" environment where the means are very different to what's been observed in recent years?

- Are mean reversion mechanics appropriate and understood?
- Interest rates and inflation have increased in tandem in the last year in the UK and US, does the ESG capture this relationship as an outcome?
- How well did the ESG capture the extent of risk-free interest rate rises observed in the last year?
- Does the model cater for insurance events impacting the expected investment strategy (for example resulting in the syndicate having to liquidate or top-up ring-fenced funds)
- Does the ESG capture relationships that are expected based on business expert views?

5.2 General comments

Throughout the focus area return, Lloyd's collects 'syndicate comments' and 'references to relevant documentation/validation'. In the comments section we are asking for clear explanations of syndicates' approaches and what has been considered, as well as justification for why this is reasonable for the syndicate risk profile. This includes articulating where no action has been taken or a result is not material due to specific model or risk profile features.

More detail to cover these points, as well as what has been performed for validation, should be signposted in the 'references to relevant documentation/validation'. Signposting should explicitly mention sections of the documents that are being referenced.

If syndicates are not sure about how to best complete certain areas of the return, representatives should attend Actuarial Oversight team drop-ins which will be held over July and August 2023 and / or liaise with the Lloyd's capital point of contact.

5.3 Market risk contribution

Syndicates that fall into one or both of these groups are required to complete the market risk focus area data collection. Other syndicates do not need to complete the data collection.

- 1. Syndicates that have any negative contribution from market risk to the SCR on an ultimate basis; and / or
- 2. Syndicates that have a negative contribution on a one-year basis where the contribution is larger (on an absolute basis) than the benefit from discounting in the technical provisions (TPs).

We note that these syndicates are the same that previously breached our requirements for the negative market risk template. These syndicates are no longer required to complete the negative market risk template – this has been removed from the Lloyd's website and has been superseded by information requested via the focus areas return.

Market risk breakdown and behaviour

Lloyd's expects syndicates to validate that the impact of the dependency structure is acting appropriately and produces a suitable market risk contribution to the capital requirement.

This validation should consider:

- What could drive downside insurance risk around the SCR setting level and how components of market risk might be expected to behave at this level;
- Scenarios on how assets might behave due to systemic drivers (such as inflation and geopolitical
 uncertainty) and how these drivers would be expected to impact insurance risk and other risk categories;
 and
- Appropriateness of the market risk contribution and how well it captures the impact of the above drivers simultaneously impacting market risk and insurance risk at the capital setting level.

With respect to negative market risk contributions, we often see that it is driven by material investment returns being generated in the capital setting window. We expect syndicates to consider that earlier depletion of assets or the need to realise assets in unfavourable conditions following large insurance losses could and should result in investment returns that are lower than expected, on average.

24

In the focus area assessment syndicates should clearly articulate the sources and drivers of negative contributions and explain them with reference to the expected behaviour of market risk in scenarios that drive the capital requirement. Lloyd's will not accept results that are purely a function of how the ESG is being implemented without a robust justification that references the expected behaviour. Syndicates should comment on implicit and explicit sources of dependency between market risk and other risk categories that influence the level of contribution to SCR.

The market risk breakdown question is used as a quantitative basis for the market risk contribution data collection. The mean, pre-diversified and downside risk figures should be consistent with data provided in LCR Form 314, table 2. The post-diversified figures should be diversified to total SCR (as opposed to total market risk).

5.4 Geopolitical risk

Stress and scenario testing

Syndicates are required to carry out stress and scenario testing in order to strengthen understanding of key uncertainties that could affect their insurance portfolios, so that potential consequences can be analysed, assessed and treated appropriately in their internal models. For the focus areas submission we would like to see one scenario test from agents. This should cover the impact of potential rising geopolitical tensions and the consequence of political and military action. The scenario can be one that's used within the agency, for example by Risk Management for validation, to communicate uncertainty to senior management and inform model development.

The loss values should be split by risk category and class/class combination within premium risk and back-tested against the relevant distribution in your model (for example the total loss should be back-tested against the overall capital distribution, while risk category total losses can be back-tested against the relevant risk category distributions). The total losses should be the sum of the losses by risk category. Lloyd's has provided syndicates with the option to complete the loss information for up to five classes or combinations of classes. At least one of these should be completed.

The basis and details of the scenario should be defined and described by the syndicate. Syndicates can choose to provide the test either on a total distribution basis or on a deviation from mean basis. This basis of the test should be reported using the drop-down menu in the focus area template and should be consistent between the scenario definition and calculation inside the internal model.

The scenario return periods should be defined separately for each line item in the scenario table by the scenario experts, as far as possible. This should be performed in order to aid review of the model dependency structure in the test. This may require capital modelling teams to take existing scenarios which are only defined at a total loss level and obtain more granular loss driver and probability information from the scenario experts.

Syndicates are expected to clearly articulate scenario assumptions, losses and limitations as well as justify the model return periods with reference to the expected return period from the scenario experts. Providing clarity in your explanations will reduce the amount of follow-up with Lloyd's during the CPG period. Syndicates are permitted to use and expand the Lloyd's Exposure Management scenario from January 2023 in this question.

In previous years we have fed back to the market that scenarios shared with us are often, in our opinion, not severe enough to demonstrate how material and unlikely aggregations of losses are captured in the model. With this in mind we would like for the scenario to be based on a plausible, extreme combination of events that could give rise to major losses. Major in this case does not mean leading to insolvency but to a meaningful erosion of capital. For example, this could be a loss above a 1 in 50 confidence level on the insurance risk distribution.

Defining the scenario should be done in the context of the risk profile, so if there is negligible exposure to insurance risks due to the nature of the business written and it is difficult to derive an extreme loss, a less severe scenario may be reported. In such cases it is still important that syndicates consider the full extent of impacts on all risk categories even if there is not a significant risk to direct business.

As part of scenario testing syndicates should consider:

That new events could impact classes and combinations of classes in ways that have not been seen before

- There could be an impact on all risk categories, not just insurance and market risk, therefore these impacts and how they aggregate should be given attention
- The way that geopolitical risks manifest may result in many complex first and second order impacts, for example due to:
 - Repercussion from marine/air space interdiction
 - Trade restrictions and sanctions
 - Increased political activity in regions not directly involved in the tension
 - Economic shocks
 - Increased frequency of disruptive cyber incidents (the losses from which may not be restricted to cyber policies if the incidents impact major infrastructures).

In the focus area template syndicates are also expected to outline who the experts are that developed the reported scenarios.

Lloyd's geopolitical risk scenario

In Q1 2023 Lloyd's Exposure Management team issued a compulsory return for syndicates to complete with losses from three RDSs. The scenarios cover the potential for geopolitical risk scenarios of varying severities in a region with significant trade and economic activity.

The losses should be tested against either:

- The losses generated by a specific event modelled by the syndicate (if applicable); or
- Non-catastrophe premium risk stress for the affected class(es). This should exclude natural catastrophe losses and other specific man-made catastrophe losses which don't relate to the scenario events.

The losses should be tested against the distribution of the sum of classes affected (not against all classes), on top of other expected claims for the year, i.e. against the stress of the distribution. Syndicates must comment on appropriateness of the modelled return periods. For example if losses sit at very high return periods, syndicates should explain how the modelling and validation teams have concluded that this is reasonable and does not indicate that parameterisation of the affected classes or diversification within the model should be updated.

If the loss estimates have changed since submitting the Exposure Management return the most up-to-date version of losses should generally be used. We expect syndicates to recalculate the losses if there is a significant mis-match in the basis of exposure between the Exposure Management return and the SCR. Syndicates do not need to completely refresh the loss estimates if differences in exposure are unlikely to impact the overall result of testing and / or if the impact of exposure changes can be reasonably approximated. The submission documentation should comment on how exposure changes are expected to impact the results if the loss estimates have not been recalculated.

Model changes

Lloyd's expects syndicates to have considered all potential impacts from uncertainty in the external environment. The response to this question gives syndicates the opportunity to explain how the model has been updated since the previous submission for geopolitical and recession risks. There is a wide range of model areas to consider, which reflects the complex nature of these risks and the need to consider them broadly as well as within the confines of parameterising volatility for politically and economically exposed classes of business. Syndicates are given the following options to choose from for each model area:

- No model change: There has been no change to the model since the previous submission (for reasons which should be disclosed in the comments)
- No model change model already sufficiently allows for the risk: There has been no model change since the
 previous submission because the prior methodology and parameterisation already captures the risks at an
 appropriate probability level
- Implicit model change: There have been model changes which are implicit, for example via using representative data points in the parameterisation process

26

- Explicit model changes method and/or parameter: There have been model changes which are explicit, for example adding or adjusting existing explicit drivers/parameters for these risks
- Other: Other model changes which don't fall into other categories, for example the risk is captured by a management adjustment.

Each choice of model update category must be accompanied by rationale to explain it, particularly when there have been no changes or where the changes are implicit. The capital requirement should have sufficient coverage of these model areas and this should be validated. Syndicates should provide the detail and, where possible, the impact of the changes made.

Where syndicates have previously provided Lloyd's with information on modelling approaches which are relevant to this question, the focus area response may signpost to older documents and comment on changes to them, if there are any, since that point. The focus area response should justify any changes, or lack thereof.

5.5 Macroeconomic factors

Asset breakdown

The following information is required by asset group, on a standalone risk basis:

- T=0 value: The opening balance sheet value of the asset holdings, which should be reconciled to the "available assets" in the Exposure and Risk Margin section of LCR form 600
- No. of years modelled: The number of years of investment return included in the capital requirement
- Mean annual return: The average return across all modelled years on the syndicate investment portfolio
 expressed as a simple average of the mean absolute return over the mean asset values in each modelled
 year.
- Expected return: The absolute amount of investment return modelled on the syndicate investment portfolio, on a mean basis. The total ultimate return should reconcile to LCR form 314 cell A4. The equivalent one-year returns should also be provided.
- 1 in 200 downside return: The absolute amount of return modelled on the syndicate investment portfolio at the 99.5th percentile. The total ultimate return should reconcile to LCR form 314 cell C4. The equivalent one-year returns should also be provided.

This information will be used by Lloyd's to inform a market-wide view of return levels and downside risk being modelled by syndicates, which will be compared to market risk contribution. Expected return has continued to rise, and models should reflect that this should be accompanied by an increase in risk to achieve it.

ESG Usage

Lloyd's requires syndicates to reflect current economic conditions in their capital models, in particular the potential increase in uncertainty observed in recent years in economic inflation, risk-free yields, credit spreads and in equity and investment markets.

If the model uses an ESG, Lloyd's requires syndicates to consider what the most appropriate version to use would be. This could be to use a Q2 2023 version of the ESG. If an older version is being used, syndicates should demonstrate that the impact of doing so does not lead to underestimating uncertainty in the current economic environment. This may require that overrides are applied to align the view of uncertainty to the most up-to-date view held by the syndicate. Ultimately syndicates are required to demonstrate that current economic conditions have been reflected in the internal model and modelling of market risk is appropriate from a forward-looking perspective.

If overrides are applied to ESG assumptions these should be clearly articulated, justified and validated. If the ESG has not been overridden syndicates should also explain why this approach is appropriate. Overrides to be considered here are adjustments to any variables in the ESG, including inflation. In the focus areas we have provided the following options for syndicates to describe the nature of ESG overrides:

 Some distribution parameters overwritten: This covers adjustments made to the "standard" parameterisation from the ESG model vendor and includes adjustments within the ESG model/software itself and to the outputs (i.e. prior to being loaded into the internal model). This includes bespoke calibration of the ESG that syndicates have requested from the model vendor, for example to target a specific view of risk.

- No overrides: There are no adjustments made at all and the standard parameterisation from the ESG vendor
 is applied in the internal model. The simulated variables from the ESG are used as they are within the
 internal model without further adjustment.
- Other: This covers cases where the standard vendor parameterisation is preserved, but there are methods
 or adjustments used to adjust volatility in the internal model itself. For example, after an ESG variable is
 simulated, additional uncertainty is applied in the internal model by scaling it via use of a deterministic or
 stochastic scale factor.

This also covers where syndicates have requested non-standard distributions or features from the ESG vendor (e.g. licensing inflation indices other than for prices, wages and medical).

There should be thorough validation of the ESG, including of overrides or lack thereof, to ensure that it remains appropriate to reflect the risk profile of the forecast period. Validators should clearly demonstrate why they are comfortable with any changes in volatilities observed and correlations between economic variables. For example, syndicates must perform detailed validation of interest rate distributions (including their link with other distributions), such as back-testing recent interest rate increases and assessing modelled return periods for potential future shocks.

Validation should not only focus on standalone market risk, but market risk contribution to capital as well. Please signpost to your documentation/validation in the focus areas return.

Model changes

See Section 5.4 for further details.

Claims inflation model changes

Lloyd's will continue to focus on ensuring that syndicates make an appropriate allowance for the current inflation environment in the capital requirement and this remains an area of interest for CPG. The Lloyd's definition of inflation is in Section 7.

This focus area query requires syndicates to comment on all updates made to the model separately for economic and excess inflation risks. If there have been no changes, then syndicates should comment on the rationale for this, referencing any testing that has been applied to validate this.

Responses to this query should comment on impacts these changes have made to dependency within the model, such as between sources of inflation, between classes, within insurance risk and between insurance risk and other risk categories. Syndicates may also reference any strengthening of the validation testing applied for inflation and quantitative impacts to the capital requirement.

5.6 Other focus areas for the 2024 YoA

Finally, there are some other queries, included in the "General queries" tab in the return. Two queries relate to previous loadings and feedback. There are three questions to assist with the modelling in the Lloyd's Internal Model (LIM). These are the back-test of the 2022 year of account; providing the impact of non-proportional reinsurance on an ex-natural catastrophe basis; and year of account profit and loss distributions.

The year of account distribution information is a new request for the 2024 YOA and may assist in informing allocation of capital to members.

Profit and loss distribution by YOA

This is an optional data request for syndicates with non-aligned members to complete.

Member's capital requirements are based on a centrally managed model that is informed by syndicate's plans and capital approved during CPG. Lloyd's are considering improvements to this model to drive greater predictability for managing agents and their members. Some additional information is required from syndicates to be able to enact some of these improvements. Use of this to inform the allocation of member capital for 2024 SCRs is subject to the quality of the information provided.

A key aspect of the central model is the allocation of SCRs to years of account to ensure that member's capital is reflective of the risk that they back. An additional table has been added to the focus areas return collecting year of account profit and loss (P&L) distributions. This will be on a standalone basis to help inform level of risk by year before diversification is accounted for in the LCR.

Please note that it was raised that these allocations can be done on a similar diversified basis to those on LCR form 560. This is not what is required, the standalone risk for each year is required. Where there are difficulties in splitting non-insurance risk categories, these should be considered in line with the risk profile of the syndicate and how and where member capital should be split by YOA. Insurance risk can be used as a base to carry out this allocation but all risk categories must be included.

This is an optional data request, however Lloyd's highly encourages syndicates with multiple members to complete it.

6 Appendix 1: Definition of metrics for Fast Track

Exact definitions of risk-to-exposure metrics from items on LCRs are laid out below.

#	Metric	Definition
S 1	uSCR stress-to-exposure measure	uSCR stress = LCR form 310 Row 2 Col G - LCR form 310 Row 2 Col A Exposure measure = Mean premium risk net claims + ½ * mean reserve risk net claims Mean premium risk net claims = LCR form 502 Q1 Col B Total Mean reserve risk net Claims = LCR form 510 Q1 Col A Total
S2	Ultimate premium risk stress-to-exposure figure	Premium risk stress = LCR Form 314 Table 1 Row 2 Col B Exposure measure = Mean premium risk net claims = LCR Form 502 Q1 Col B Total
S 3	Ultimate reserve risk stress-to-exposure figure	Reserve risk stress = LCR Form 314 Table 1 Row 3 Col B Exposure measure = Mean reserve risk net claims = LCR form 510 Q1 Col A Total
S4	One-year SCR stress to uSCR stress	One-year SCR stress = LCR form 310 Row 1 Col G - LCR form 310 Row 1 Col A uSCR stress = LCR form 310 Row 2 Col G - LCR form 310 Row 2 Col A

7 Appendix 2: Definition of claims inflation

We define claims inflation as the change in claims cost of a like for like policy over time. Claims cost is considered as all costs in relation to the payment and settlement of a (re)insurance claim. This includes loss adjustment expenses directly associated with the claim, such as claims handling. Like for like means having consistent policy wording, exposure and level of coverage, such that the change in claims cost is considered after normalizing for changes in policy terms and other differences in the policy.

Our definition of claims inflation covers changes in claims cost due to trends which affect the number (frequency) and/or size (severity) of claims. Claims inflation is the sum of economic inflation and excess inflation:

- Economic inflation: Changes in claims costs as captured through published economic indices relevant to a (re)insurer's mix of business.
 - Typically, this is inflation in the cost of a basket of selected goods and services or average wage costs, which are captured in price and wage indices (such as RPI, CPI and ASHE in the UK, which are produced by ONS).
- Excess inflation: Changes in claims costs beyond what is captured in economic indices, including factors which are specific to a (re)insurers' business.
 - Typically, this is inflation associated with resources specific to the nature of the claims costs of the (re)insurer (beyond that captured in generic inflation indices), or emerging risk from new materials, medicines and technologies.

We define social inflation as a subset of excess inflation, which more narrowly pertains to claims inflation as a result of societal trends. This includes rising costs of claims resulting from increased litigation, broader definitions of liability (excluding those caused by changes in policy terms and conditions), more plaintiff-friendly legal decisions, larger compensatory jury awards and social movements.