SOLVENCY II DEFINITIONS
Implementing Solvency II requires understanding of several concepts relating to governance, risk management and capital setting. Lloyd’s current understanding of these concepts is set out below. Also provided are comparisons to current processes under ICAS as points of reference.

CALCULATION KERNEL
The technical model used for the quantification of capital requirements for all risk categories can be seen as the calculation kernel. As the quantification covers all risk categories it will include elements that are not necessarily statistically modelled.

Comparison with ICA
The calculation kernel covers less than the current ICA as it is purely the quantification tool and does not encompass the link between capital and the risk register / framework which is currently part of the ICA.

External models
An external model is the use of a third party model to feed into the calculation kernel with economic scenario generators and catastrophe models being the most common examples. Where a managing agent uses proprietary / externally supplied software as the platform for their calculation kernel this does not in itself constitute an external model.

INTERNAL MODEL
The internal model includes the calculation kernel and must also satisfy the following requirements:

- be able to provide an appropriate calculation of the SCR (Article 100);
- be an integrated part of the undertaking’s risk management process and systems of governance (Articles 43,110.5 and 118); and
- satisfy the tests and requirements as set out in Articles 118-123.

Use test (article 118) – will require firms to demonstrate that the internal model is widely used in and plays an important role in their system of governance (art 41-49), and in particular, their risk management system, decision making processes and the ORSA.

Articles 119 -123
- Statistical quality standards
- Calibration standards
- Profit & loss attribution
- Validation standards
- Documentation standards

The internal model will need to satisfy these tests. An internal model must meet all of these requirements to be approved – if not it remains a calculation kernel and would not be approved for Solvency II / capital setting purposes with capital then being set using the standard formula SCR.

Comparison with ICA
A key area for development will be to satisfy the use test and demonstrate that the internal model is embedded within the business. Whilst under current requirements the ICA should be embedded in this way, this test will be of increasing importance under Solvency II.
**Full and partial internal models**
Internal models can be further defined as full or partial models.

- **Full model** – all risk categories are quantified using the internal model / calculation kernel. It does not mean that all elements of the SCR have to be statistically / stochastically modelled.

- **Partial model** – one or more modules of the SCR as laid out under Solvency II are calculated using the standard formula.

Lloyd’s currently expects all syndicates to have a full internal model. Lloyd’s considers all ICAs to be “full models” on the basis that managing agents quantify each element of risk individually, either statistically or through stress and scenario tests. However, as set out above, there are greater requirements to meet for internal model approval than currently under the ICAS regime.

**OWN RISK & SOLVENCY ASSESSMENT (ORSA) (Article 44)**
The ORSA can be defined as the entirety of the processes and procedures employed to identify, assess, monitor, manage, and report the short and long term risks a firm faces or may face and to determine the own funds necessary to ensure that overall solvency needs are met at all times.

The ORSA must be conducted as part of the risk management system and as a regular ‘assessment’ it is also the key output from that system. It should include an assessment of overall capital needs, taking account of the risk profile, approved risk tolerance limits and business strategy. Whilst calculation of the SCR will look at regulatory capital requirements arising over a one year time horizon, the ORSA will consider economic capital requirements over a business planning timeframe. The ORSA should also be an integral part of the business strategy, taken into account in strategic decisions and should be used to help identify and manage risk. The ORSA should also make the link between actual reported results and the capital assessment.

The ORSA is not subject to regulatory approval, but the results of each assessment will need to be advised to Lloyd’s / the FSA and will form part of ongoing regulatory activities. The ORSA is a requirement for all firms whether using the standard formula or an internal model to calculate regulatory capital requirements. An ORSA does not require an internal model, but where an internal model is used it is an integral tool to the ORSA process.

**Comparison with ICA**
The ORSA will need to be documented in a similar way to the ICA, but it is much wider in scope as set out above. Given this and the fact that the ORSA is a new requirement under Solvency II, Lloyd’s view is that no current ICA would meet the ORSA requirements.

**RISK MANAGEMENT SYSTEM (Article 43)**
The strategies, processes and reporting procedures necessary to identify, assess, monitor, manage and report, on a continuous basis the risks, on an individual and aggregated level, to which the business is or could be exposed, and their interdependencies.

The risk management system should be well integrated into the organisational structure and decision making processes and should include the following:

- a clear risk appetite – set by the Board, part of strategy, widely understood and used;
- a firm-wide assessment of risks across all risk types, including emerging risks; and
• management information that is timely, consistent and accurate and used for internal and external reporting.

An effective risk management system is required under Solvency II.

**Comparison with current risk framework**

The risk management system is wider than the current risk framework and recognised current practices, in particular it includes the ORSA and there must be demonstrable integration between risk, decision making and strategy.

For Solvency II, all aspects of the risk management system will need to be clearly documented and evidenced as fit for purpose in advance of their use.

**SUMMARY**

The following diagram shows a comparison of and the interaction between each Solvency II element outlined in this document. The diagram is not to scale, but key elements to note are:

• whilst the calculation kernel is a subset of the current ICA, the internal model is wider than the current ICA framework; and

• parts of the ORSA are outside the current risk framework, implying that developments will be required for all current risk frameworks.