

GOVERNANCE, RISK MANAGEMENT & USE WORKSHOP

9 & 24 August 2011

Agenda

- Introduction
- Model Scope & Change

Table discussions

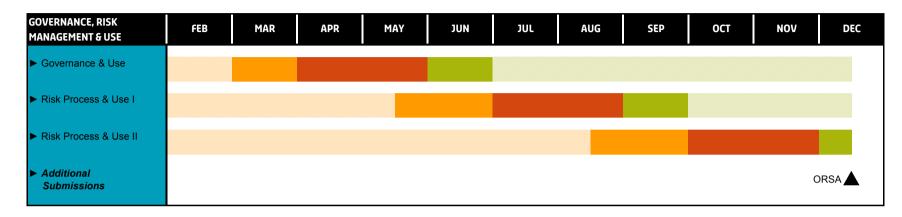
- Feedback from Governance Reviews
- Expectations of Internal Audit
- Approach to upcoming reviews

Table discussions and play back/Q&A

• Next steps

INTRODUCTION

Progress to date on workstream



Governance & Use	Risk Process & Use I	Risk Process & Use II		
Fit & Proper	 Internal Audit 	 Identification, assessment, control 		
Internal Control	Risk Appetite	& mitigation		
 Outsourcing 	 Model Change Policy 	Monitoring &		
Governance &	• Model	reporting		
Board operations	Scope/Coverage	 Actuarial function 		
 Risk Governance (including model governance) 		 Use test wrap up 		
geveniaries)				
ORSA & Use test				

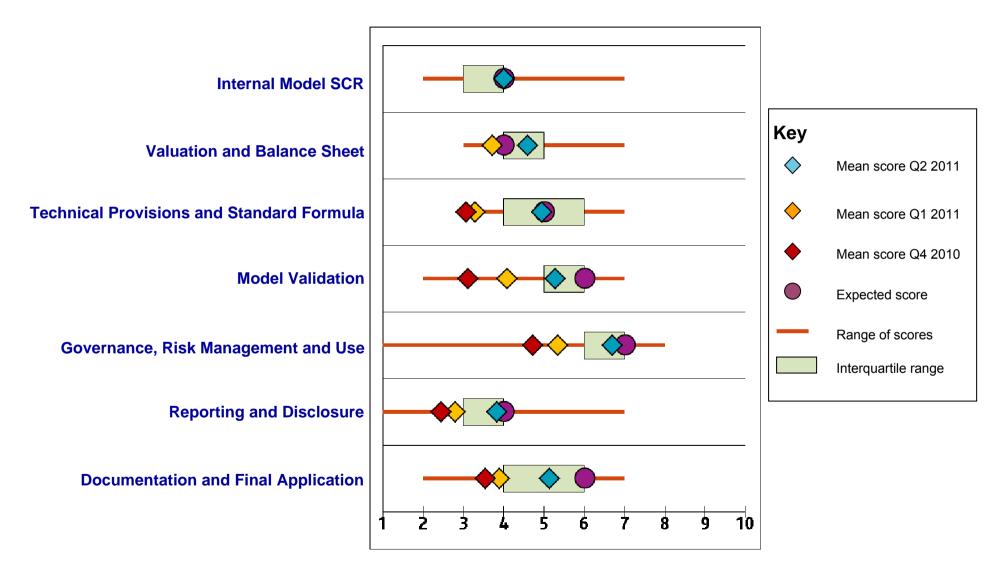
Where have we got to on GRMU......

- Market workshops held on:
 - Overall plan
 - Feedback on internal control and outsourcing
 - Expectations around Risk Appetite and Outsourcing
- Completed review activity on Internal Control and Outsourcing
- Nearing completion of Governance and Risk Governance review activity
- March and June evidence template submissions
- High level feedback of evidence templates currently being provided.
- ORSA guidance published.

... but strong links with other workstreams

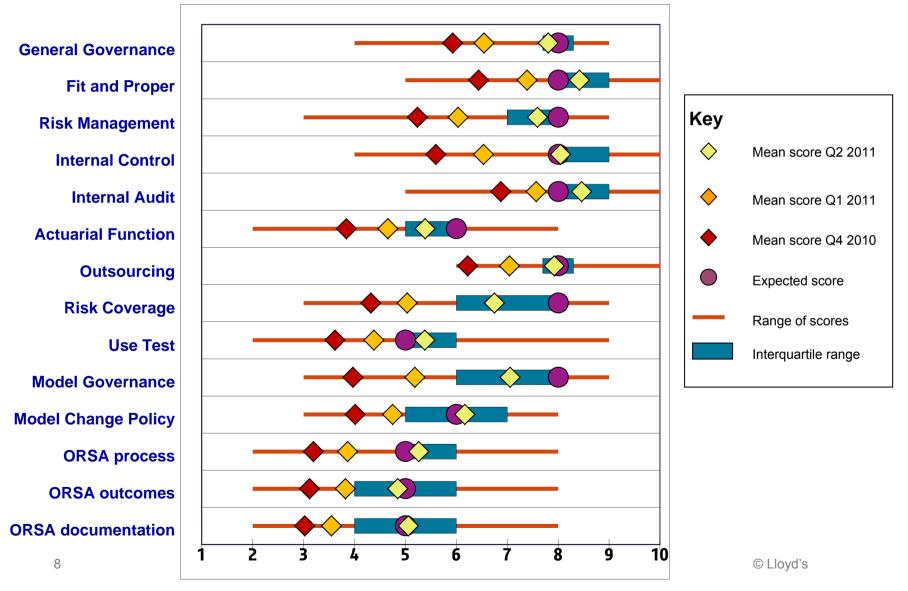
- Internal Model SCR
 - model scope and model governance
 - calculation of operational risk
- Technical Provisions
 - actuarial function
- Model validation
 - scope of validation covers governance and use test
- Documentation and final application
 - Board understanding and sign off on "application"

Latest workstream scores



Latest self assessment scores

Self assessment scores as at Q2 2011



MODEL SCOPE -RECAP

Model Scope

- Scope is broader than the calculation kernel.
- Must be able to define the scope of the internal model for each managed syndicate.
- Lloyd's will not mandate use of a specific scope for internal models as this should be relevant to the business and risk profile of each syndicate.
- Internal model scope does not need to be consistent across agents for the purposes of the Lloyds internal model (LIM).
- Any component or process that can have a significant impact on the SCR must satisfy the requirements of Solvency II.
- Review process will not be limited by the scope of the internal model.
- Agents must understand the implications of including or excluding certain elements from the scope of an internal model.
- Agents must demonstrate that the internal model covers all material risks.

Risk coverage

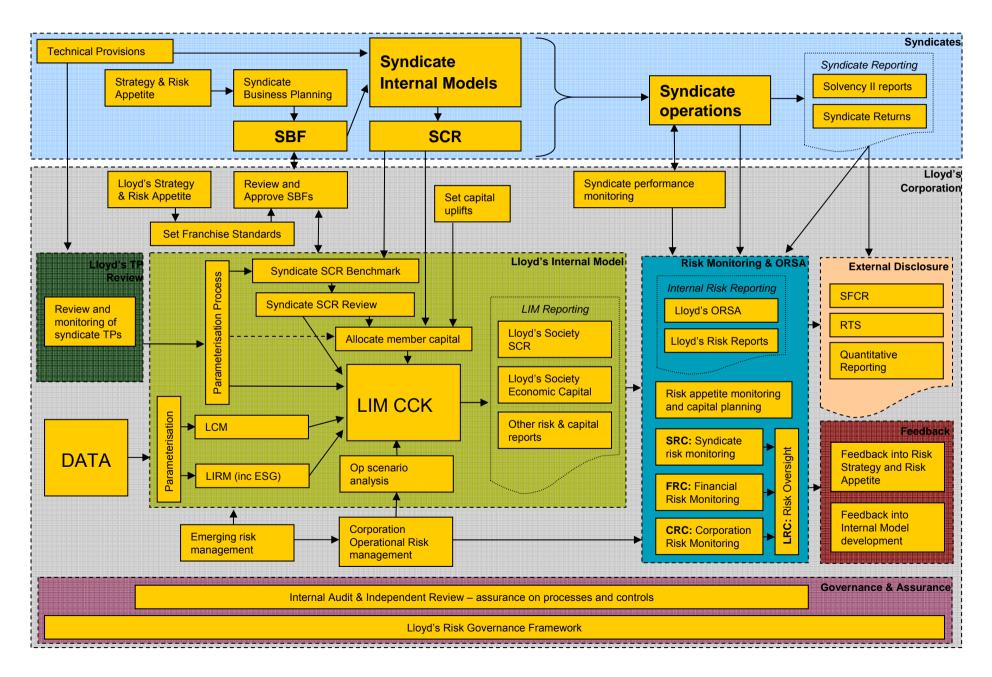
- **1**. All material risks must be covered by the internal model.
 - "[I]t is essential to ensure that there is no material risk that is in the model scope but is not included in the model." (5.199)
- 2. Materiality can be assessed using qualitative or quantitative indicators.
 - "[I]t also seems natural to rely on both qualitative and quantitative indicators that reveal the materiality of the risks concerned." (5.203)
- 3. Indicators may rely heavily on judgement and they can be approximate
 - "[T]he determination of risk indicators, irrespective of whether they are qualitative or quantitative, may to a great extent involve expert judgement." (5.205)
 - *"[D]etermination of quantitative indicators can be approximate..."* (5.204)
- 4. Quantitative indicators are preferred to qualitative indicators
 - "[Q]uantitative risk indicators are to be preferred ..." (5.206)

Risk Identification model must reflect entire risk profile (5.199) • starting points: risk register (p.12) / ORSA risk identification (5.202) **Risk Indicators of Materiality** determination may involve expert judgement (5.205) • quantitative preferred but supplement with qualitative (5.206) • CEIOPS recommends minimum standards (5.207) consider if risks immaterial individually are material in aggregate (5.216) **Quantitative** (5.204-5.210; p.3) Qualitative (5.211-5.215) risk attracts management action can be somewhat approximate existence of dedicated RM • 99.5% VaR over 12mo existence of dedicated risk mitigation • others used in RM identification in ORSA • capital allocation to risk • etc. • etc.

Risk Coverage in Model

- each risk identified as in /out (Lloyd's Guidance p.12)
 - explanation for risks not covered (p.12)
- demonstrate that all material risks are covered (p.12)
- define triggers for re-assessment of model coverage (5.201)

Lloyd's – LIM scope



MODEL CHANGE

What constitutes a LIM change?

Model change types

- Change to model methodology
- Change to model governance
- Change to business process
- Change to external models

Aspects not classified as model changes

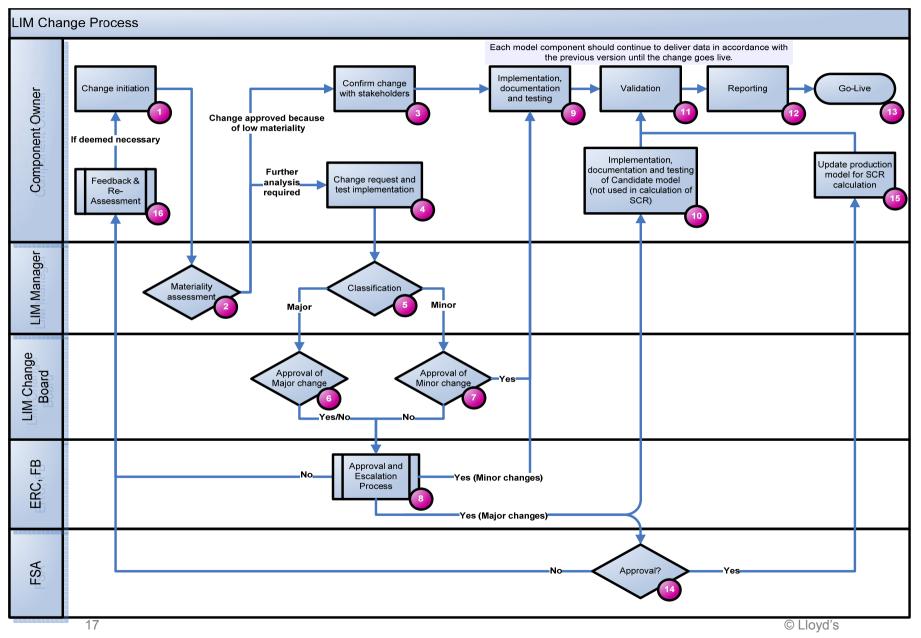
- Non-functional modifications
- Model update (e.g. parameters are recalculated (including calibration to the market) with new data but the methodology has not been changed)
- Modifications to the model scope (will always require FSA approval)
- Modifications of the model change policy (will always require FSA approval)

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Definition of major and minor LIM changes

- When a change is classified into either a major or minor change, the following criteria should be considered:
 - Impact on SCR/FAL Burn
 - Number of components affected
 - Complexity of the change
 - Solvency II compliance
- Quantitative limits to be proposed and depend on the outcome of the change- able to be explained, and change thresholds
- Each of the criteria is to be assessed in forming a view of major/minor.

Proposed LIM change governance



What does this mean for syndicates?

- Model change policy is a key document for our review.
- Lloyd's will not specify major and minor changes for the market nor mandate an approach.
- However, all agents are expected to have a robust model change framework.
- Approach should be principles based March 2010 guidance still relevant.
 - LIM framework aligns to these principles.

GROUP DISCUSSIONS

Discussion handout on model change

CHANGE SCENARIO

1. Your catastrophe modelling provider changes its modelling methodology for a particular peril. The result for your SCR doubles.

2. Your catastrophe modelling provider changes its modelling methodology for a particular peril. The result for your SCR halves.

3. You put new data through your internal model for the year end run. No modelling changes have been made since the last model approval, but as the result of exposure changes in the year, your SCR increases by 35%.

4. You start underwriting a new class of business that you have not modelled before and have no previous experience with. You do not think it will materially impact your SCR.

5. You acquire a portfolio of business, which is similar to the main class of business you write. You do not think the acquisition will materially impact your SCR.

6. You recode your insurance risk module. This enhances the performance of the model in respect of run times, but is exactly the same in terms of the underlying methodology it's trying to implement.

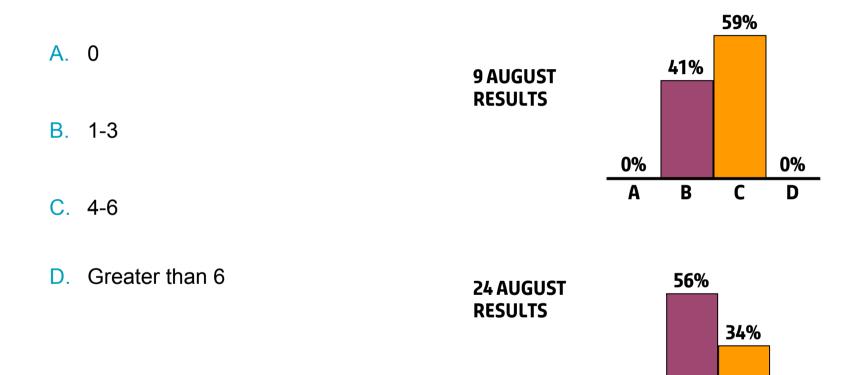
7. The credit rating of one of the counterparties you deal with changes.

8. You have a partial internal model modelling all risks except for operational risk. You now wish to include operational risk in your internal model.

9. You have a full internal model and currently model operational risk using stress tests. You now want to model operational risk on a frequency and severity modelling basis. This does not impact significantly on your SCR, but you think it will improve the overall modelling process and is more easily understood by senior management

10. Lloyd's changes the LCR by asking for additional information to be supplied as an input to LIM.

How many of the 10 scenarios did you consider constitutes a 'major' change?



С

4%

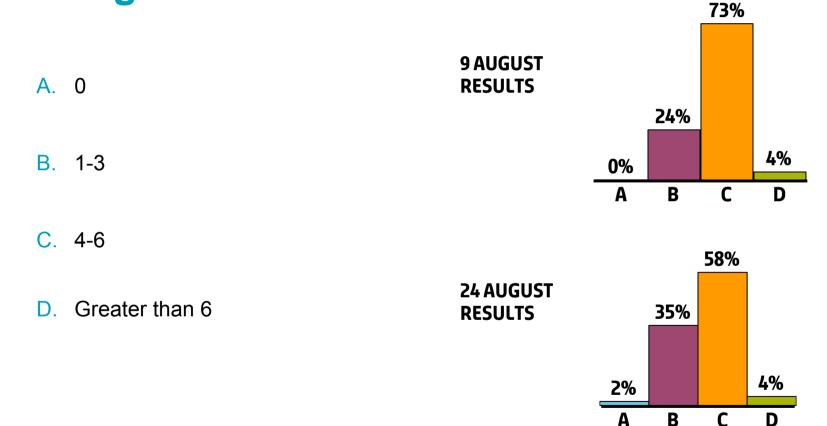
Α

В

6%

D

How many of the 10 scenarios did you consider did not constitute a model change?



Did you agree with LIM views?

CHANGE SCENARIO	NOT A MODEL CHANGE	MINOR MODEL CHANGE	MAJOR MODEL CHANGE
1			✓
2			✓
3	\checkmark		
4	\checkmark		
5		✓	
6	\checkmark		
7	\checkmark		
8	\checkmark		
9			\checkmark
10		✓	

Latest Level 2 draft text on model change policy *Article 204 IM2* – (Article 115 of Directive 2009/138/EC)

Policy for changing the internal model

- 1. The policy for changing the internal model shall cover the procedure to be followed to determine whether a change in the internal model is needed as a consequence of any relevant change in the system of governance, the compliance with the requirements to use the internal model, the method of calculation of the Solvency Capital Requirement and any relevant change to the risk profile of the undertaking.
- 2. Any relevant change as referred to in paragraph 1 not covered by the scope of the policy for changing the internal model requires an amendment of that policy approved by the supervisory authorities in accordance with the procedure laid down in paragraphs 6 to 8.
- 3. The policy for changing the internal model shall not cover the inclusion of new elements in the internal model, such as the inclusion of additional risks or business units. Inclusion of new elements in the internal model shall follow the approval procedure laid down in Article IM3.
- 4. The policy for changing the internal model shall specify when a change of the internal model will be considered as major or minor and when a combination of minor changes shall be considered a major change. Where a combination of minor changes is considered a major change, the procedure laid down in Article IM3 for major changes shall apply.
- 5. The policy for changing the internal model shall set out the governance requirements in relation to changes to the internal model, including internal approval of changes, internal communication, documentation and validation of changes.
- 6. The application by an insurance or reinsurance undertaking to change the policy for changing the internal model shall be provided to the supervisory authorities in writing in the language laid down in paragraph 1 of Article IM1. The application shall be signed by the administrative, management or supervisory body of the insurance or reinsurance undertaking including the justification for changing the policy for changing the internal model.
- 7. Supervisory authorities shall decide on the application to change the policy for changing the internal model within six months from the receipt of the complete application.
- 8. Supervisory authorities shall approve the application to change the policy for changing the internal model only if they are satisfied that the scope of the policy is comprehensive and procedures described in the policy for changing the internal model ensure that the internal model meets on a continuous basis the requirements set out in Articles 101, 112 and 120 to 125 of Directive 2009/138/EC and in the case of a partial internal model Article 113 of Directive 2009/138/EC.
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FEEDBACK FROM GOVERNANCE REVIEWS

Governance - Committees

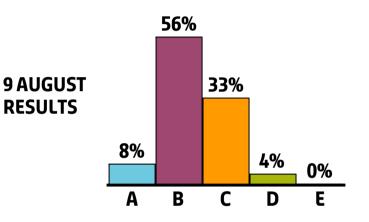
- Further clarity is needed on the overall Risk Committee structures and the objectives of each committee
- Use of Group committees is not always well documented.
- Misalignment between the membership and responsibilities of committees.
- In particular, NED involvement does not appear to always make sense given the committee responsibilities.
- Still some blurring of the lines of defence across the committee structure.
- Inconsistency in level of detail included in Terms of reference.

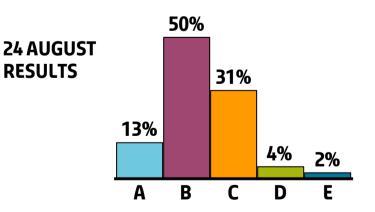
Governance – Other areas

- A few examples where spans of control are too large.
- Board balance and composition.
- Solvency II Board reporting could be improved.
- Risk reporting to the Board does not always reflect a good summary of information provided to Risk Committees.
- The majority of agents have dedicated risk management resource.
- Board effectiveness reviews are not always being completed in line with Lloyd's minimum standards.

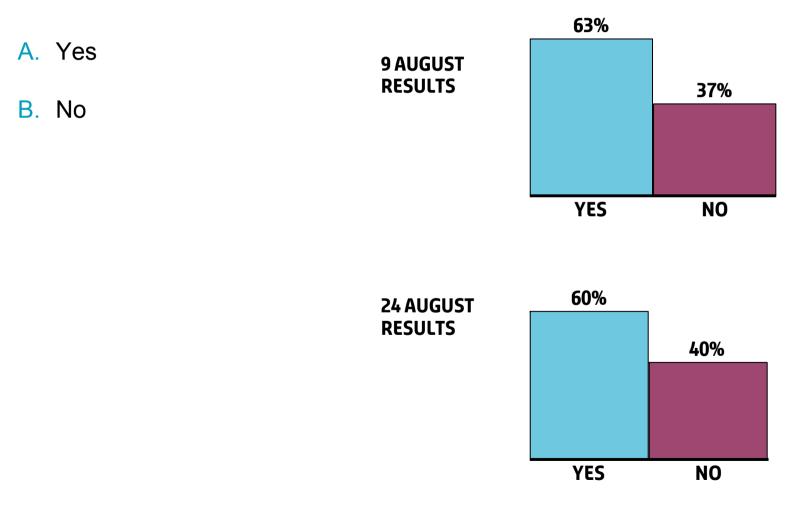
What proportion of work would you say you still have to complete in relation to governance?

- A. Fully completed
- B. Work complete, we just need time to evidence this through the committees operating.
- C. All committees are now operating, but we need to complete the documentation.
- D. Still need to implement one committee.
- E. Still a lot of work to do.





Are the new committees you have implemented operating as you would like?



EXPECTATIONS OF INTERNAL AUDIT

EIOPA draft requirements - Definition

Internal audit is an independent function established within the undertakings to examine and evaluate the functioning, effectiveness and efficiency of internal control system and all other elements of the system of governance.

EIOPA draft requirements - Guidelines

- Internal Audit function should be independent
- Internal Audit function needs to avoid any conflict of interest
- An audit policy should be in place
- Audit plan should be risk based, complete and detailed required frequency of audits.
- Work should be documented in working papers.
- Output of work should include recommendations including timeframes for completion.
- Annual audit report should detail how the plan has been executed.
- Audit activities should be complemented by an adequate follow up procedure.

What's new for Internal Audit under Solvency II?

- Internal Model.
- Overall documentation of the risk management framework.
- Approach and complexity of risk appetite framework.
- Own Risk and Solvency Assessment.
- Volume and complexity of risk related committee reporting.
- Measurement of the embedding of a risk management culture.
- Risk function.
- Actuarial function
- Level of regulatory scrutiny of audit activities.
- Level of reporting undertaken to the regulator and the market.

Overall level of assurance expected from an internal audit function significantly increased on an ongoing basis.

What does this mean in practice......

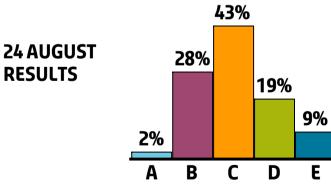
- Independent assurance is required around the Solvency II implementation project.
- Significant challenge and scrutiny required for Lloyd's submissions i.e. self assessment scoring templates.
- Independent assurance required on all elements before they can be assigned a '10' score for Lloyd's.

BUT, independent does not have to mean internal audit!

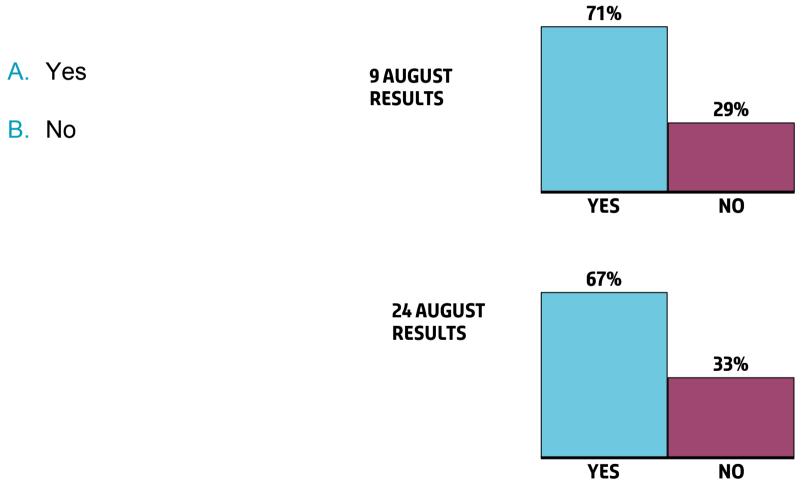
- Audit will be required to provide assurance on an ongoing basis to elements which are new or improved for Solvency II.
- Some areas will be far more difficult to audit e.g. meeting the requirements of the 'Use Test', measuring risk culture etc.

Where are you currently scoring yourselves on your Internal Audit preparedness?





Have Internal Audit at your agent already completed reviews of Solvency II deliverables?



APPROACH TO UPCOMING REVIEWS

Approach - background

- Significant progress has been made in the first half of 2011.
- Our approach in H1 2011 has still felt too documentation focused.
- We need to ensure that in H2 we focus on agents who need the most help.
- Review activity to date has provided us with good indicator of progress.
- This is the right time to amend and augment our current approach.
- There will be some changes to agent allocations within the team.

There is still a lot of work and reviews to complete.

Approach – risk based

- We will make far greater use of walkthrough sessions.
- Number of walkthroughs will depend on size, current progress, risk management approach etc.
- Questions/structure for wallkthrough sessions will align to work programmes.
- Recommendations to be made post evidence template, documentation request and walkthroughs.
- Topics being considered will align to our original 2011 plan.

Approach - timings

Date	Activity
End July	High level review of evidence templates complete
August	Evidence template review – content and documentation request
September	Walkthrough activity begins
End September	GRMU evidence template submission
End December	Walkthroughs complete for all available elements
Jan/Feb 2012	ORSA and Use Test walkthroughs

GROUP DISCUSSIONS

Group discussion

- Use handouts on assurance
 - What assurance is currently included in your programme. A list of Lloyd's activity is included below for reference:
 - Independent assurance of the Solvency II programme.
 - Quality assurance of programme 'products' e.g. ORSA, Management Information etc.
 - Internal Audit of Solvency II programme.
 - Internal Audit of new Risk Governance framework.
 - Independent Validation of the LIM.
- Do you see any issues with the proposed review activity for the remainder of 2011?

ROUNDUP AND QUESTIONS

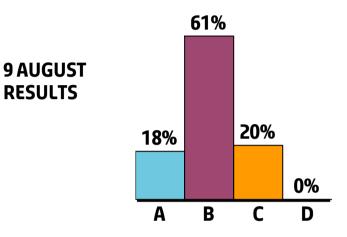
NEXT STEPS

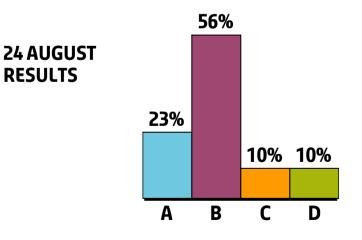
Next Steps

- Slides will be made available on <u>lloyds.com</u> after both workshops, ideas welcome via your account manager, risk executive or via <u>solvency2@lloyds.com</u>
- Updated Q2 scores will be reviewed and questions raised with agents together with any request for supporting evidence/rationale
- Third iteration of Governance, Risk Management & Use evidence templates due end September
- Next Governance, Risk Management & Use workshops 3 & 4 October
- Other upcoming sessions:
 - Model Validation 1 & 2 September
 - Reporting & Disclosure, Valuation & Balance Sheet 14 & 15 September
- Finally, before you go, a request for feedback ...

How useful have you found today's session?

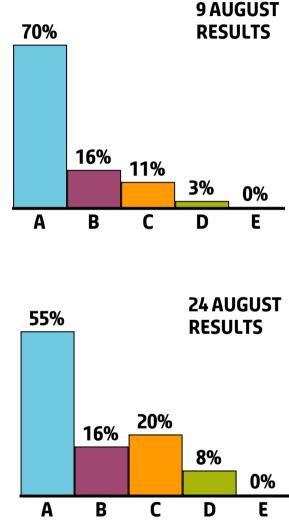
- A. Very useful and I have learnt something
- B. Useful and we will use the slides for reference
- C. Useful, but greater technical guidance would have been beneficial
- D. Not very useful





How have you found format of today's workshop?

- A. I liked having 2 discussion sessions and balance was good
- B. I liked having 2 discussion sessions but they should be shorter
- C. I would prefer to have only one table discussion
- D. Would prefer less discussion and more presentation
- E. Other



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