

Life conference and exhibition 2010  
Neil Chapman and Ian Marshall



## CEIOPS and FSA internal model guidance so far and to come

7-9 November 2010

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## Best laid plans ....

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- This session is targeted at those involved with the development or review of internal models and intended to cover:
  - a run-through of the CEIOPS level 3 guidance issued so far and an analysis of what it means in practice
  - an outline of the remaining areas where level 3 guidance will be developed and speculation as to what it might contain
  - a discussion on how industry internal model practice is evolving
- But ...

... level 3 guidance has been delayed and can only be consulted in informally

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# Revised agenda

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- This session will therefore instead will cover:
  - How the informal level 3 consultation process will work and what will be covered
  - What is happening in CEIOPS and the FSA on internal models
  - Use test requirements
  - Validation requirements

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# Reminder of the Levels

## Lamfalussy process

Level 1 text  
(The Directive)

Level 2 measures

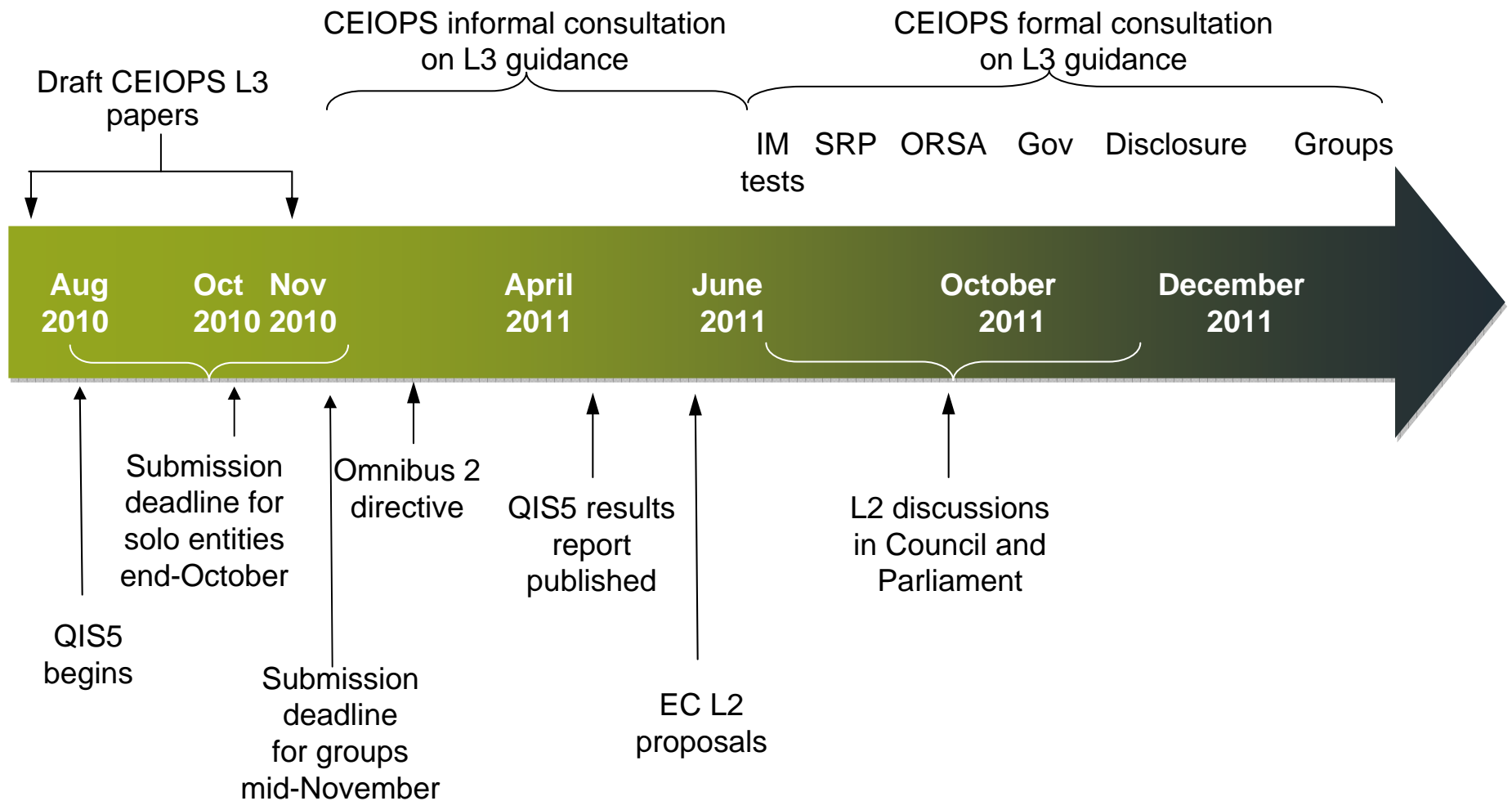
Level 3 Guidance  
(and BTS)

Dry  
Bones

Adding  
Colour

Finished  
Article!!

# Solvency II timeline



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# Informal v Formal consultation

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|                                | Informal guidance  | Formal guidance                   |
|--------------------------------|--|-----------------------------------|
| <b>CEIOPS sign-off process</b> | Agreed at working group                                    | Agreed at Members Meeting         |
| <b>Publication</b>             | No publication   | On CEIOPS website                 |
| <b>Distribution</b>            | To EU bodies, eg CEA, AMICE, CRO Forum, Groupe Consultatif | On CEIOPS website                 |
| <b>Response to Comments</b>    | Informal   | Written response to every comment |

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# Format of L3 papers

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- Introduction
  - Link back to relevant L1 and L2 material
- Guideline
  - Concise statement of what the guideline is
  - May be aimed at supervisory authority or firm
- Explanatory text
  - For each guideline, explain why it is there
  - Possible to give examples
- Impact Assessment
  - Where necessary



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## What will be covered for Internal Models in the L3 informal consultation

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| Date                  | Formal guidance  |
|-----------------------|--|
| Q4 2010               | <ul style="list-style-type: none"><li>• Use Test</li><li>• Calibration</li><li>• P&amp;L Attribution</li><li>• Validation policy</li><li>• Statistical Quality Standards</li></ul> |
| 2011                  | <ul style="list-style-type: none"><li>• Application</li><li>• Validation tools</li><li>• Model Change policy</li><li>• Documentation</li></ul>                                     |
| Input to other papers | <ul style="list-style-type: none"><li>• Reporting</li><li>• ORSA</li><li>• Governance</li></ul>  |

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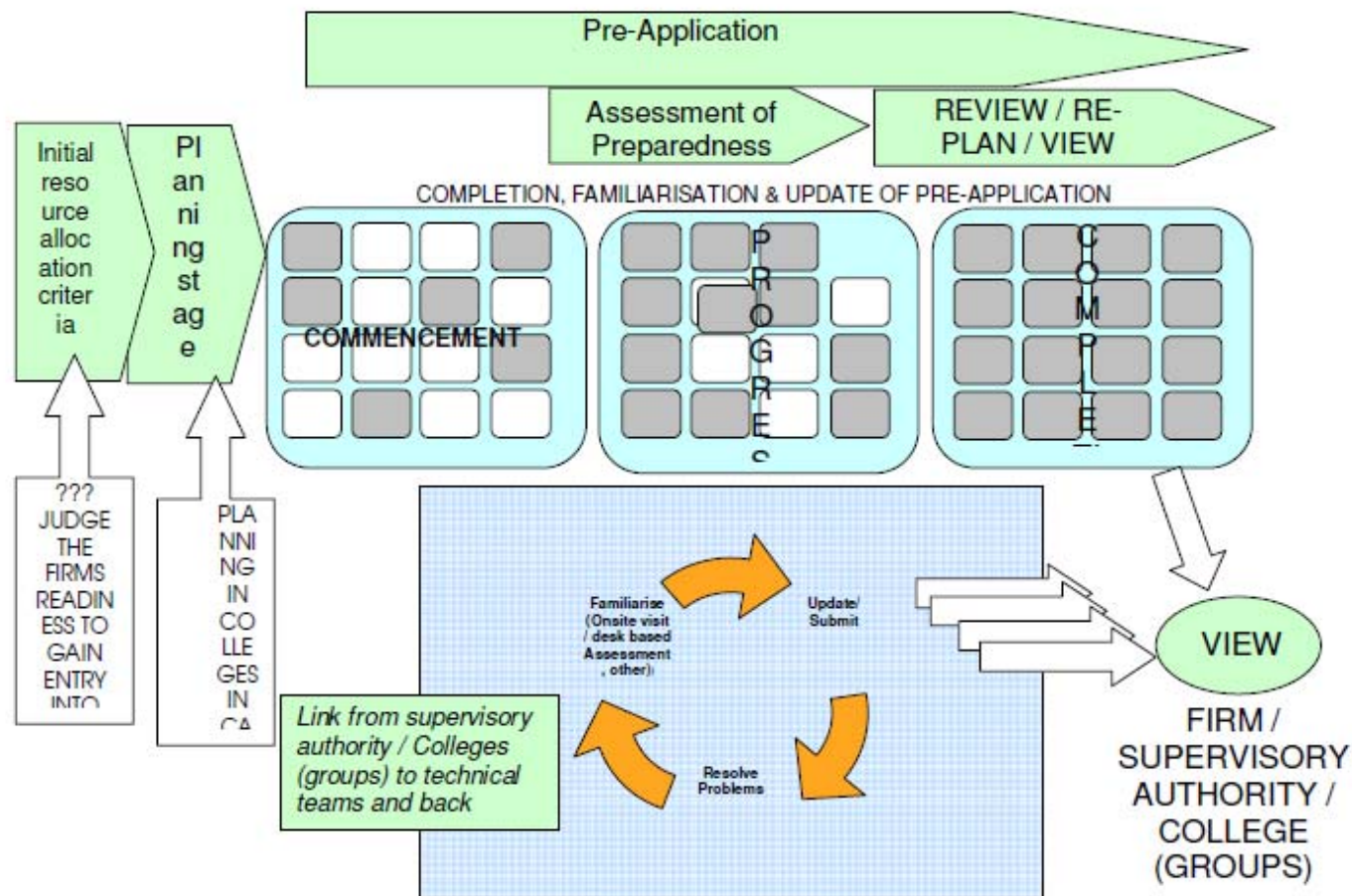
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# CEIOPS pre-application work

## CP80 – guidance on the pre-application



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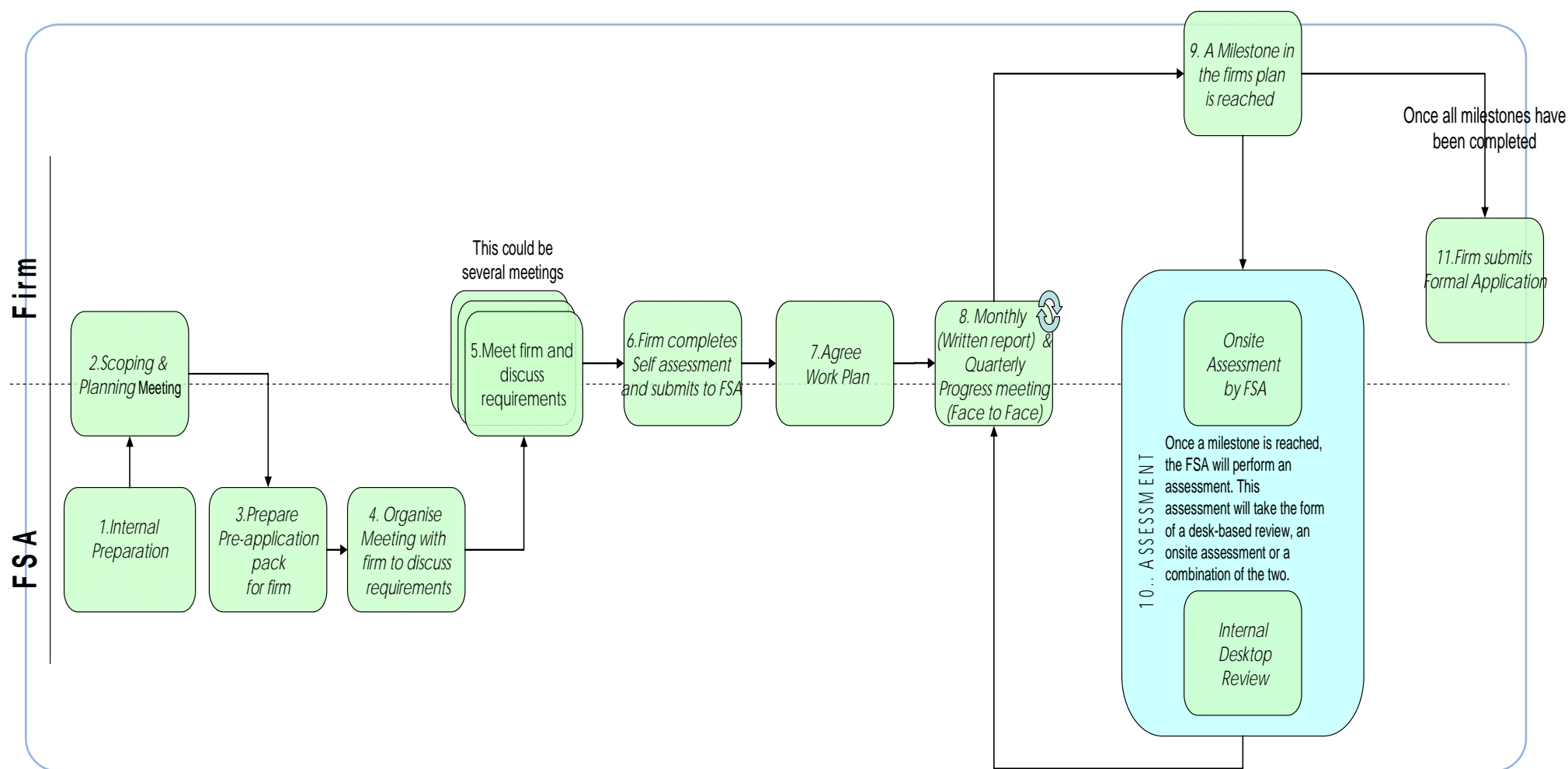
# CEIOPS pre-application work

## Pre-application consistency task force

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- Set up to promote consistency in the pre-application process across Member States
- Activities promoted by the task force
  - Stock take of pre-application processes put in place by various supervisory authorities
  - Facilitating informal discussion between various regulators on practical issues encountered by supervisors in the pre-application
  - Informal Q&A for regulators on practical issues
  - Training provided to regulators

# FSA IMAP Pre-application process - overview



- Structure based on *former CP80 Pre-application process for internal models*

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# FSA IMAP – Review and Assessment Task Force

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- Primary purpose is to assist in the design and development of model review activity, producing high quality, consistent material for supervisors, actuaries and risk specialists across the FSA.
- Fosters co-operative team-working across the organisation to deliver fit-for-purpose and cost effective implementation of IMAP as part of SII programme for FSA and Firms.

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# What will be covered by level 3 implementing measures

- Use Test
  - General considerations for the use test
  - Defining the uses applied
  - Fitting to the business model
  - Understanding the internal model
  - Support of the decision making process
  - Integration with the risk management
  - Group specificities

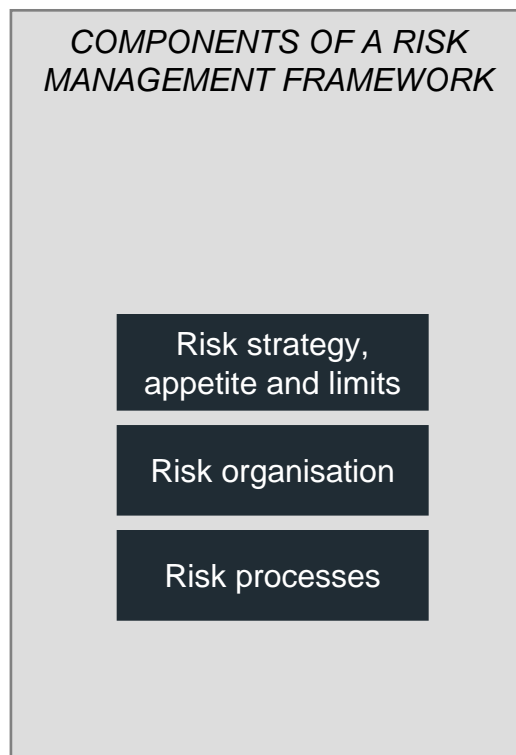
# Thoughts on the use test

1

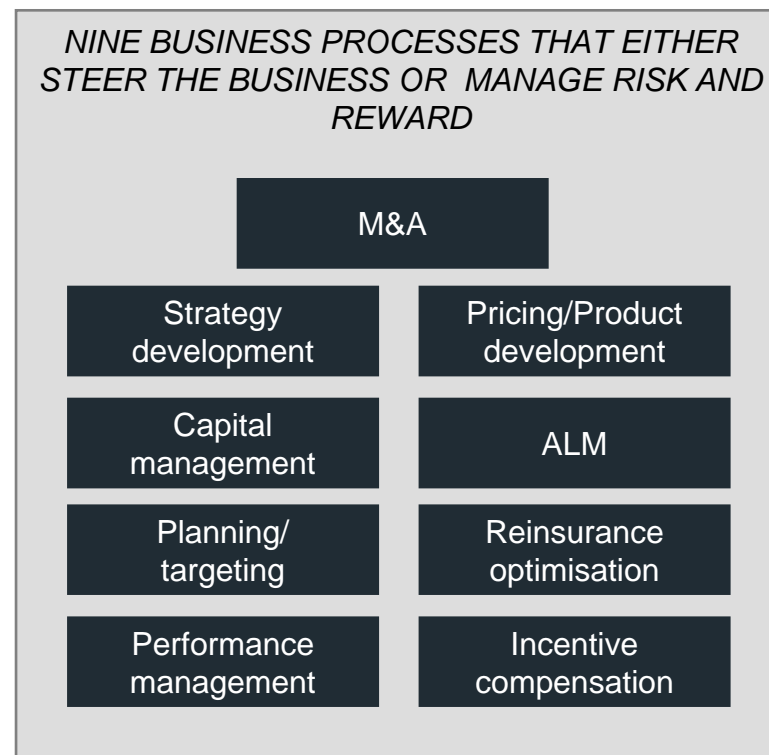
Economic capital needs to get out of the risk silo

# From risk silo to risk-based decision making

## RISK MANAGEMENT FRAMEWORK



## BUSINESS PROCESSES



## Thoughts on the use test

- 1 Economic capital needs to get out of the risk silo
- 2 Senior management sponsorship and engagement is key

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# Promoting a risk management and governance culture

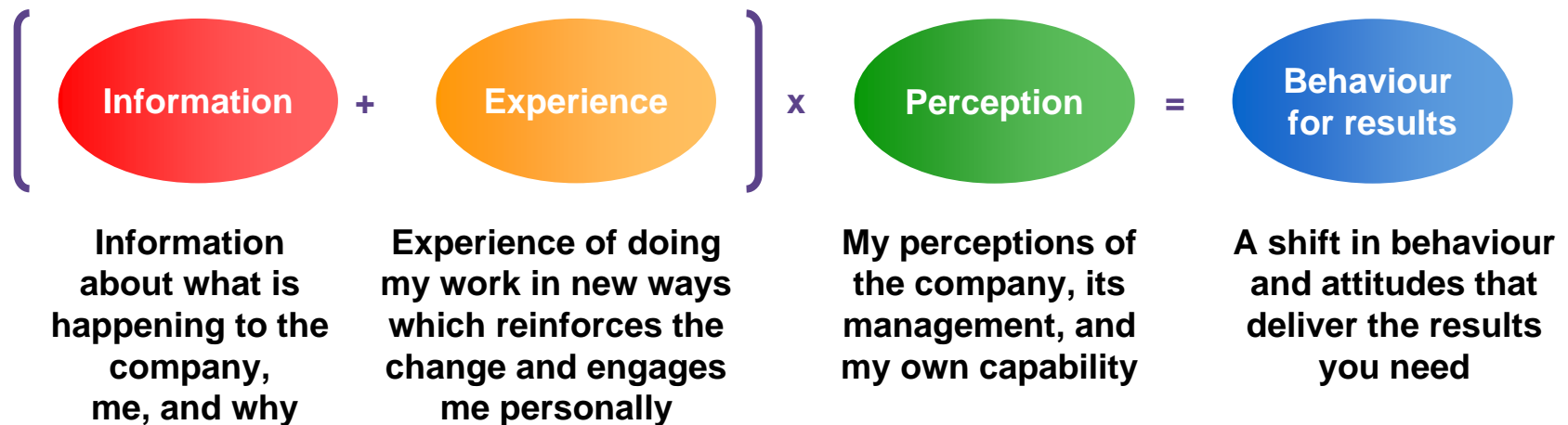
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## *Questions for senior management to consider*

1. *How can the board and senior management provide more effective and informed oversight of your firm's risks?*
2. *Are risk considerations given appropriate profile in your firm's business and strategic planning processes?*
3. *What should your firm be doing to realise the benefits of further integration of risk, capital and business management activities?*
4. *How can your firm improve the knowledge and understanding of your board and senior management to raise the quality of discussion and challenge on more complex matters?*
5. *Are your firm's risk appetite statements and risk policies sufficiently comprehensive and well understood and workable?*
6. *Does your firm have a clear view of how it wants to develop its risk management practices?*
7. *Are there enough opportunities for independent and informed challenge to risk management processes and outcomes?*
8. *Is there enough objectivity in your risk identification and assessment processes?*
9. *Does your firm's management information provide sufficient and timely material on risk issues and does it prompt appropriate action?*
10. *Is there enough clarity of how responsibilities for risk management activities are allocated in your firm?*

Source: FSA Insurance Sector Briefing: Risk Management in Insurers, November 2006, [http://www.fsa.gov.uk/pubs/other/isb\\_risk.pdf](http://www.fsa.gov.uk/pubs/other/isb_risk.pdf)

# Achieving changes in behaviour needs more than training



**The more people feel that they have had a chance to influence change the more accepting they are likely to be**

## Thoughts on the use test

1

Economic capital needs to get out of the risk silo

2

Senior management sponsorship and engagement is key

3

Risk dashboards help bring risk management to life

# Regular risk dashboards reporting helps make risk management accessible

| RISK DASHBOARD                                   |                       |   |  |   | DRAFT  |
|--|-----------------------|---|--|---|--|
| Executive summary                                |                       |   |  |   |  |
| Group Status by Risk                             |                       |   |  |   |  |
| Impact of risk stress                            |                       |   |  |   |  |
| £m   |                       | Capital<br>IGD<br>Free Surplus<br>(1 in 25) | Capital<br>QIS4<br>Free Surplus<br>(1 in 25) | Earnings<br>IFRS<br>Operating Profit<br>(1 in 10) | Earnings<br>EEV<br>Operating Profit<br>(1 in 10) |
| <b>Group Base</b>                                |                       | 1,192                                       | 1,252  | 812   | 2,023  |
| <b>Market</b>                                    | Fixed interest - Up   | 0   |  | -5  | 0  |
|  | Fixed interest - Down | -303  | -2,073                                       | -56   | -225   |
|  | Equity                | -244  | -1,789                                       | -95   | -158   |
|  | Currency              |   |  |   |  |
| <b>Credit</b>                                    | Credit                | -471  | -1,059                                       | 0   | -58  |
|  | Concentration         |   |  |   |  |
| <b>Insurance</b>                                 | Mortality & Morbidity | -31   | -618   | -10   | -76  |
|  | Longevity             | -510  |  | -116  | -120   |
|  | Persistence           | -30   | -565   | -9  | -169   |
| <b>Other</b>                                     | Expenses              |   |  |   |  |
|  | Operational           |   |  |   |  |
| <b>Total change<br/>(before diversification)</b> |                       | -1,589                                      | -6,104                                       | -290  | -807   |
| <b>Total change<br/>(after diversification)</b>  |                       | -1,589                                      | -6,104                                       | -290  | -807   |
| Risk appetite limits                             |                       |   |  |   |  |
| £m   |                       | Capital<br>IGD<br>Free Surplus<br>(1 in 25) | Capital<br>QIS4<br>Free Surplus<br>(1 in 25) | Earnings<br>IFRS<br>Operating Profit<br>(1 in 10) | Earnings<br>EEV<br>Operating Profit<br>(1 in 10) |
| <b>Market</b>                                    | Fixed interest - Up   | xxx   | xxx  | xxx   | xxx  |
|  | Fixed interest - Down | xxx   | xxx  | xxx   | xxx  |
|  | Equity                | xxx   | xxx  | xxx   | xxx  |
|  | Currency              | xxx   | xxx  | xxx   | xxx  |
| <b>Credit</b>                                    | Credit                | xxx   | xxx  | xxx   | xxx  |
|  | Concentration         | xxx   | xxx  | xxx   | xxx  |
| <b>Insurance</b>                                 | Mortality & Morbidity | xxx   | xxx  | xxx   | xxx  |
|  | Longevity             | xxx   | xxx  | xxx   | xxx  |
|  | Persistence           | xxx   | xxx  | xxx   | xxx  |
| <b>Other</b>                                     | Expenses              | xxx   | xxx  | xxx   | xxx  |
|  | Operational           | xxx   | xxx  | xxx   | xxx  |
| <b>Total change<br/>(before diversification)</b> |                       | xxx   | xxx  | xxx   | xxx  |
| <b>Total change<br/>(after diversification)</b>  |                       | xxx   | xxx  | xxx   | xxx  |
| Commentary:                                      |                       |   |  |   |  |



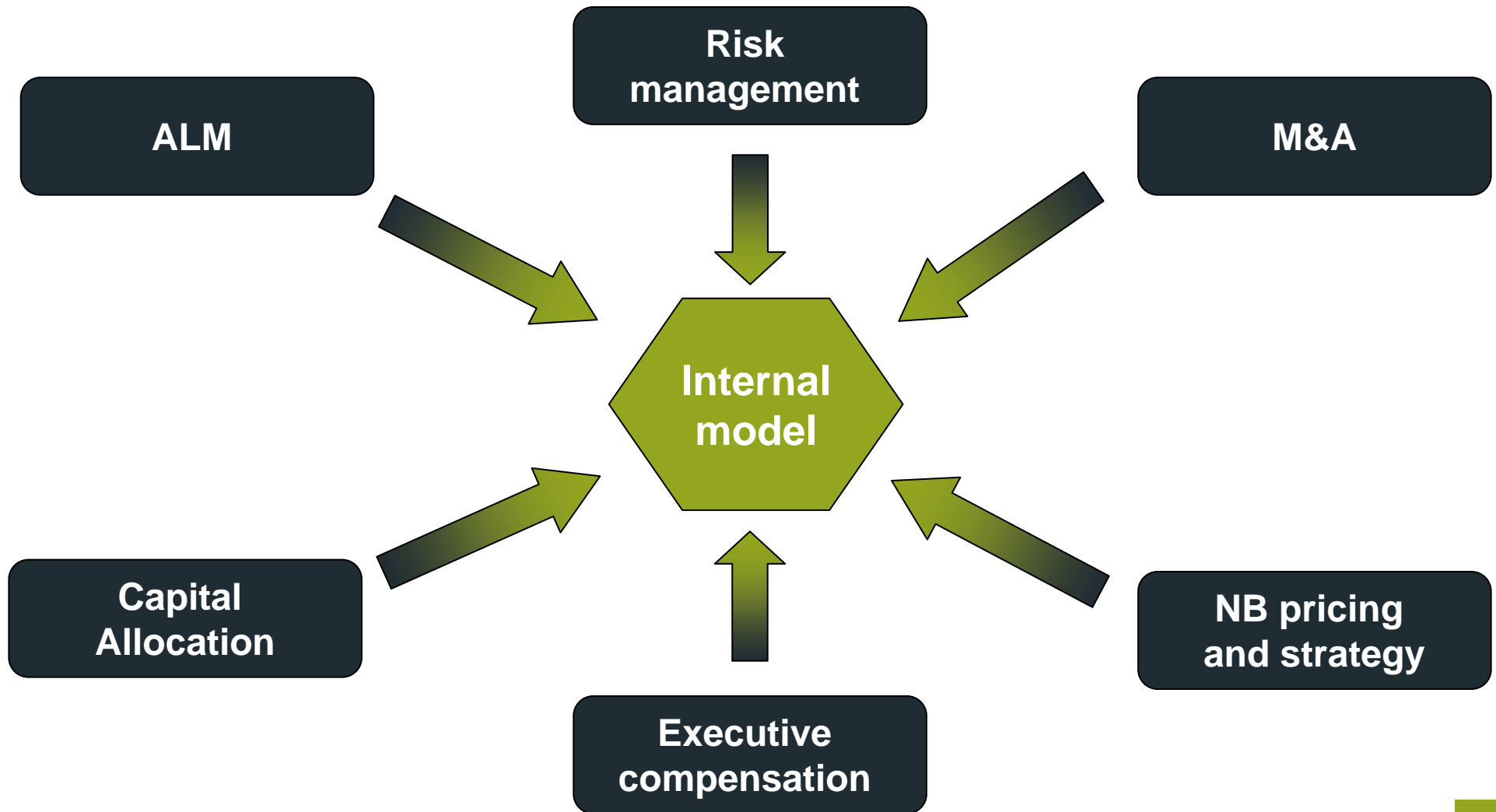
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# Thoughts on the use test

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- 1 Economic capital needs to get out of the risk silo
- 2 Senior management sponsorship and engagement is key
- 3 Risk dashboards help bring risk management to life
- 4 The Litmus Test: what difference does the IM make?

# The Litmus Test: Does the IM make a difference?



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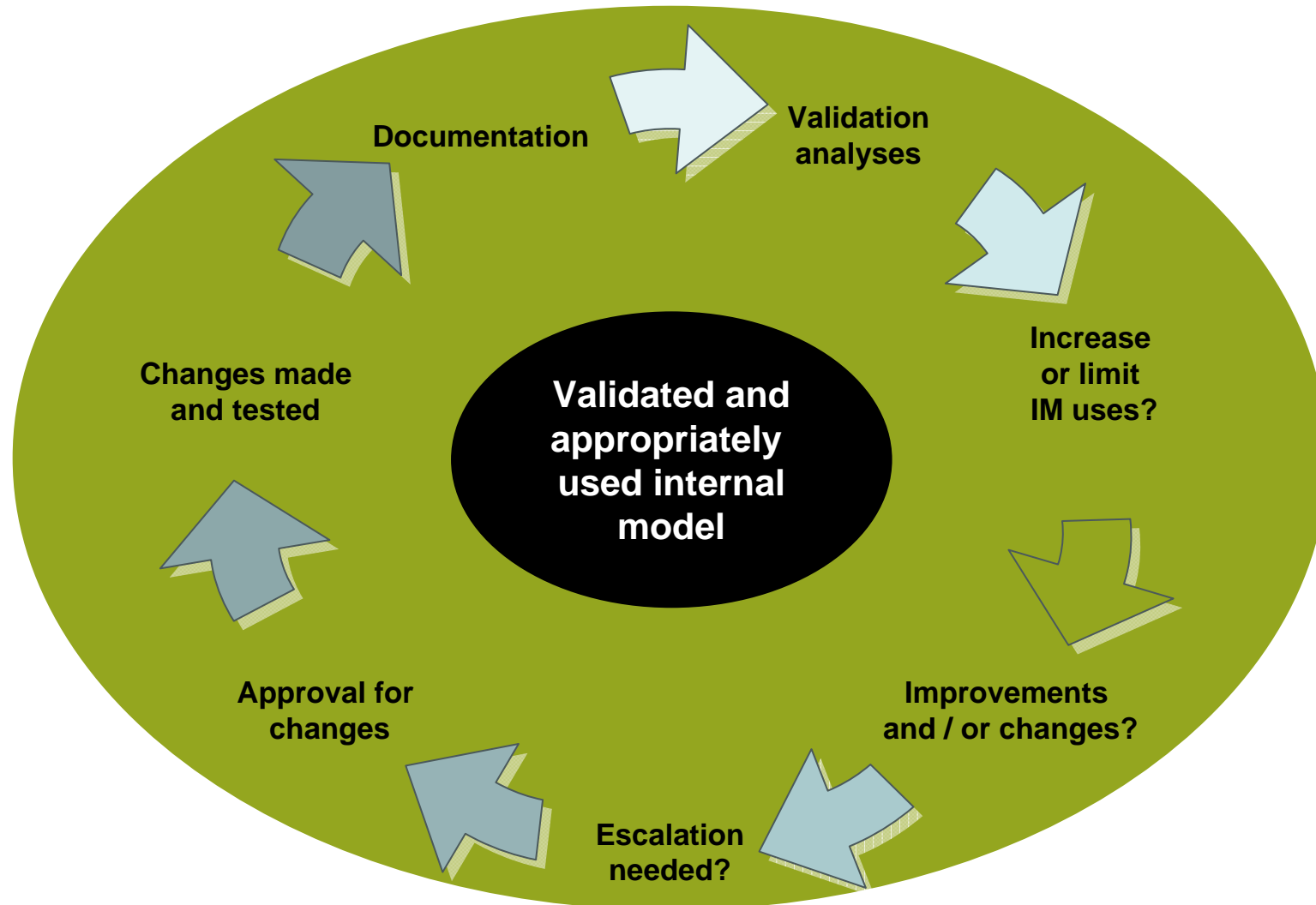
- Validation
  - Scope of validation
  - Governance
  - Escalation of validation results
  - Responsibilities in the validation process

# Scope for the validation exercise



**A formal validation policy will be needed**

# A continuous cycle of validation is needed



# The validation “tool box”

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- Sensitivity testing
- Stress and scenario testing
- Benchmarking
- Profit and loss attribution
- Backtesting
- Stability

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# Conclusion

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- Level 3 consultation will be informal
  - Comments and suggestions more than welcome
  - Need to be channelled through the key stakeholders, i.e. the ABI and CEA
- IMAP process will be as outlined in CP80
  - Initial self-assessment
  - Agreed plan and key milestone
  - Regular updates, meetings, desktop review and on-site work
- Use test
  - Key is taking economic capital out of the risk silo into the wider business and influencing key risk decisions
- Validation
  - Need a continuous cycle



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# Questions or comments?

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