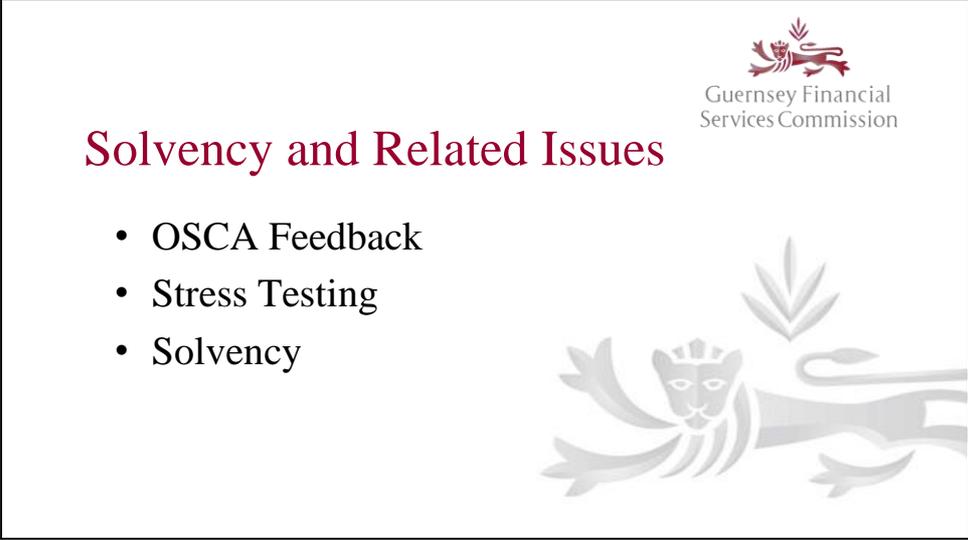


## Industry Seminar 20 October 2011

### Insurers and Managers Presentation

**Caroline Bradley – Deputy Director, Insurance Division**

Good afternoon everyone.



  
Guernsey Financial  
Services Commission

## Solvency and Related Issues

- OSCA Feedback
- Stress Testing
- Solvency

I will start off by giving you an outline of what I'll be talking about this afternoon.

Firstly I will briefly cover some feedback on the Own Solvency Capital Assessments the OSCAs. As Jeremy has already mentioned we will be publishing a paper on this shortly but I will just talk through some of the key points that have emerged from the reviews of the OSCAs.

After that I will talk about the stress testing exercise that has just been undertaken by some insurers and how that process has worked.

I will then spend some time on what is probably one of the most important issues facing us at the moment; the development of a solvency regime which meets emerging international standards whilst still remaining appropriate for the nature of the industry in Guernsey.

## OSCA Feedback

- Introduced in 2008
  - Initial feedback October 2009
  - Paper to be published 2011
- 

So, turning first to OSCAs. We introduced the OSCA process in 2008 so firms have had a few years now to get used to the process. We first gave some feedback at a presentation in October 2009 but more recently have been asked for more detailed feedback. We have carried out some detailed reviews of the OSCAs but we understand that you don't want a paper published from which the various different approaches adopted by the insurance managers can be identified, even on a no names basis. So the paper has been consolidated and therefore provides much more general observations. It describes and compares the assumptions and methodologies adopted by boards of both long term and general insurance entities in their OSCA.

I will just mention some of the key points that have emerged.

## OSCA Feedback

- Long term vs general insurers
  - Long term insurers more developed
  - General insurers – led by Manager
- 

In general what we have seen is that the long term insurers are more sophisticated in their approach and that many are a long way down the road towards the UK Individual Capital Assessment and even towards the forthcoming Solvency II approach. For the general insurers the OSCA format depends very much on their particular insurance manager's approach which have wide variations.

## OSCA Feedback

- Valuation of assets and liabilities
- Target criteria
- Risk quantification



Looking at the valuation of assets and liabilities we see that both life and general insurers value assets in similar ways using market values wherever possible. However, for liabilities there is a divergence of approach. The life entities tend to value their liabilities using a best estimate of expected future cash flows, which eliminates any inherent conservatism or optimism in the provisions. The general insurers simply use the reserves from their statutory accounts which may not represent the best estimate and which are not discounted.

In respect of target criteria most life entities tend to specify a shock period and an event horizon whilst the general insurers don't. Only a few life entities specify a risk measure and a confidence level whilst the general insurers do not. The life insurers are generally specifying a target criteria of 99.5% VaR over one year.

The quantification of risk is universally performed using a 'bottom-up' approach where each risk is assessed individually or a number of related risks are assessed collectively. The capital requirement is predominately determined using either a factor-based approach or the change in the net value of assets less liabilities following a Board-specified stress/scenario event. Several life and non-life entities have used more complex simulation techniques to quantify one or more risks.

## OSCA Feedback

- Underwriting Risk
- Market Risk
- Operational Risk
- Counterparty Risk



Underwriting risk relates to possible errors in the selection, approval or pricing of insurance risks including deviations in the timing, frequency and severity of insured events from those expected at underwriting. Components of life underwriting risk include mortality, longevity, morbidity, lapse risk, expense risk and catastrophe risk. There are three predominant sources of information that life entities use to calibrate the stress/scenario tests relating to underwriting risk:

- Some are using the Solvency II QIS5 standard formula or variations thereof;
- Others use Group Internal Model stresses used for UK Individual Capital Assessment (ICA) or other group reporting requirements; and
- Others use actuarial judgement based on benchmark studies.

Non-life insurers have generally used either a factor based approach whereby premium and reserves are multiplied by a factor determined by the board or an approach based on the residual exposure. The approach to catastrophe risk also varies considerably with some companies not considering this at all.

Market risk is a key risk for life entities with long term liabilities since technical provisions are discounted to take account of the time value of money and long term assets are held to match the long term liabilities. This risk is much less important for non-life entities since as liabilities tend to be uncertain and short term, liquid assets are held and technical provisions are almost never discounted. Therefore, as you might expect life insurers take a more technical approach to market risk whereas the general insurer's assessment of market risk tends to be based more on the judgement of the board.

Approaches to operational risk also vary although many companies do not address it at all. Whilst a few life entities apply the QIS5 approach to operational risk most general insurers have not allocated capital to operational risk as they are reliant upon insurance managers in this area.

Turning to counterparty risk some entities apply a factor based approach, grouping assets by category and age and then applying a risk factor depending on the nature of the asset, the age of the debt and the risk associated with the counterparty involved. Several life entities have adopted the QIS5 standard formula to determine capital for counterparty default exposures.



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## OSCA Feedback

- Comparison of approaches
- Quantitative vs Qualitative approach



Finally, we wanted to compare the approaches taken by the insurance managers to try to quantify the different approaches. We calculated the OSCA for a hypothetical captive using the different models developed by some of the insurance managers. We also wanted to see how much the current OSCAs exceeded the current minimum capital requirement.

We discovered that the level of capital required varies significantly depending on which insurance manager's model was adopted. It was not possible to use the models of every manager as some had a narrative approach although it did seem in those cases that the board of directors was able to have a more meaningful input compared with a formulaic approach.

So, that is a brief overview of the OSCAs and we will let you know as soon as the paper is available on the website.



**Stress Testing**

- Scope
- Scenarios – baseline & adverse
- Reverse Stress Tests
- Future Stress Test Exercises



I now want to turn to the recent stress testing exercise. We first carried out a stress testing exercise in 2008 and then a further exercise was carried out in 2010 in respect of those entities that had been particularly sensitive to certain scenarios in 2008. In line with the Commission's mandate to maintain financial stability a further exercise was carried out this year.

The exercise was limited to companies with general insurance premiums of more than £15m or life companies with liabilities of over £50m. This meant that 28 companies carried out the stress testing exercise.

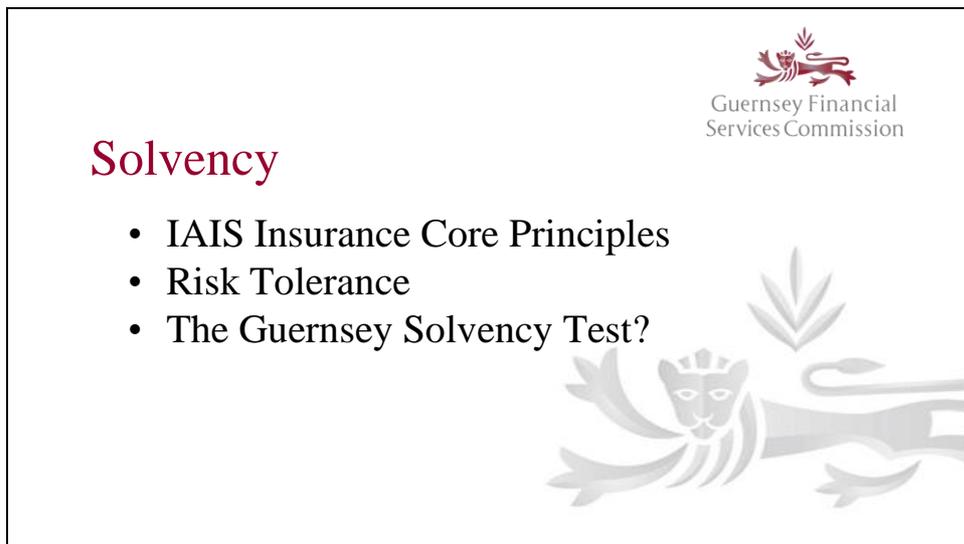
The stresses tested were based on shifts in interest rates, foreign exchange rates, equity prices and property prices. Additional stresses for the life companies were based on changes in mortality, longevity, morbidity and expense inflation. For the general insurers some catastrophe scenarios were also tested. Each test had a baseline scenario and a more adverse scenario. The scenarios were developed based on the 2008 and 2010 stress tests previously carried out, the 2010 stress tests developed by EIOPA, the European Insurance and Occupational Pensions Authority, and the scenarios applied in the QIS5 exercise.

We also asked companies to undertake a reverse stress test to identify scenarios that would result in the company becoming unviable. This prompted a number of firms to ask how to undertake such an exercise so we may have to consider giving some guidance on this point

in the future. The reverse stresses identified included; reinsurer failure, failure of a parent to repay a loan and the failure of a major bank.

We are now in the process of validating the results of the stress testing and we have undertaken to publish those results. As there were a limited number of companies taking part in the exercise we are currently looking at how we can report these results publicly without identifying the companies concerned.

The Commission will need to consider the timing, frequency and scope of future stress testing exercises but it is likely to be an annual event for certain companies. The IAIS core principles create an expectation that stress testing will form an integral part of a company's enterprise risk management framework and therefore we will need to take this into account in the development of a new solvency regime.



**Solvency**

- IAIS Insurance Core Principles
- Risk Tolerance
- The Guernsey Solvency Test?

So that leads us into consideration of future solvency issues.

I will firstly look at the IAIS Insurance Core Principles as they relate to solvency issues. Then I will talk about some work we have been doing internally on the risk tolerance of the Commission in relation to insurer failure. I will also look at how we can pull this work together to arrive at a regime that is suitable for Guernsey.

I will look at each ICP individually but first I want say something in general about the core principles. There may be elements of the standards that are simply not appropriate for the nature of our market and we will take this into account. Against this we need to weigh the reputational issues of falling behind international developments. Therefore we start from a position that we will try to meet the core principles and standards whilst recognising that there may be fundamentally good reasons not to implement them all.

The Commission must strike a balance between protecting policyholders and the reputation of the Bailiwick on the one hand and imposing unduly onerous levels of regulatory capital and compliance costs on the other hand.

## IAIS Introduction on Proportionality

- ICPs apply to all jurisdictions
  - Supervisory objectives of a jurisdiction
  - Nature, scale and complexity
  - Commensurate with the risks
- 

Those who have been involved in the Solvency working party will have had some exposure to the requirements of the new Insurance Core Principles which became effective on 1 October. The final versions of all 26 new core principles are now available on the public section of the IAIS website. For those who are not familiar with the core principles I thought it would be useful to outline some of the requirements and at the same time give you an indication of the debates we have been having internally on how we might meet those requirements.

I think firstly it is important to note that the introduction to the ICPs includes the following guidance:

*“The ICPs apply to insurance supervision in all jurisdictions regardless of the level of development or sophistication of the insurance markets and the type of insurance products or services being supervised. Nevertheless, supervisory measures should be appropriate to attain the supervisory objectives of a jurisdiction and should not go beyond what is necessary to achieve these objectives. It is recognised that supervisors need to tailor certain supervisory requirements and actions in accordance with the nature, scale and complexity of individual insurers. In this regard, supervisors should have the flexibility to tailor supervisory requirements and actions so that they are commensurate with the risks posed by individual insurers as well as the potential risks posed by insurers to the insurance sector or the financial system as a whole.”*

In the context of implementation and assessment against the core principles there is further guidance that:

*“When implementing the ICPs and standards in a jurisdiction and when carrying out an assessment of observance it is important to take into account the domestic context, industry, structure and developmental stage of the financial system and overall macroeconomic conditions.”*

So, as you can see the principle of proportionality runs throughout the core principles. Given the levels of flexibility outlined in the guidance there seems to be no reason why Guernsey cannot aim to achieve observance with the ICPs unless there are some fundamental issues which cannot be overcome by the application of proportionality.

## IAIS Insurance Core Principles

- ICP 14 – Valuation
- ICP 15 – Investments
- ICP 16 – Enterprise Risk Management
- ICP 17 – Capital Adequacy

There are four core principles that cover solvency and capital issues and you can see them on this slide. As Jeremy has already mentioned we do have a project underway to look at all of the other core principles but here I am just focusing on these four.

## ICP 14 - Valuation

**The supervisor establishes requirements for the valuation of assets and liabilities for solvency purposes**

- Consistent basis
- Current Estimate
- IFRS

ICP 14 deals with the valuation of assets and liabilities for solvency purposes.

The first principle is that valuation of assets and liabilities should be undertaken on a consistent basis. That is consistent within the balance sheet of an individual insurer and across the balance sheets of all insurers.

Essentially the requirements are for a consistent economic valuation of assets and liabilities eliminating any conservatism or optimism in the valuations and reflecting the risk adjusted present value of future cash flows. This is called the current estimate.

The valuation of technical provisions should be based on the current estimate plus a margin to cover the inherent uncertainty of those obligations.

This ICP is actually closely aligned with International Financial Reporting Standards and contains the following guidance:

*“To the extent that financial reporting standards, including IFRS, are consistent with the standards in this ICP valuations that are in accordance with those financial reporting standards may be regarded as compliant with this ICP.”*

Now, most insurers in Guernsey report under IFRS or UK GAAP with a smaller number using US GAAP.

The IFRS exposure draft on Insurance Contracts was issued last year but is not yet finalised. The provisions of this exposure draft are closely aligned with the requirements of ICP 14 and therefore it would seem sensible to conclude that once it comes into effect insurers reporting in this way will meet ICP 14. UK GAAP and US GAAP are converging with IFRS and in the meantime we could allow insurers to carry on reporting under UK or US GAAP for a transitional period.

In Guernsey we have always tended to rely upon accounting standards as the basis for valuation of assets and liabilities. We do however, run the risk that until the relevant IFRS requirements are finalised and until UK and US GAAP converge with IFRS we will still have inconsistencies across the market.

There is a risk that in the interim period before IFRS becomes more widely adopted Guernsey would not be regarded as observant with this core principle.



## ICP 15 – Investments

**The supervisor establishes requirements for solvency purposes on the investment activities of insurers in order to address the risks faced by insurers.**

- Regulatory investment requirements must address
  - Security
  - Liquidity
  - Diversification
- Review of Approved Asset Regulations



ICP 15 deals with investments.

As you can see, the ICP does not set out requirements for the treatment of specific types of investment but requires the supervisor to set those requirements. The supervisor must also require the company to manage its investments and report them appropriately.

At a minimum the regulatory requirements must address security, liquidity and diversification of investments. Now, to some extent our approved asset regulations already address these issues but we will take this opportunity to review them.

We need to review and update the approved asset regulations and the counterparty exposure provisions within the asset and liability valuation regulations. For example, we have on a number of occasions been asked to approve BBB rated investments as class 2 assets. BBB rated investments are generally permitted in other jurisdictions. The current regulations require updating in order to take account of developments in the investment markets and to take account of the investment profile of insurers in Guernsey.

This would also provide an opportunity to specify the treatment of assets such as parental loans and uncalled capital which are largely dealt with by unwritten policy and on a case by case basis. We should be more transparent in these matters and aim for clear regulations which remove the need for the Commission to provide individual approvals.



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## ICP 16 – Enterprise Risk Management

**The supervisor establishes enterprise risk management requirements for solvency purposes that require insurers to address all relevant and material risks.**

- Framework for the identification and quantification of risk
- Proportionality applies
- Stress testing
- ORSA



This ICP requires ERM frameworks to identify and quantify risks using techniques which are appropriate to the nature, scale and complexity of the insurer. Insurers should have a documented policy which describes the relationships between the insurer's risk tolerance limits and its regulatory capital requirements. The ERM framework also extends to include asset-liability management, investment policy and stress testing. The Own Risk and Solvency Assessment, which is the responsibility of the board, forms part of the ERM process and standards are also set for supervisory review of the ERM framework.

Some of the requirements of this ICP are currently addressed at a high level in the Licensed Insurers' Corporate Governance Code and in the OSCA process which was introduced in 2008. Insurers in Guernsey have therefore already been required to address the risk management concept although not to the full extent of an embedded ERM framework. Some insurers that are part of larger groups will be in a position to participate in group ERM frameworks and so the requirements of this ICP should not be too onerous for them.

Within its guidance notes the IAIS recognises that this ICP is onerous for both insurers and supervisors and that it may take some time to implement. It also acknowledges that it is simply not achievable by some insurers. The Commission therefore aims to work towards applying this ICP in a proportionate manner.

The requirement for an Own Risk and Solvency Assessment, or, ORSA, is also contained in this ICP. However, it is recognised in the guidance that the ORSA should be appropriate to the nature, scale and complexity of the risks. Responsibility for the ORSA rests squarely with the board and should incorporate a longer time horizon than is typically used to determine regulatory capital requirements.



## ICP 17 – Capital Adequacy

**The supervisor establishes capital adequacy requirements for solvency purposes so that insurers can absorb significant unforeseen losses and to provide for degrees of supervisory intervention.**

- PCR
- MCR
- Triggers for regulatory intervention
- Internal models



ICP 17 deals with capital adequacy.

The guidance to the standards of this ICP states:

*“The risk tolerance of the supervisor will influence both the level at which the solvency control levels are set and the intervention actions that are triggered, reflecting the balance to be struck between protecting policyholders and the impact on the effective operation of the insurance industry of unduly onerous levels and costs of regulatory capital requirements.”*

Earlier I mentioned that we have been doing some work internally to establish the risk tolerance of the Commission and I will speak more about that shortly.

There is also further guidance that:

*“Standardised approaches should be appropriate to the nature, scale and complexity of the risks that insurers face and should include approaches that are feasible in practice for insurers of all types including small and medium sized insurers and **captives** taking into account the technical capacity that insurers need to manage their business effectively.”*

This guidance clearly allows a simplified approach to capital requirements for captives and allows solvency requirements to differentiate between different types of insurer. The approach must be appropriate to the risk and take into account approaches that are feasible in practice. There does not appear to be any scope to simply waive the standardised approach but an extremely simple approach applied to captives should seem to be acceptable.

The supervisor is required to establish both a minimum capital requirement, the MCR and a prescribed capital requirement, the PCR. The PCR must be defined in terms of a specified

level of safety over a defined time horizon. The MCR is the absolute minimum below which no insurer would be regarded as viable.

The supervisor is also required to set appropriate criteria for the use of internal models. We recognise that some larger insurers, especially those that are part of international groups, will wish to utilise their own models and we need to consider how to allow for this whilst also recognising that we may not have the necessary skills or resources in house to validate these models.



## Risk Tolerance

- Commercial vs Captive
- Life vs General
- Domestic vs International
- Insurance vs Reinsurance



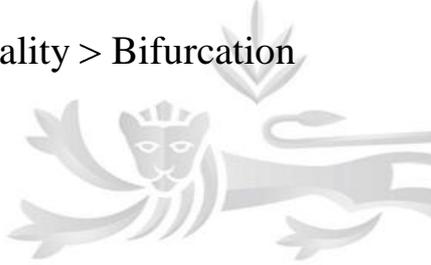
As I have mentioned the core principles make reference to the risk tolerance of the supervisor. Here we are considering the Commission's risk tolerance in relation to the failure of certain types of insurer. In considering the risk tolerance we need to take into account both the impact on policyholders and on the reputation of the Bailiwick of the failure of different types of insurer. Taking these issues into account the tolerance in relation to the failure of a commercial insurer will be lower than for a pure captive. The failure of a life insurer could potentially have more devastating effects for policyholders than that of a general insurer although the reputational impact may be similar.

It is difficult to argue against applying the full level of international standards to commercial insurers. This brings us to a difficulty in defining what would be regarded as a commercial insurer rather than a captive. Some companies are easy to define however we do have a number that have historically regarded themselves as captives but which, on further analysis, could be regarded as commercial. In particular these would include producer owned insurance or reinsurance companies which actually provide cover to third parties.

## The Guernsey Solvency regime?

Risk tolerance > Proportionality > Bifurcation

PCR – calibration



So, how do we apply all of the requirements of the core principles to the Guernsey insurance market?

Once we have established our risk tolerance that should naturally lead us to the proportionate application of many of the qualitative aspects of the core principles. However, it is in the quantitative aspects that we have more difficulty, particularly in how to set the requirements for the PCR. How do we create something that is appropriate for both a large commercial insurer and a captive? A bifurcated regime with different classes of insurance licence is a possibility.

We have considered the option of building a standardised approach to the PCR for Guernsey; however, we would be hindered in this approach by a lack of readily available and useable data within the Commission. We have also considered whether there are elements of say, the solvency II regime that we can utilise perhaps recalibrated to a difference confidence level for captives. It has also been suggested to us that we could perhaps try and construct something around the risk gap approach that we are all familiar with and we are looking at that.

In considering all of these matters we have to be aware of industry concerns, political considerations, reputational issues and market impact. There are also the practical and resource implications of a new regime for the Commission as well as the industry.

## IAIS Review of Captive Guidance Paper

Drafting group to be chaired by Guernsey

Review of new ICPs

Key areas – solvency & corporate governance

I will be chairing the review of the IAIS captive guidance paper with the first meeting to be held on 7/8 November. We are fortunate that both Ireland and a US representative have volunteered to be vice-chairs so we will have considerable weight behind the paper. This paper will be crucial in setting the future standards for captives. Whilst the paper addresses a number of ICPs and will have to be reviewed in its entirety, it is in the areas of solvency and corporate governance where the most detailed work will be required since those ICPs are the ones which have changed the most.

The IAIS workplan has this timetabled for completion in 2013.