The Actuarial Profession
making financial sense of the future

ICAS for small firms

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Overview

- The ICAS process
- Approach for small firms
- Base liabilities and assets
- Stress tests and aggregation
- Operational risk
- Documentation standards

Why did the FSA introduce ICAS?

- The ICA regime is designed to increase the use of modern risk management and risk measurement techniques.
- The FSA are placing increasing reliance on principles based regulation and senior management responsibility.
- The FSA wish to better understand the risks and appropriate level of capital for individual firms.

All of these reasons are relevant for small firms

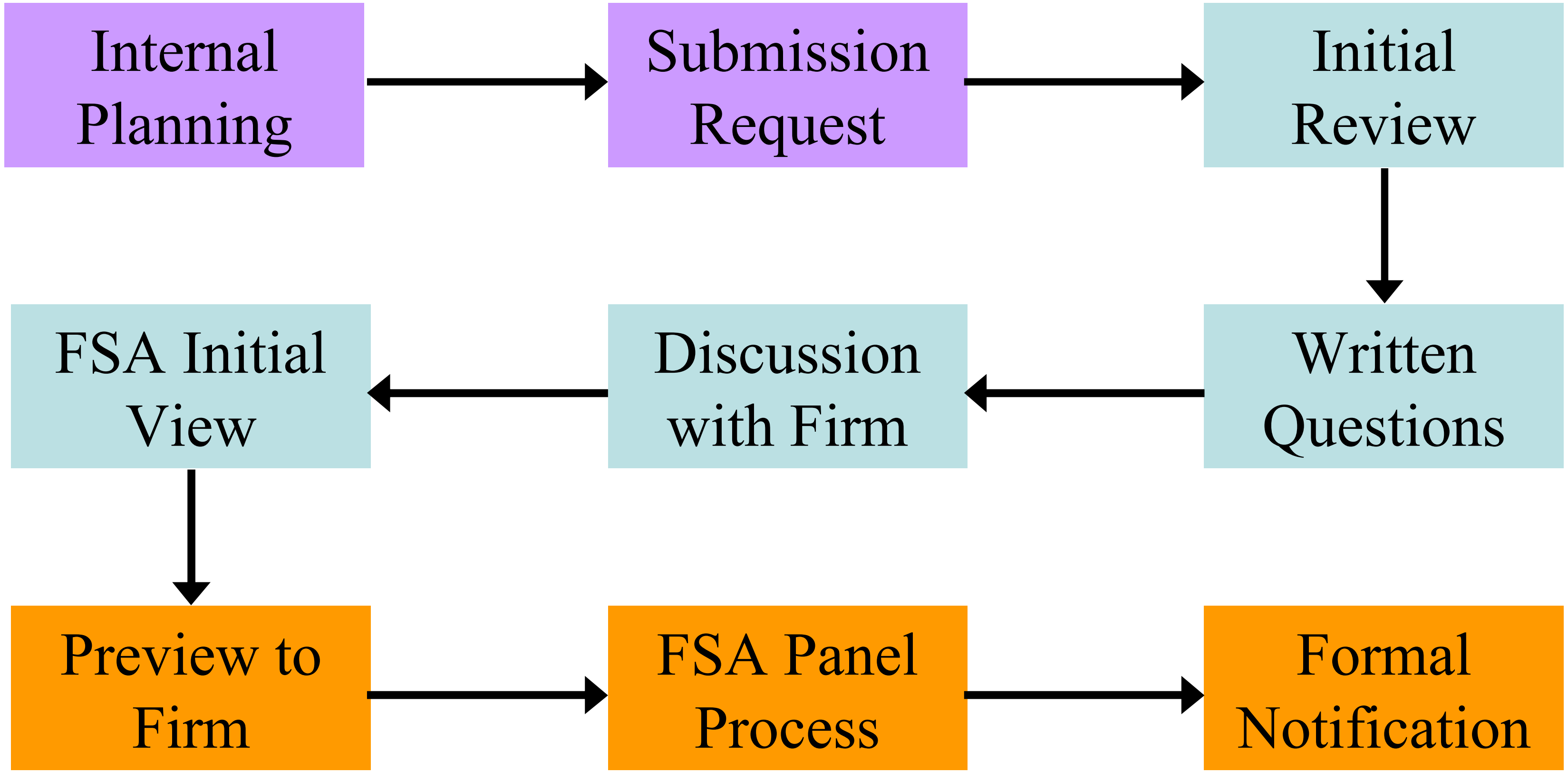
Where we are with the ICAS roll-out (10/06)

No. of Firms requiring Life ICAS	Total	MRGD	RFD	Wholesale	SFD
Total	96	23	45	15	13
Completed	44	18	24	2	0
Submission received and ongoing	18	4	9	4	1
Letter sent but submission not yet due	34	1	12	9	12
Awaiting start	0	0	0	0	0

Communication from the FSA

- FSA ICAS Sector Briefing
  - Published on 18 November 2005
  - CP06/16 contained ICAS Principles
  - There will be further communication before summer 2007

FSA Process – Steps



Link between ARROW and ICA's

- ARROW is the FSA's supervision tool
- Reviews occur over a 1 to 4 year cycle for each firm.
- We assess the risks a firm may pose to the FSA's objectives.
- The risk mitigation program (RMP) addresses some identified risks.
- The ICA is part of ARROW review of adequate financial resources

ARROW is not used for firms supervised within small firms division

What is not on our agenda?

- We do not prescribe methodologies and approaches
- The ICA regime is not RBS by the backdoor
- We do not use internal guidelines to set minimum stresses
- Capital may not be the chosen mitigant for all risks

Methodology

- Base assets and liabilities
- Stress tests
- Aggregation

Key requirement is that method chosen gives a firm the correct messages on risk management

Methodology – Base assets and liabilities

- Base assets included at market value ignoring admissibility rules.
- Base liabilities included at best estimate/market value ignoring prudential margins

Easy if a firm has an RBS – rather more difficult if not

Base liabilities – what methods are possible

- RBS: Asset shares plus cost of guarantees

OR

- Bonus reserve valuation
- Statutory liabilities less VIF
- Statutory liabilities less prudential margins
- Statutory liabilities without adjustment

Base liabilities = statutory reserves: issues

- Some assumptions are set prudently
- There is no explicit allowance for future bonuses
- There is no allowance for the time value of guarantees
- Expense allowances are implicit
- There is no allowance for lapses
- There is no allowance for management actions
- No credit is taken for the embedded value (VIF) of the business

Methodology – Stress tests

- ICA calculated from the capital required to withstand the increase in liabilities and decrease in assets in the appropriate scenario.
- FSA requirement that scenarios should be calibrated to be equivalent to a 1 in 200 one-year event.
- The 1 in 200 event should be set by its impact on your own balance sheet – how do you determine this?
- What management actions would you take if the stress occurred?

Methodology – Stress tests

- In small portfolios random fluctuations are very important. For example:
  - Mortality – 99.5% fluctuation stress in a portfolio of 250,000 lives is c+10% but in a portfolio of 25,000 lives it is c+30%
- For stresses such as mortality and persistency the stress should be applied at a sufficiently granular level.
- Expenses are particularly relevant in small firms and especially so where the firm is closed – we look to see sufficient scenario testing where this is the case.

Methodology – Aggregation

- Correlation approach must reflect stressed conditions
- Correlations between biggest risks are key
- Some risks diversify very heavily – need to ensure that you are not getting the wrong messages from these results
- The sophistication of non-linearity tests is increasing in large insurers

Operational risk

- This has been an area where we have seen some weakness
- We will apply add-ons where these are material to overall capital requirements
- In particular where a firm is seen to have made little effort to quantify its operational risk
- Sophisticated methods are not necessary for credible answers

Operational risk

- We expect firms to maintain a risk register and that this will be a major input into the ICAS
- Lack of loss data is not an excuse, since this problem affects large firms too!
- Institute of Actuaries papers reflect the practices of large firms but do give an idea of the direction small firms should be heading

Operational risk – common issues

- Badly defined boundaries between operational risk and other risks giving missed or double counted risks e.g:
  - Claim handling – operational or insurance
  - Expense overrun – operational or insurance
  - Becoming mis-matched – operational or market
- Ignoring low impact scenarios
- Not considering how controls operate in stress

Operational risk – common issues

- Scenarios which are too narrow in focus and do not allow for operational impacts
- Calibration of scenarios
- Assessments which are not forward looking in terms of business changes planned
- Interactions between operational risks
- Relationship with market risk

Current issues

- Add-ons and how they operate
- Use of RMP points where add-ons are not given
- Disclosure of ICG
- Commitments to pension schemes
- Outsourcing to service companies
- Dividends/coupon payments

Issues for small firms

- Lack of diversification
- Exposure to binary events such as failure of reinsurers
- Ability to manage expenses on a decreasing portfolio size/expense scenarios
- Outsourced AFH and board ownership of ICA
- Meeting our use test requirements

Documentation – What firms should demonstrate

- Board involvement with ICA
- Use test for outsourced calculations
- That production of the ICA is a business-as-usual process
  - Robust systems and controls
  - Use of audited results
  - Sensitivity resting
  - Analysis of change
  - Differences between Pillar 1 and Pillar 2 assets and liabilities
  - Management actions which have been agreed with the board
- That ICA is linked to risk management/risk register

Documentation – What firms should demonstrate

- That firms are in touch with industry thinking/best practice
- Sufficient technical detail to allow an informed review
- Differences between capital calculated at the firms own risk appetite and that at the FSA's defined risk appetite
- That stresses are selected on an individual basis
- That correlations are understood, are firm specific and have regard to stressed conditions
- That adequate stress and scenario testing has been carried out

Questions?