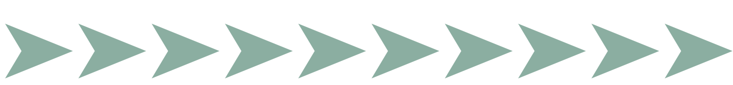
Financial Services Authority

Insurance Sector Briefing:

Risk Management in Insurers

November 2006



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Foreword

The recent changes in the insurance market and socio-economic environment have meant that the risks that insurers now find themselves facing have evolved. These range from volatile investment conditions, increases in longevity and mortality risks through to terrorism threats and climate change. As a consequence, stakeholder focus on these risks and the way in which they are managed has also sharpened. It is, therefore, increasingly important that insurers fully understand the risks to which they are exposed.

In line with our move to principles based regulation the onus is on firms' senior management to ensure that their risk management arrangements are effective. Allowing firms to determine the best means to achieve this recognises that risk management, and indeed regulation, is not a one-size fits all approach. This *Sector Briefing* sets out our thinking on current risk management practices and notes some areas that firms' senior management will wish to consider.

We first reviewed insurers' risk management practices in 2003 and at this time they were under developed. Since then, it is clear that some significant and encouraging progress has been made. However, we also recognise that firms may have dealt with the areas most easily addressed and that the further development that is needed will inevitably prove challenging. For many firms, moving from the identification and measurement of risk to the management of those risks in their day-to-day business operations is no easy task.

With regard to the improvements we have seen since 2003, our new risk-based capital adequacy regime under the ICAS framework has acted as one catalyst for change for some. But capital should not be viewed as the panacea for risk management practices. Indeed, we would expect ICAS to be used as one of many tools in an integrated approach to risk and capital management.

We believe that while ICAS may have placed us in good stead for the implementation of the European wide risk-based capital regime, to benefit fully from the implementation of Solvency 2 it will be vital that firms have in place a fully integrated risk and capital management framework across their business activities. This will be especially important for groups which are seeking to gain benefit from the diversity of their operations.

While we are pleased to see a closer relationship between risk and capital emerging, risk management should not be viewed only in the context of efficient use of capital. Considering whether customers have been treated fairly, by establishing TCF (Treating Customers Fairly) committees, is one example of a more holistic approach to managing risk.

We would like to see directors of firms using this *Sector Briefing* as a point of reference and hope that it provides a useful prompt for them to consider how effectively they are managing the risks in their businesses. For our part we will continue to monitor firms' progress through our day-to-day supervision and ICAS reviews.

Finally, I would like to thank the firms involved with this review for their help and co-operation.

Sarah Wilson – Insurance Sector Leader

1. Executive Summary

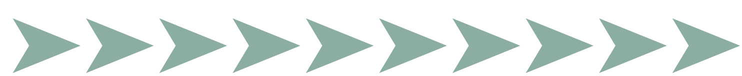
1.1 In our *Insurance Sector Briefing: ICAS – one year on*[1] we committed to conducting a thematic review of firms' progress in developing their risk management practices and to determining the extent to which Individual Capital Adequacy Standards (ICAS) had brought about improvements. This *Sector Briefing* reports on the key findings from our review.

1.2 We previously reviewed firms' risk management practices in 2003. Since then, it is clear that practices across the sector have evolved. This review's focus has been less on what processes firms undertake, and much more of the effectiveness of those processes. As such we have presented matters for board and senior management consideration where we feel there is the greatest commonality of issues.

1.3 We have identified five key areas for boards and senior management to consider:

- **Governance and oversight**: There has been progress by many firms in enhancing their governance and oversight of risk management but there are still areas where further improvements may be needed, for example boards' self-assessments of skills. While most firms now have a more developed network of oversight committees, frequently members of those committees lack appropriate knowledge and experience to provide sufficiently informed challenge on risk matters.
- **Risk appetite**: Most firms have documented their approach to risk management through risk policies, procedure manuals and risk appetite statements. However risk appetite is not well understood in many firms to a level of clarity that provides a reference point for all material decision making. There is a big step between defining and applying risk appetite, particularly for operational risk.
- **Implementing risk management**: Risk management activities often lack consistency of approach or are disproportionately focused on particular risk areas. Inadequate challenge on risk issues may limit the extent to which the board, senior management and the FSA can rely on outputs. Some risk management functions do not appear to be going beyond co-ordinating risk management activity.
- **Management information**: Lack of insightful analysis in many firms restricts the ability of management to identify trends and appropriately prioritise risk mitigation activity.
- **Impact of ICAS**: We are pleased with progress in the development of quantification techniques for risk-based capital; but for many firms there is still much to do, particularly to improve board and management understanding of risk-based capital.

1 ICAS – one year on, November 2005. http://www.fsa.gov.uk/pubs/other/isb_icas.pdf



1.4 Overall, the industry has made substantial progress. However, most firms have further to go to improve the effectiveness of their risk management frameworks. Whereas other sectors of the financial services industry were previously considered to be further advanced than the insurance sector, the gap is now closing. But no sector is standing still. Risk management is developing rapidly as a discipline, and views of what forms good practice have moved on since our 2003 review.

1.5 One of the most encouraging changes that we have observed since 2003 is that more firms are now recognising the commercial benefits of robust risk management – previously many insurers had considered risk management to be a compliance activity. Good risk management is now increasingly seen as an integral part of 'business as usual' rather than a set of discrete activities, carried out with the regulator in mind.

Next steps

1.6 We would like firms to use this *Sector Briefing* to review where they are, relative to our findings, in developing their overarching risk management frameworks. We set out below a series of questions which senior management may wish to consider when reviewing the effectiveness of their own risk management practices.

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?*

2003 review

2.1 In October 2003, we published a report entitled *Review of UK Insurers' risk management practices* ('2003 report')[2]. This presented the findings of a review of risk management practices in 39 firms from across the sector.

2.2 The 2003 report commented on the practices of firms, and highlighted the following areas where further improvements were needed:

- the development of risk management processes by many firms appeared to be treated largely as a compliance matter to meet our requirements, and not as a means to deliver more effective risk management;
- there was often no segregation between risk-controlling, risk-identifying or risk-analysing activities, even in some larger firms;
- a significant number of firms had not clearly defined their risk appetite;
- management information did not always include analysis of risk and even when it did, there were shortcomings; and
- the use of modelling as a risk and capital management tool was in its infancy.

2.3 Since 2003, the Integrated Prudential Sourcebook (PRU) has come into effect for insurers and most insurance firms are now required to undertake regular Individual Capital Assessments (ICAs). By the end of June 2007, we intend to have reviewed all ICAs at least once and to have issued Individual Capital Guidance (ICG) to all of these firms. In addition, the prudential requirements governing risk management are supplemented by the rules and guidance in Senior Management Arrangements, Systems and Controls (SYSC).

2006 review

2.4 Our Principles for Businesses put the onus on senior management to set the standards for their risk management processes.[3] Risk management is part of a coherent, interactive set of management arrangements whose effectiveness depends in part on the internal and external environment for a firm at any point in time and, since 2003, risk management standards have developed significantly.

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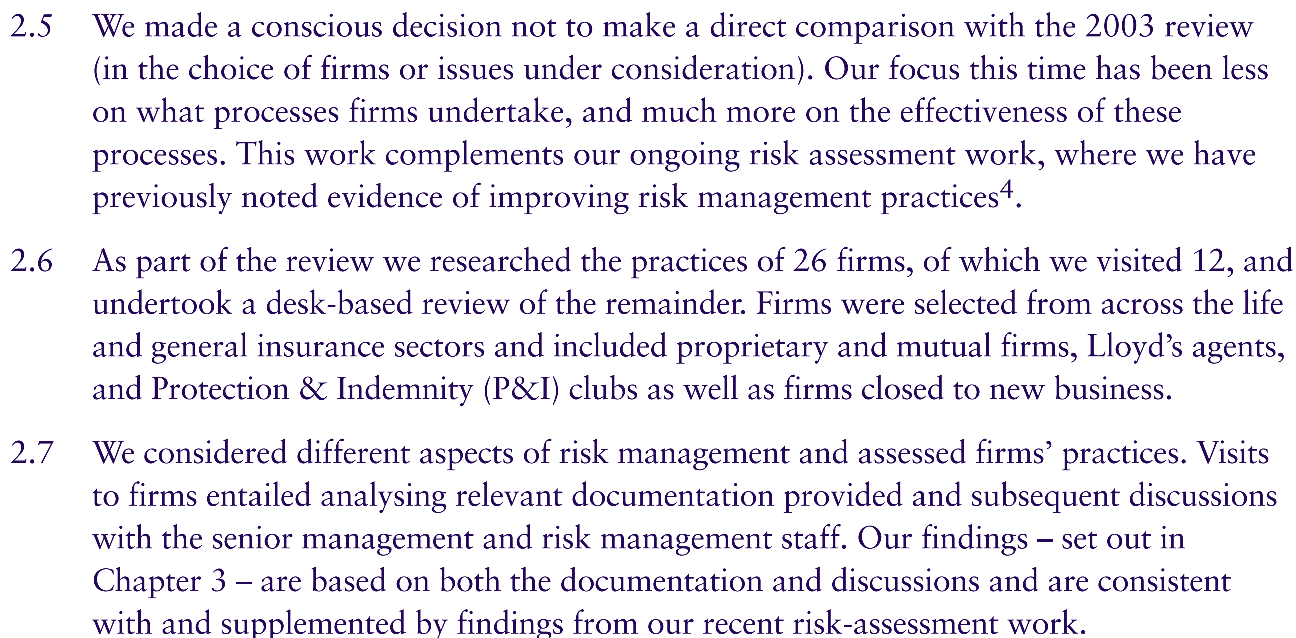
2 Review of UK Insurers' risk management practices. http://www.fsa.gov.uk/pubs/other/review_ins_risk.pdf

3 Principle 3. A firm must take reasonable care to organise and control its affairs responsibly and effectively, with adequate risk management systems.



2.5 We made a conscious decision not to make a direct comparison with the 2003 review (in the choice of firms or issues under consideration). Our focus this time has been less on what processes firms undertake, and much more on the effectiveness of these processes. This work complements our ongoing risk assessment work, where we have previously noted evidence of improving risk management practices[4].

2.6 As part of the review we researched the practices of 26 firms, of which we visited 12, and undertook a desk-based review of the remainder. Firms were selected from across the life and general insurance sectors and included proprietary and mutual firms, Lloyd's agents, and Protection & Indemnity (P&I) clubs as well as firms closed to new business.

2.7 We considered different aspects of risk management and assessed firms' practices. Visits to firms entailed analysing relevant documentation provided and subsequent discussions with the senior management and risk management staff. Our findings – set out in Chapter 3 – are based on both the documentation and discussions and are consistent with and supplemented by findings from our recent risk-assessment work.

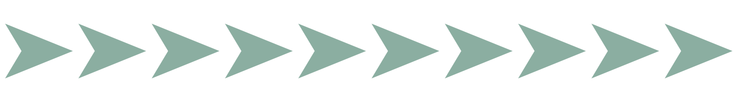
Who should read this Sector Briefing?

2.8 This document should be of most interest to senior management in insurance firms, and those responsible for the management of risk in firms. It may also be of note to analysts and auditing firms.

2.9 We hope that this *Sector Briefing* will prove helpful to the industry in identifying priority areas for the future development of cost-effective risk management practices, delivering benefits that go beyond the narrow aim of regulatory compliance. We have included a number of case studies to illustrate how some firms are addressing the issues we have identified. Whilst we recognise that there is no 'one-size fits all' approach, we hope in providing these examples that we are helping to share good and poor practices. It is, however, a matter for each firm's senior management to interpret our findings in the context of their own business.

2.10 Although this *Sector Briefing* is not a Consultation Paper and firms should not interpret its contents as general guidance, we are interested in any comments which you may have on the feedback we are providing. If you would like to comment, please contact the Insurance Sector Team at insurancesectorteam@fsa.gov.uk. Firms who wish to discuss issues relating to their firm should speak to their usual supervisory contact.

4 'Challenges for the Insurance Industry' Speech by David Strachan, Insurance Sector Leader, FSA European Insurance Roadshow 2005: 14 October 2005 http://www.fsa.gov.uk/pages/Library/Communication/Speeches/2005/1014_ds.shtml



3. Areas for board and senior management consideration

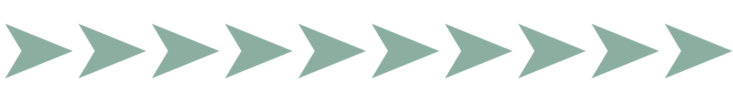
3.1 We have identified five areas where we believe there is scope for further improvements to be made. These are:

- governance and oversight;
- risk appetite;
- implementing risk management;
- management information; and
- impact of ICAS.

3.2 This chapter notes our observations for each of these areas in more detail.

a. Governance and oversight

Areas of positive development	Observed shortcomings
• Since our 2003 review, there has been steady progress in firms' recognition of the business benefits of sound risk management. • Most boards understand their responsibilities for adequate systems and controls over risk management. • Risk management is now frequently an explicit component of many individual roles. Indeed, in some firms, it is difficult to separate risk management activities from other business activities. • There is increasing consideration of risk implications as part of business planning and monitoring. • ICAS has given many boards new and useful insights into the characteristics of their firms' risk profile and the capital implications.	• Few firms incorporate plans for developing their risk management framework as part of their periodic strategic and business planning. • Whilst many firms have developed appropriate committee structures to oversee risk management, some boards have placed undue reliance on the work of these committees. • Only a minority of boards and committees regularly self-assess the overall effectiveness of their oversight of risk management.



This section considers the effectiveness of governance arrangements in relation to firms' risk management activities.

Issues to consider

Sound risk management is a business-critical issue

3.3 Effective risk management increases the prospect of business objectives being achieved, whereas neglect of these responsibilities can have consequences for senior management and fair treatment of customers, with resulting damage to the business. So we place significant emphasis on senior management taking responsibility for their firms' systems and controls and, in particular, assessing and managing risk. The effectiveness of processes and procedures to maintain adequate controls is also of equal importance.

3.4 Firms who can manage their businesses well and demonstrate effective risk management processes and procedures are likely to receive less regulatory attention.

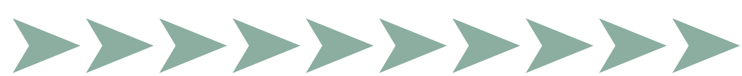
3.5 In our 2003 report we concluded that a significant number of firms had designed risk management processes primarily to meet our rule requirements. Good risk management was rarely thought of as a possible route to improved commercial effectiveness and performance. In this review the picture appears to have improved significantly. The level of buy-in to risk management by boards and senior management is demonstrated in a number of ways. For example, risk management is a regular agenda item at board meetings in many firms. Risk is also becoming more of a factor in business planning and performance reviews, although in a minority of mostly smaller firms, risk assessment is not part of the business planning process. A few firms had also developed risk frameworks long before the introduction of FSA rules and guidance, but managing the full range of risk exposures across the business was a relatively new concept for many.

3.6 Despite these welcome developments, many insurance firms still appeared to lack a vision of how they want to develop their risk management frameworks. Development activities were often remedial rather than progressive. We would like to see more firms including planning for improvements to risk management as part of their regular strategic and business planning exercises.

Case Study A – Business planning

The five-year business plan of a group included a section dedicated to its key business risks. It referred to people risks, process and systems risks, and macro-economic environment risks, amongst others. It also focused on the controls relating to these risks that would be essential to achieve its strategic objectives for its five-year business plan.

This document was supplemented by an appendix that provided more detail on the mitigation for each key risk. It described the impact and probability of key risks before and after the impact of controls, together with trends over time and the potential for emerging risks.



3.7 The use of risk-based capital is at a relatively early stage in most firms. We were, however, encouraged to note the comments of many board members that ICAS had given them new and useful insights into the characteristics of their firms' risk profile and the capital implications. In turn, this understanding of the links between risk and capital had improved their understanding of the contribution of risk management to the overall management of the business.

3.8 In contrast, we observed a few cases where board appreciation of the capital implications of its risk profile was much less developed – as evidenced by cursory board discussion of the ICA and limited engagement during its preparation. Such approaches compromise the credibility of the risk-based capital assessment itself, as well as limiting management ability to prioritise its activities or to focus on efficient use of its capital. This is to the detriment of the firm, its customers and its owners.

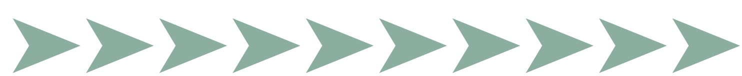
Delegation of risk management oversight needs to be appropriate

3.9 Around three-quarters of the firms in our review had established a risk committee, compared with just over half in 2003. This finding is consistent with our expectations, based on the size, activities and risk profiles of the firms in our sample. In contrast with audit committees, for example, we found that in most cases risk committees were made up of executive directors only. For most firms, this may be an appropriate approach to adopt, so long as the culture encourages contributions from all levels and provides effective challenge.

3.10 We are also mindful that, for many small firms, it is not possible to establish a network of oversight functions and committees. For such firms, the closely-knit and informal approach to management means that the leadership is often well informed about risks and issues in their business. But this does not mean that there is no scope for periodic, perhaps externally supplied, assurances on key processes as part of the firm's approach to oversight.

3.11 In many of the firms with risk committees, these have become more focused on high level oversight since our 2003 review. For example, in the last few years, the role of some risk committees has moved from identifying and managing operational risk to consideration of the firm's full range of risk exposures. This reflects increasing management awareness of the importance of understanding all the factors that can affect future business performance.

3.12 There are a number of possible reasons for this shift of emphasis. Firstly, as the underlying risk assessment processes have themselves developed, in particular for operational risk, the role of the risk committee has been able to move towards assessing the output from the risk assessment process rather than overseeing development of the process itself.



3.13 Secondly, in some firms, risk committees found themselves out of their depth when considering technical risk issues, such as insurance underwriting exposures. Consequently, there was often more of a focus on detailed operational risk issues. To overcome this, increasing numbers of firms have passed responsibility for oversight of specific risk areas to other, often newly constituted, board committees. For example, there may be asset and liability committees for financial risks, comprising relevant technical experts. The risk committee can then focus more on high-level coordination and challenge to risk management activities.

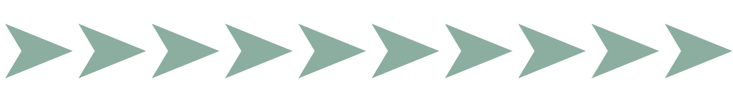
3.14 When the remit of the risk committee does not extend across all risk areas, it is still important that risk management activities come together effectively through some other part of the governance structure. We have concerns that in some firms there are significant gaps or inconsistencies in the oversight of some specific risk issues. This could lead to senior management being unsighted on specific areas/risks. The use of committees should support, and not replace, board involvement in the most material matters for the firm.

3.15 Effective coordination is particularly relevant to insurers who are exposed to a large number of 'boundary risks'. Risks such as those in claims management, for example, can have implications for both operational and insurance risk management activities. This is particularly important as arguably there are more boundary risks in the insurance sector than in other sectors.

3.16 In the case of firms whose risk management is coordinated at group level, we expect the firm's management to exercise appropriate oversight over the risk management processes and satisfy itself of the appropriateness of such processes. In such cases, a group risk function can enhance the process, for instance by monitoring aggregate risk levels and providing local advice. But the firm's governing body also needs to oversee its risk management, including setting risk appetite at a level that is appropriate for the firm.

Reviewing the effectiveness of risk management oversight is important

3.17 We recognise that many aspects of risk management processes are complex and it is not necessary, and indeed not possible, for every member of the board to be fully technically competent in all risk areas. But to make effective individual contributions every board member should maintain at least a minimum level of understanding of all key issues and processes within the business. This may pose a recruitment challenge for some firms, but there is a role for executive management, not only in supplying or facilitating an induction programme and training and development, but also in helping governance bodies to assess, and regularly reassess, their individual and collective development needs.



3.18 In the firms that we visited, there appeared to be a growing recognition of the importance of Internal Audit having organisational independence from risk management to provide objective oversight. But in some firms the risk and audit functions were combined. Where the firm does not have an Internal Audit function, or where it has combined audit and risk responsibilities, we would encourage it to consider the use of external resources to provide assurance on the quality of material internal controls.

Case Study B – Governance and oversight

During an ARROW risk assessment, we identified weaknesses in a medium sized firm's governance of its risk management framework. While its risk register seemed reasonably comprehensive, it lacked any process for ranking or rating risks. Also, there was no process for escalating overdue action points. As a result, the board was not in a position to know which were the key risks and how planned mitigation was taken forward.

As required by the risk mitigation programme, the firm's board has now taken a series of steps to deal with these weaknesses. This has included assigning owners to all risks and controls, improving management information (MI) to show the inter-relationship between different types of risks, and reporting overdue action points. In addition, the board established a risk committee to provide greater oversight of the risk management process. Overall, these steps have improved the governance, as well as ensuring greater prioritisation of risk management and greater assurance for the board about the status of risks and controls within the business. In cases such as this, we can place more reliance on the effectiveness of the board's oversight of risks to use more proportionate and less intrusive regulatory tools to mitigate the risks to our objectives.

b. Risk Appetite

Risk appetite defines the level and nature of risks to which the board considers it is acceptable to expose the firm. It therefore defines the boundaries of activity that the board intends for the firm. It is an essential component of risk frameworks.

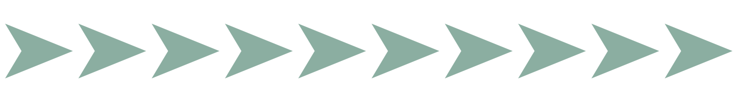
Areas of positive development	Observed shortcomings
• Firms often define risk appetite separately for different categories of risk. • Risk appetites are most commonly applied in areas such as underwriting and investment. Typically, firms use risk appetites that are derived directly from their authority limits. Such approaches appear to work well and are being appropriately monitored. • Regularly reviewing risk appetites, particularly in the context of risk-based capital assessments, has helped to make it easier for some firms to apply them more widely to their businesses.	• Producing meaningful statements of risk appetite has posed significant challenges for many firms. • Although most firms have defined their risk appetites, there has been slow progress by boards and management to go beyond definition and apply them a point of reference for material decision making. • Many firms have not cascaded their appetite statement to operational and technical staff. • Applying a risk appetite to operational issues has proved challenging for most firms. • Only a few firms to date, as part of their embedding of the ICAS process, have considered establishing a link between their risk appetites and their management of solvency. • Some firms have not consistently monitored adherence to their risk appetites or reviewed them for some time.

Issues to consider

Are definitions of risk appetite usable as a basis for decision making?

3.19 There are many different ways to describe what is meant by 'risk appetite'. A good statement should make clear its tolerance levels and be capable of being used as a trigger for escalation or notification of issues to senior management. This could be in terms of monetary aggregate loss or in non-monetary terms such as the number of incidents or complaints.

3.20 To be effective management tools, firms need to take risk appetites beyond written definition and actively promote them to create a common understanding throughout their business.



3.21 All firms in our review had defined their risk policies and their risk appetites for their principal risk categories – as required by our rules[5]. Most of these had done so in terms of simple, monetary statements. This represents progress since our 2003 review, when only around 50% of firms in our survey had defined their risk appetite.

3.22 However, we found that compiling meaningful risk appetite statements has posed significant challenges for many firms, such that we saw few fully effective examples in this review. Many of the risk appetite statements in place would be difficult to relate to the range of decisions that managers would need to take. It is easier to define risk appetite in some business areas than others. For example, in the case of underwriting risk exposure the risk appetite concept is often readily understood and translatable from existing underwriting controls and practices.

3.23 However, operational risk presented a common area of difficulty. This is partly because many operational risks are risks that firms do not take on deliberately as they are an integral part of day-to-day operations. It was apparent that some firms do not attempt to articulate their appetite for operational risk, even though they may have comprehensive processes for its oversight. This is a situation that we have also found to be prevalent across other financial services sectors, notably in the banking sector.

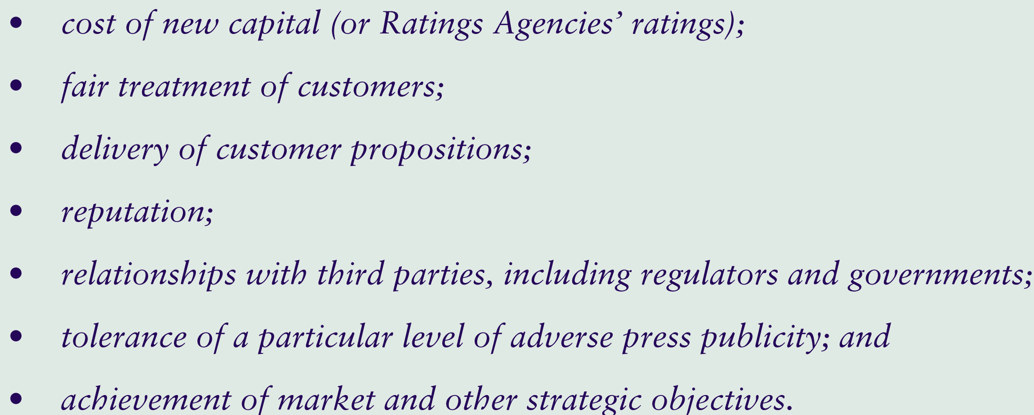
3.24 More generally, firms have found it difficult to derive statements of risk appetite that have practical application to issues that have more than monetary implications. But we have seen examples where firms have attempted to develop broader appetite statements (*see box 1*). These types of broader approach to defining appetite can be particularly helpful for management as it can provide the criteria for more thorough evaluation of business decisions.

Box 1 – Risk appetite

Some firms have considered their risk appetite in the context of the extent of 'damage' that they are prepared to accept in all areas that underpin their strategic objectives. A discussion of what factors are important to a firm, in addition to quantum of capital may therefore be a useful starting point for considering risk appetite statements. Such factors may include (in no particular order):

- *ease of capital raising;*
- *returns to shareholders, debt-holders and customers;*

5 SYSC 14.19R (PRU 1.4.19R)



- *cost of new capital (or Ratings Agencies' ratings);*
- *fair treatment of customers;*
- *delivery of customer propositions;*
- *reputation;*
- *relationships with third parties, including regulators and governments;*
- *tolerance of a particular level of adverse press publicity; and*
- *achievement of market and other strategic objectives.*

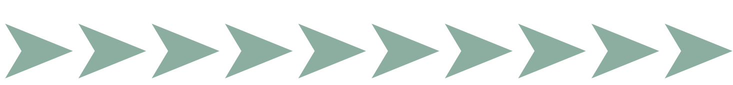
3.25 We have found that only a few firms have considered establishing a link between their risk appetites and management of solvency, as part of embedding ICAS. Some have defined their risk appetite as their desired ICA figure for a particular risk type. While we understand why some have opted for such a definition, this may not be enough to guide the day-to-day management of the business.

Are levels of risk appetites regularly reviewed?

3.26 Several firms have found that defining and embedding workable risk appetites usually requires several iterations. Regular reviews of risk appetites help to maintain or improve the relevance of the appetite to the business and may also improve operational efficiency by sharpening up decision making processes.

3.27 Where risk appetites were being actively monitored and reviewed, we observed wider use in daily business operations, including business planning and risk management. Effective reviews need timely and relevant MI for boards and management to determine whether, and at what cost, appetites are being adhered to. We have seen examples of where such information has helped to inform planned reviews or initiate them when material loss events have exceeded appetite levels.

3.28 Too many firms, however, did not appear to have consistently reviewed their risk appetites for some time, in some cases for more than one or two years. This not only potentially denies the firm the opportunity of enjoying significant commercial benefit, but inappropriately defined, or poorly applied appetite statements, may lead a firm to accept risks that ultimately threaten its market positioning. Senior management responsibility in this area appears to us to be more of a strategic than regulatory imperative.



Case Study C – Defining risk appetite

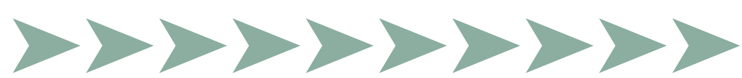
A medium sized firm recognised the commercial benefits of improving its risk management, but had experienced difficulty in developing its processes.

Whilst it had developed comprehensive risk policies, its management had found it difficult to define its risk appetite in a meaningful way, especially for operational risk. It first attempted to express its risk appetite in quantitative terms but found some risks, such as reputational risk, difficult to quantify, and the numbers were not well understood throughout the firm. Instead the firm fell back on very general statements that it believed staff would understand and apply better. At this current – and incomplete – state of development, the business has been left without a clear and common understanding of the risk appetite that its management can use in their everyday activities.

Until the firm finds a practical way to express the limits of its risk tolerance, we believe that senior management, and particularly the board, will struggle to determine efficiently and consistently the appropriate level of mitigation for some of the firm's risks.

Although the firm has yet to overcome its difficulties in defining risk appetite, this has not been due to lack of risk management resource or senior management commitment. Indeed, both the risk manager and senior management seem highly committed to developing further effective risk management processes in the firm.

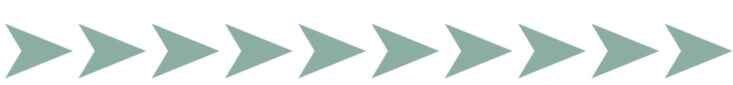
We continue to encourage the firm to successfully conclude this work so that it has a clearly defined risk appetite.



c. Implementing Risk Management

There is no single 'right' way for different firms to operate their risk management frameworks. To determine the most effective arrangements, firms need to consider the scale, nature and complexity of the risks to which they are exposed.

Areas of positive development	Observed shortcomings
• In most firms with an independent risk management function this provided impetus and focus for risk management activity. • Some firms without a dedicated risk function had achieved this impetus by other means, such as a well-coordinated sharing of responsibilities among senior managers. • We found evidence of increasing recognition of the importance of independence of risk function judgement, from internal audit and compliance in particular. • Longer established risk management functions have tended to become more strategic in their role. • While a few firms did not formally segregate the internal audit and risk functions, some of these firms had arrangements for independent review of the risk function/framework, by non-conflicted audit staff. • In many cases, the work of the Internal Audit and risk functions appeared to inform the other without inappropriate reliance by one on the other.	• Some risk management functions do little more than coordinate risk management activity without providing challenge or analysis. • Board members and senior managers are sometimes unaware of the limits of the remit of their risk management functions, and may therefore place inappropriate reliance on outputs. • Some risk management functions are disproportionately focused on certain risk types, particularly operational risk or, occasionally, insurance risk.



Issues to consider

The effectiveness of risk management arrangements

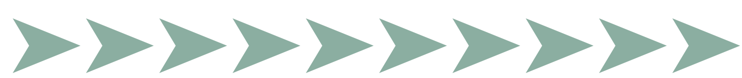
3.29 As noted earlier, risk management as a management discipline has developed considerably since 2003, both in the insurance sector and in the wider financial services industry. Most firms have carried out full risk assessments more than once, and have modified their approaches based on their earlier experiences and now have a 'top down' and a 'bottom up' risk assessment process.

3.30 The roles undertaken by a risk function in larger firms are often reflected in the duties of individuals in a smaller firm where a separate risk function cannot be cost-justified. For example, some smaller firms with less centrally-based risk resources involve local business area senior managers in coordinating risk management processes in their areas. Others have achieved this by giving different individuals responsibility for specific risks across the whole business, each reporting to a risk committee. Therefore, many of the comments that follow can apply equally to all firms.

3.31 Typically, the head of risk and/or the risk function has been able to step back from driving the process to a role of leading and coordinating the overall activity. This has happened most successfully where staff have been properly trained, and where there has been support and ownership from management across the organisation.

3.32 Whilst firms have made progress in ensuring assessments cover all their risks, we noted some exceptions. For example, strategic and regulatory risks were not included in some cases. However, most firms have made good progress in developing their classification of risk, enabling them to identify common root causes and aggregate exposure levels across their organisations.

3.33 In a number of firms we observed a tension between risk functions' roles in assisting operational areas identification and assessment of risk on the one hand, and providing analysis and challenge on the other. For example, we observed that risk teams often spent considerable time facilitating risk discussions and recording data. Also many group functions were primarily acting as aggregators of information. As risk frameworks bed down and mature, we would expect the focus of the risk function to turn increasingly to governance aspects, in particular supporting the board and senior management by providing informative and validated risk information that aids decision making.



3.34 In our view, boards should be aware of the boundaries of the responsibilities of their firms' risk functions, so that they know how much reliance to place on their outputs. We have often found that this is not the case.

Case Study D – Risk management effectiveness

When assessing an insurer's risk management processes, we found that it had devoted considerable time and effort to developing and linking its risk management, strategy, risk capital, risk appetite and business decision making. However, weaknesses remained, including:

- a failure to capture risk management information across all of its risks;
- risk information being partly held centrally and partly locally;
- a lack of integration of the firm's 'bottom up' and 'top down' processes for identification; and
- the risk management function was not involved in all of the firm's major projects.

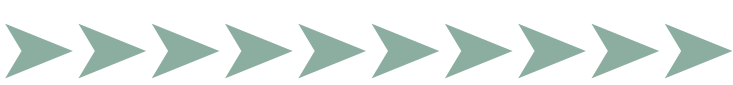
Many of the weaknesses were attributable to limitations in the firm's IT capabilities; in this case an inadequate platform for the capture, storage, analysis and communication of risk information. This inadequacy meant that much risk management effort was wasted, either through the lack of appropriate information or in the development of 'workarounds' to overcome the lack of central capability.

In this case we place significant emphasis on senior management responsibility to ensure that their systems and controls are effective.

3.35 It is critical that those involved in risk management are able to take an objective view. Consequently we provide robust challenge to firms whose organisational structure suggests that such objectivity could be compromised. Our latest review found an increasing recognition of the importance of an element of objectivity in risk management processes.

3.36 Many firms commented that one of the major challenges in building an effective risk function had been obtaining and sustaining recognition from business areas of the benefits of risk management processes to their day-to-day activities. Several firms that have overcome this issue have heads of risk or risk managers who have the visible support of the board and senior management and wide access within the organisation.

3.37 We observed several risk functions that worked effectively with business areas to help risk identification and analysis processes. Others had dedicated risk managers who spent time liaising directly with business areas, with the result that highly risk aware cultures had developed. In such firms, risk management activities were seen as part of 'business as usual'.



3.38 Several firms commented on difficulties in recruiting and retaining high-performing and experienced risk management people with insurance backgrounds because of their limited availability.

3.39 While we are increasingly seeing ‘professional’ risk managers, with broader skills these individuals often lack specific insurance experience. In our view this brings a healthy cross-fertilisation of good practices from other industries, but such individuals need to be well supported in their roles and in their personal development.

Is there appropriate oversight and coordination exercised over all risk types?

3.40 We observed in some firms that the remit of the risk function was limited to certain types of risk, with responsibility for the assessment of other risk types being apportioned elsewhere. Most commonly, this limited remit was for operational risk, although we encountered cases where insurance risk was either the primary focus of the risk function, or, conversely, excluded from the function’s oversight. Typically, this pattern of allocation of responsibilities is symptomatic of the presence, or absence, of particular skill sets in the risk function. Where this arises there is a potential for lack of overall coordination of risk management activity, although we did see cases where this has been overcome, for instance through an effective risk committee providing the necessary focal point.

Case Study E – Oversight of insurance risk

A medium sized firm had apportioned responsibility for oversight of its management of its underwriting risk to its underwriting function. This meant that the remit of its risk management department did not extend to this area of risk. Higher than expected underwriting losses during 2005 brought about a review of this practice, when the firm realised that a lack of external challenge and oversight had led to an over-reliance on particular loss modelling. The remit of the risk management department was accordingly revised and specialist staff recruited into the function.

d. Management Information (MI)

Boards and management can only base their discussions and decisions on the information they possess. The completeness, clarity, timeliness and accuracy of MI are therefore important drivers of board and management effectiveness, particularly in relation to risk management.

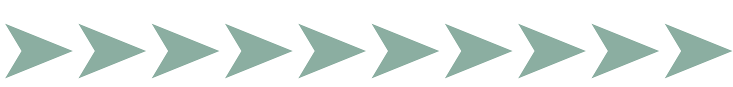
Areas of positive development	Observed shortcomings
• Some firms have made good progress in developing and deploying key risk and key control indicators (KRIs/KCIs) and have found them helpful, and many have continued to refine them • Firms whose boards and risk committees are actively using MI to monitor risk exposures had found that its development was a continuous process, and they had improved or focused the information in the light of experience.	• Many insurers have made disappointing progress in the development of reporting on risk exposures. • The use of KRIs and KCIs is not widespread and where they are used further refinement is required to ensure they are appropriate and relate to the firm's risk appetite. • Many firms have shortcomings in the completeness of their internal information, and few conduct sufficient, or sufficiently detailed, analyses of underlying trends. • Identifying and reporting emerging and changing risks is frequently inadequately addressed.

Issues to consider

Is the relevance of risk MI periodically reviewed?

3.41 Many firms have improved their MI to focus on the top risks for high-level review by boards and senior management, with 10-20 being a typical number. This is entirely appropriate provided that they are satisfied that risks of lesser significance are being monitored elsewhere in the firm. The filtering process, however, may need regular validation, to satisfy boards that the criteria they have agreed for filtering are being appropriately applied. In addition, firms should seek to satisfy themselves that similar risks are classified in a consistent way, to ensure that the aggregate risk exposures are being monitored effectively.

3.42 Firms whose boards and risk committees are actively using MI to monitor risk exposures had found that its development tended to evolve, and had improved or focused the information in the light of experience in using it. Often in these circumstances it is the case that 'less is more', so refinements need not automatically mean a continual process of overlaying new reporting on top of old.



3.43 We were encouraged to find some examples of active use of MI in decision making. For example, one firm cited the analysis of risk data as important in setting the revised terms for its outsourcing contract.

3.44 However, we observed great diversity in firms' progress in developing and using MI on risk exposures. The boards of firms that had the least developed MI risked having an incomplete and potentially inaccurate picture of the firm-wide exposure to particular risks.

3.45 We were pleased to see that some firms had reviewed their approach to the capture, categorisation and reporting of loss data and risk exposures in the light of their ICAS work. Escalation of actual loss crystallisation to boards and senior management not only helps boards' appreciation of the adequacy of risk controls, but can also help to inform judgements when risk-based capital requirements are being assessed.

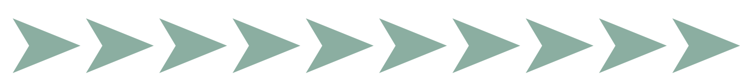
3.46 We found that weaknesses in risk MI were often symptomatic of other underlying shortcomings. For example, risk identification and capture processes may be under-developed. Or there may be a lack of common definitions and classifications of risks or controls being applied across the business, so that common causes are not identified.

3.47 In some cases, poor quality MI could be traced back to systems weaknesses that fail to capture risk information consistently on a firm-wide basis. We also observed inconsistencies in the reporting of information in certain firms which divided risk responsibility for different risk types, and where there was reporting to the board via different board committees with different memberships.

Case Study F – Effective management information

An insurer's internal audit review of its management information revealed underlying weaknesses in its risk assessment processes, including poor monitoring of risk aggregation and an absence of ranking of risks and controls. The firm also realised that the risk management framework that had been developed was excessively bureaucratic, leading to a lack of prioritisation of risk management activity.

The improvements implemented by the firm included developing a risk database that enabled it to monitor developments in risk exposures and controls over time. This database allowed enhanced MI to be produced, which provided greater understanding of trends and cyclicality in the risks facing the firm. By developing indicators to monitor its key risks, the firm is now better able to analyse and prioritise its risk management activity, thereby improving its productivity and effectiveness.



3.48 We also have concerns that inconsistencies in reported information may not be detected or appreciated by those considering the contents of the MI. For example, some parts of the business might report on all failures in key controls, irrespective of the extent of loss (including some failures where no loss was incurred). If others report only on control failures that lead to losses above a certain amount, a distorted view of relative control effectiveness can emerge. This may then lead to different prioritisation of management actions than would be the case if consistent information was being viewed.

MI needs to be informative and relevant

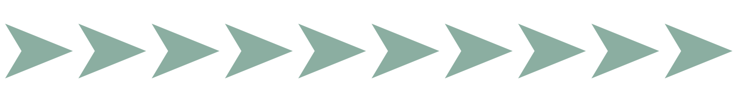
3.49 Insurance risk MI seemed generally well developed at most general insurance firms. This was not unexpected given the fundamental importance of underwriting, claims and reserving activities. Moreover, there are often long-standing agreements to share information with other firms and market organisations (in particular Lloyd's and within the subscription market) to build better intelligence on various market-wide risks. However, these firms typically had less well developed reporting structures for other risk types.

3.50 Firms that have developed KRIs and KCIs in their reporting have often found them helpful. We have illustrated an example of some possible KRIs and KCIs in Box 2. They can provide an effective way of providing a high-level quantitative summary of the effectiveness of risk management. Such measures can often be readily related to risk appetites using "traffic lights" or other form of high level rating. Trend analysis is also a particularly insightful way of looking at how the firm's risk profile is changing. For too many firms, however, the development of KRIs and KCIs remains in its infancy.

Box 2 – KRIs and KCIs

KRIs for an insurer, might include looking at measures related to:

- risk-based capital requirements by component;
- new written premiums, and other relevant exposure measures, by class;
- asset mix;
- customer profile mix;
- fair treatment of customers;
- new reported claims;
- number and nature of customer complaints;



- reinsurance arrangements;
- administration arrangements;
- experience profile of staff and management;
- systems and processes; and
- legal, tax and regulatory developments.

KCIs might include measures related to:

- internal self-assessments of risk;
- internal compliance with key processes and procedures;
- internal and/or external auditor reports;
- staff training;
- internal TCF monitoring;
- staff and management remuneration benchmarking;
- data integrity testing; and
- testing of disaster recovery processes.

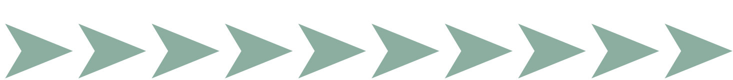
3.51 The extent to which many firms' data can be 'mined' was frequently disappointing. For example, we have seen several life insurers who are not able to look at trends in profitability by source of business other than at a very high level. Such firms may not be able to take a sufficiently targeted approach to addressing persistency problems.

3.52 One area that has often concerned us was poor identification and reporting of emerging and changing risks. Such changes may be due to evolving business practices and environments, as well as more radical strategic changes. This is an area where we consider that much more progress is needed, not least because of the implications for a forward-looking or going-concern approach to risk-based capital.

e. Impact of ICAS

One of the intended outcomes of our new ICAS regime was to improve the standards of risk management. Many firms have commented that ICAS (or, more generally, risk-based capital measurement) has improved both the focus on risk and the level of board understanding of firms' risk profiles.

Areas of positive development	Observed shortcomings
• We saw evidence of risk-based capital (and/or ICA) being used as a factor in major business decisions, for example in determining reinsurance programmes, in a significant number of firms. • Most firms recognise that they have more work to do to integrate their capital assessment and management activities within their risk and decision-making frameworks. • An increasing number of firms have started to align their business planning and ICAS calculation cycles and processes.	• Few firms appeared to be using risk-based capital for longer term business planning and strategic decision making. • In some firms, developing ICA has been over-reliant on the actuarial function (or the firm's external actuarial consultants). We were however, encouraged to find the involvement of risk management functions in this area appears to be on the increase. • The level of board understanding of risk-based capital methods was patchy. In many firms, insufficient training had been given to provide all board members with a minimum level of understanding. There is also scope for more firms to put in place ongoing training to update and maintain knowledge. • Deriving capital for operational risk frequently presents considerable challenges to firms.



Issues to consider

Are capital considerations used to inform risk management and decision making?

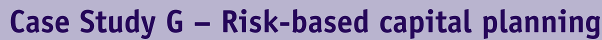
3.53 We were encouraged to note that some firms are now making more informed 'risk versus reward' decisions as a result of the insights provided by their risk-based capital work. Indeed, the more that firms can demonstrate their use of risk-based capital in decision-making generally, the more credibility we can attach to their capital calculations.

3.54 ICAS – or, more generally, risk-based capital work – is already providing the impetus for a change in firms' approach with more efficient use of capital acting as a driver for more informed risk taking. We saw examples of firms considering the capital impact on the:

- levels of retention for reinsurance;
- assessment of potential acquisition targets;
- terms and conditions for, and the extent of, third party outsourcing and investment management agreements;
- use of swaps;
- changing volume or mix within new business;
- product development and pricing; and
- dividend distribution.

3.55 We also found several examples where boards have prioritised discussions to focus on more capital-intensive risk areas as a direct result of risk-based capital analysis. A number of firms are now beginning to consider how risk-based capital models can be integrated into capital allocation and pricing decisions. Such insights were previously less visible to these firms.

3.56 However, many firms still see their ICA as a stand-alone exercise rather than working to inform and prioritise activity as part of business planning and strategic decision-making. We found that, in the main, those firms that updated their ICA analysis regularly are those that are making greater use of them for strategic decision making. Its use also keeps risk-based capital on the management agenda, even where this is by a partial rather than full reassessment. In one firm, we saw the use of 'mini ICA' assessments of particular lines of new business, as part of regular product line reviews.



Case Study G – Risk-based capital planning

A large firm has developed its risk-based capital model to a point where it forms an integral part of its strategic planning process.

The firm sees this model as a valuable additional tool by which to measure and/or judge strategic options and to assess the controls over its current and potential risks. It has already been used to support decisions relating to:

- allocating capital to business units;
- measuring profitability of business units;
- assessing alternatives to capital in managing risks;
- acquisition of books of business; and
- assessing risk aggregations.

We see this clear and methodical association of risk with capital management as a beneficial development for the firm that may lead to improved capital efficiency and better decision making by senior management.

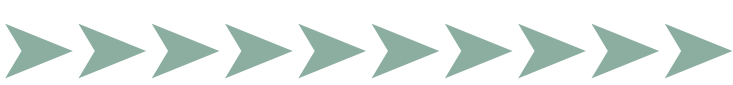
Multi-disciplined approaches improve the ICAS process

3.57 For many firms, the initial ICAS roll-out has triggered significant adoption or development of new tools, techniques and terms that were previously little understood and/or considered the preserve of the actuarial department alone. In some firms, particularly those that are part of larger insurance and reinsurance groups, risk-based capital and modelling techniques pre-dated the introduction of ICAS. But even these firms have had to undertake significant development activity. There has been a heavy reliance on actuaries to get ICAS processes in place, and we expect to see this diminish as firms further embed these processes.[6]

3.58 Firms which appeared to be less advanced in embedding and integrating risk-based capital management were often those that involved only a narrow range of people in their ICAS work. Where there is wider understanding and involvement, there was evidence of a more integrated approach to risk and capital management.

3.59 We would be highly sceptical of any firm that did not involve its wider management team, each contributing in different ways to different aspects of the calculation processes. For example, it is more likely that operational management will best understand the nature of operational risks and the robustness of the operational control environment.

6 In the feedback to CP06/16: Prudential changes for Insurers (September 2006), that we expect to publish in December 2006, we intend to include further comment on the link between firms' ICAS assessments and the wider range of risk and capital management tools that firms use to manage their business in the context of GENPRU 1.2.



Case Study H – ICAS

A large firm took credit in its ICA for a management action aimed at mitigating movements in equity markets at pre-determined trigger levels. When equity markets crossed the trigger level and, after consultation with the firm's non-executive directors, the management action was implemented.

In this case, the firm has demonstrated the benefit of risk management planning in formulating its ICA. The outcome has been a coherent cycle of events that started with assumptions built in to an ICA calculation. The firm has now been able to reflect on the effectiveness of actually having to take the particular management action and can now re-factor the outcome into its assumption setting for future capital assessments.

Feedback is an important part of this process to improve the quality of management actions. This case also illustrates the value of regular reviews. Examples and experience such as this will also help firms in reaching a clearer understanding of the inter-relationships between their ICA and their risk management, and the commercial advantages that they can derive from that.

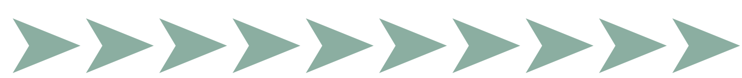
On-going training enhances the quality of ICAS discussions

3.60 There is room in virtually all insurers for further progress in delivering ongoing training to governance bodies and management on risk-based capital. Often the need for follow-up training is to reflect the development of a firm's methods and thinking. But it could also serve to reinforce previous training.

3.61 The level of training provided is a matter for each firm, and depends on the contributions that different people are expected to make, the nature of the business and the risk profile of the firm. It is unlikely that all board members, for example, need to be as deeply immersed as each other. However, a minimum level of understanding would allow all to make informed contributions to discussions and decision making, and improve the level and quality of challenge.

ICAS calculations still present challenges

3.62 The area that has been frequently cited as providing the most challenge is calculating operational risk capital. This is unsurprising given the immaturity of industry-wide operational risk quantification techniques relative to other risk areas. Also, for many firms, the majority of their risk capital relates to risk types other than operational risk, in particular insurance and market risks. Although operational risk has tended so far not to be a priority development area and has been less advanced, we have noticed in some recent ICA submissions a significant improvement in the quality of the treatment of operational risk components, suggesting that firms are now turning their attention to this shortcoming.



3.63 Another feature of operational risk is the absence of credible historic data to support stress testing. There is a greater need for management judgement in evaluating risk exposures and the robustness of risk controls in more extreme conditions. This often requires the multi-disciplined approach as described in paragraph 3.58, which in turn may require management training to ensure appropriate and consistent contributions from the wider team. Our work in reviewing firms' ICAs has shown that some insurers have often underestimated the challenges this collaborative effort presents.

3.64 We discussed calculation issues in our Sector Briefing on ICAS in November 2005 when we gave some early feedback to the industry. We expect to provide a further update in mid 2007.

4. Next steps

4.1 We believe strengthening insurers' risk management standards provides significant benefits to firms and their customers. Boards and senior management should read this *Sector Briefing* and consider whether they are reaching the standards that some of their peers are achieving, or, indeed, that they have set for themselves. As such we have set out below a series of questions which senior management may find helpful when reviewing the effectiveness of their own risk management practices.

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 you 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, well understood and workable?*
6. *Does your firm have a clear view of how you want 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?*

4.2 We expect to see progress maintained across the industry, and the effectiveness of risk management will feature heavily in our supervisory assessments. We do not regard risk management standards as a static concept and so even those firms that believe they have complete and effective processes today should continue to look for ways to raise and further improve their standards.

5. Related material

Firms may find some of the following publications relevant to their own consideration and development of risk management.

FSA Handbook References

High level standards

PRIN 2.1.1	Principle 3 (Management and Control)
SYSC 3.1	Systems and controls
SYSC 3.2.10	Risk assessment
SYSC 3.2.11	Management Information
SYSC 3.2.17	Business strategy
SYSC 3A	Systems and controls – operational risk
SUP 10.8	Systems and controls Controlled Functions

Prudential standards – references are for the restructured handbooks, which take effect on 31 December 2006 – see CP06/10. Existing Handbook references are given in brackets.

SYSC 14 (PRU 1.4)	Prudential risk management and associated systems and controls.
INSPRU 7.1 (PRU 2.3)	Individual Capital Assessment (please refer to CP06/16 for planned changes to this section – http://www.fsa.gov.uk/pubs/cp/cp06_16.pdf)
SYSC 15 (PRU 3.1)	Credit Risk systems and controls
SYSC 16 (PRU 4.1)	Market Risk systems and controls
INSPRU 4.1 and SYSC 11 (PRU 5.1)	Liquidity Risk systems and controls
INSPRU 5.1 and SYSC 14 (PRU 6.1)	Operational Risk systems and controls
SYSC 17 (PRU 7.1)	Insurance Risk systems and controls
SYSC 12 (PRU 8.1)	Group Risk systems and controls

6. Useful publications

2003 report

Review of UK insurers' risk management practices, FSA (October 2003)
http://www.fsa.gov.uk/pubs/other/review_ins_risk.pdf

Insurance updates

'*Challenges for the Insurance Industry*' speech by David Strachan, Insurance Sector Leader, FSA European Insurance Roadshow 2005 (14 October 2005)
http://www.fsa.gov.uk/pages/Library/Communication/Speeches/2005/1014_ds.shtml

Management of the underwriting cycle

General Insurance Newsletter (October 2005)
http://www.fsa.gov.uk/pubs/newsletters/gi_newsletter7.pdf

Fraud risk management

Firms' high level management of Fraud Risk (February 2006)
http://www.fsa.gov.uk/pubs/other/fraud_risk.pdf

Credit risk management

Dear Chief Executive letter, Credit Risk Management in Life Insurance Firms (9 August 2004) http://www.fsa.gov.uk/pubs/ceo/credit_risk_9aug04.pdf

Investment risk in general insurers

General Insurance Newsletter (March 2005)
http://www.fsa.gov.uk/pubs/other/gi_newsletter5.pdf

ICAS

Insurance Sector Briefing: '*ICAS – One Year on*' (November 2005)
http://www.fsa.gov.uk/pubs/other/isb_icas.pdf

Consultation Paper, *CP06/16: Prudential changes for Insurers* (September 2006)
http://www.fsa.gov.uk/pubs/cp/cp06_16.pdf

Solvency II

Discussion paper, *Solvency II: a new framework for prudential regulation of insurance in the EU* (February 2006)
http://www.fsa.gov.uk/pubs/international/solvency2_discussion.pdf

Discussion paper, *Supervising insurance groups under Solvency II*
http://www.hm-treasury.gov.uk/documents/financial_services/eu_financial_services/fin_eufs_solvency.cfm

FSA Confirmation of Industry Guidance

Discussion Paper 06/05 *FSA Confirmation of Industry Guidance* (November 2006)
http://www.fsa.gov.uk/pubs/discussion/dp06_05.pdf

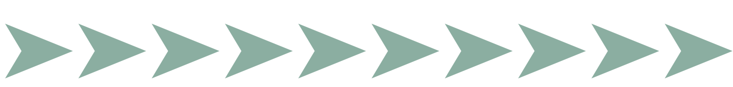
Non-FSA material

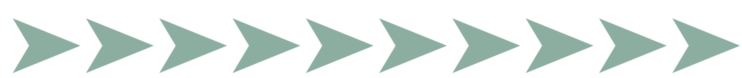
'Towards a better reflection of Risk' (interview with Henrik Bjerre-Nielson, CEIOPS, in Munich Re, 'Topics: Climate Change, Solvency II, Occupational Disability' 2006)
http://www.munichre.com/publications/302-04915_en.pdf

COSO, 'Enterprise Risk Management – Integrated Framework Executive Summary'
http://www.coso.org/publications.htm (September 2004).

Lloyd's Risk Management Toolkit
http://www.lloyds.com/rmtoolkit (2005)

Combined Code for Corporate Governance
http://www.fsa.gov.uk/pubs/ukla/lr_comcode2003.pdf (July 2003)
http://www.mutualinsurers.org/documents/AMI-Combined-Code.pdf
(annotated version for mutual insurers – July 2005)





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