



IAIS

INTERNATIONAL ASSOCIATION OF
INSURANCE SUPERVISORS

Public

ICS Consultation Document Public Background Call

27 July 2016



Agenda

- 1. Overview of the ICS**
- 2. ICS Consultation Document**
- 3. Valuation: MAV, GAAP with Adjustments, MOCE**
- 4. Capital Resources**
- 5. ICS Capital Requirement**
- 6. Developing a Holistic Approach to Tax**

1. OVERVIEW OF THE ICS

Insurance Capital Standard (ICS)

The ICS is being developed in the context of the IAIS Mission:

- maintain fair, safe and stable insurance markets
- for the benefit and **protection of policyholders**
- and to contribute to **financial stability**

- The ICS aims at **comparability of outcomes across jurisdictions**
 - increased mutual understanding
 - greater confidence in cross-border analysis of IAIGs among group-wide and host supervisors

ICS - key points

- The ICS is a **group-wide, consolidated insurance capital standard** applicable to Internationally Active Insurance Groups (IAIGs)
- The ICS is part of ComFrame, which addresses qualitative AND quantitative requirements for IAIGs
- The ICS is not intended as a legal entity requirement
- Once finalised and agreed, the ICS will be a measure of capital adequacy for IAIGs
- The ICS will constitute the minimum standard to be achieved and one which the supervisors represented in the IAIS are expected to implement in their respective jurisdictions (implementation issues are still under discussion)
- Supervisors will be free to adopt additional arrangements that set higher standards or higher levels of minimum capital.
- Moreover, they are free to put in place supplementary measures of capital adequacy for the IAIGs in their jurisdiction

Goals for the ICS – Version 1.0

Goal for ICS Version 1.0 (for confidential reporting): The goal for this milestone is the delivery of an ICS for confidential reporting purposes based on:

- the identified two valuation approaches
- a standard method for calculating the ICS capital requirement

Upon completion of ICS Version 1.0, there will also be a plan to consider other methods of calculation of the ICS capital requirement including:

- the use of internal models (partial or full)
- external models
- variations of the standard method.

**To be adopted by June 2017
for confidential reporting**

ICS Version 1.0 – Confidential Reporting

- A natural extension to the existing voluntary Field Testing process
- ICS Version 1.0 is expected to be developed to a sufficient degree to support feedback amongst the IAIS, supervisors and IAIGs on the potential impact of the proposed ICS requirements
- Provides time for monitoring and refinement of the ICS which should enable its suitability to be assessed and improved
- During the confidential reporting phase, the IAIS aspires to have 100% of likely IAIGs participating in Field Testing as it is important to test ICS Version 1.0 with a more complete set of likely IAIGs to assess the appropriateness of the ICS for different risk profiles

Goals for the ICS – Version 2.0

Goal for ICS Version 2.0 (for adoption within ComFrame): The goal for this milestone is the delivery of an ICS that is fit for implementation by supervisors:

- that will achieve an improved level of comparability compared to ICS Version 1.0 but possibly not the level of comparability envisaged by the ultimate goal
- may still include the two valuation approaches but aspires to reduce differences in valuation
- may allow for both the standard method for calculating the ICS capital requirement and other methods of calculation including:
 - the use of internal models (partial or full)
 - external models
 - variations of the standard method.

To be consulted on beginning June 2018, and adopted (together with ComFrame) in 2019

ICS Version 2.0 – For Adoption

- The IAIS provides a process through which supervisors share information and expertise in order to produce standards that are applicable globally
- The IAIS is a standard-setter, not a legislature. Ultimately, it is the prerogative of the appropriate jurisdictions to implement an IAIS standard or a policy as they see fit
- After ICS Version 2.0 is adopted, there will be an implementation period
- According to IAIS By-Laws, Members commit to implement IAIS supervisory material taking into account specific market circumstances and undergo periodic self-assessments and peer reviews
- The IAIS will create an implementation monitoring process during which lessons will be learned and used as progress is made along the path of convergence to future milestones beyond ICS Version 2.0.

Goals for the ICS – Ultimate Goal

The ICS Ultimate Goal (no final date attached):

- A single ICS that includes a common methodology by which one ICS achieves comparable, i.e. substantially the same, outcomes across jurisdictions.
- Ongoing work is intended to lead to improved convergence over time on the key elements of the ICS towards the ultimate goal.
- Not prejudging the substance, the key elements include valuation, capital resources and capital requirements.

ICS Structure and Consultations

- 3 Main components of ICS:
 - Valuation
 - Qualifying capital resources
 - ICS capital requirement

ICS Ratio = qualifying capital resources / ICS capital requirement

- ICS applies to all IAIGs including G-SIIs
 - Definition of 'IAIGs' and 'Group' to be taken from ComFrame
- First Consultation Document (Dec 2014 – Feb 2015) focused on Insurance activities
- Second Consultation Document (Jul 2016 – Oct 2016) focuses on the standard method for Insurance activities

Potential benefits of a global Insurance Capital Standard

- **For supervisors** - an appropriately designed international capital standard will provide home and host supervisors with a **common language** to assess the solvency of insurance groups operating in their jurisdictions, enhancing supervisory cooperation between home and host supervisors and helping to build trust.
- **For investors and rating agencies** - this should also enable investors to assess and compare the solvency of insurance firms competing internationally, enhancing market discipline and reducing regulatory arbitrage.
- **For industry and policyholders** - over time, such a standard should also reduce the need for multiple overlapping and conflicting local practices in measuring the same risks, reducing costs for firms, which in turn should deliver a better proposition for policyholders.

ICS development – general points

- Developing a global capital standard for IAIGs is no easy task, given the different starting points and regulatory capital regimes in place across different jurisdictions
- This is why the IAIS has decided to deliver the ICS in stages with identified key milestones: version 1, version 2 and an ultimate goal
- It is a multi-annual process with field testing, consultation, stakeholders' meetings providing inputs to its development/amendments over the years
- **Important to recognise that not all issues will be addressed immediately, but the evidence from field testing and general feedback is helping us to improve on the approaches/design/calibrations over the years...**

ICS development and field testing (1)

- **2015 Field testing** - Focus was on **testing design options** (e.g. practicality, complexity, robustness, ability to capture risks written in different jurisdictions) with initial notional calibrations (proxies for VaR 99.5% over a year)
 - For some ICS risk charges, field testing results and feedback suggested we are on the right track – no change in design foreseen
 - For some other ICS risk charges field testing results and feedback suggested that design may not be appropriate – exploring design changes
- **2016 Field testing** - **now need to focus on calibration** - need to ensure calibration level is more appropriate for 2016. To this end, we need to consider access to data for:
 - Global calibration
 - Justification of regional differences of calibration
 - Other granularity requested – is there calibration data?
 - A part of the next field testing exercise will also be used to collect data from volunteers to assist the calibration of insurance risk (life, non-life and health)
 - The 2016 ICS Consultation Document will seek feedback on design, methodologies and data to calibrate ICS risks

ICS development and field testing (2)

- Other issues we are trying to improve with respect to last year include:
 - **Valuation** – identifying an approach to deal with inappropriate volatility in capital resources – part 1 of the 2016 field testing will focus mainly on this including an assessment under a stress scenario
 - **Capital resources** – we have a better understanding of what is causing financial instruments not to qualify, including materiality – we made a few changes and we are collecting further data this year to identify appropriate solutions
 - **Management actions** - Interpretation and application needs more work – potentially broader scope, but need to avoid double counting
 - **Tax** – aim is for a consistent approach across all ICS
 - **Interest rate risk** – calibration methodology that also works in a negative and low interest rate environment
 - **Currency risk** – more appropriate granularity of calibration, consideration of requirements to hold capital locally
 - **Equity risk** – more appropriate calibration of equity volatility
 - **Credit risk** – more granular risk-based approach to commercial mortgages

Global Engagement with Volunteers and Stakeholders

- **2015 Field Testing – 34 Volunteer IAIGs** and their supervisors
 - US\$ 1.0 trillion of equity (GAAP)
 - US\$ 1.3 trillion of premiums (36% non-life / 64% life)
 - US\$ 10.8 trillion of insurance assets
 - US\$ 8.3 trillion of insurance liabilities
 - *Underlying liabilities expressed in ~ 70 different currencies*
- **2016 Field Testing – 42 Volunteer IAIGs** and their supervisors
 - Headquartered in a wide range of countries and territories across North America, Europe, Africa and Asia
- Regular engagement with Field Testing Volunteers via numerous Field Testing workshops around the world
- Multiple capital-related stakeholder meetings every year around the world

Global involvement of Supervisors (1)

- Broad global membership of the IAIS Capital, Solvency and Field testing Working Group (CSF WG) in charge of the ICS technical development - *Australia, Belgium, Bermuda, Canada, Chile, China, EIOPA, European Commission, France, Germany, Hong Kong, India, Italy, Japan, Korea, Netherlands, Singapore, South Africa, Spain, Switzerland, UK, USA*



Global involvement of Supervisors (2)

ICS-related topical workstreams:

Workstream	Led by representative from	Participation (countries or jurisdictions)
Market Adjusted Valuation	European Insurance and Occupational Pensions Authority (Europe)	Canada, Chile, France, Germany, Italy, Japan, Korea, Netherlands, Singapore, Switzerland, UK, US
GAAP with Adjustments	Department of Treasury (Federal Insurance Office) (US)	Canada, Chile, Europe, Germany, Japan, UK, US
Capital Resources	Office of the Superintendent for Financial Institutions (Canada)	Canada, France, Germany, Japan, Korea, UK, US
MOCE	Bank of England (UK)	Canada, Chinese Taipei, France, Italy, Japan, Korea, Switzerland, US
Life risks (overall)	National Association of Insurance Commissioners (US)	(see below)
Mortality & Longevity Risk	Financial Services Agency (Japan)	Chile, Chinese Taipei, France, Germany, Korea, Singapore, US
Health / Morbidity / Disability risk	Autorité de contrôle prudentiel et de résolution (France)	Europe, France, Germany, Japan, Korea, Netherlands, Singapore, US
Lapse risk	Monetary Authority of Singapore	France, Germany, Japan, Korea, Singapore, US
Expense risk	Monetary Authority of Singapore	France, Germany, Singapore, US

Global involvement of Supervisors (3)

ICS-related topical workstreams:

Workstream	Led by representative from	Participation (countries or jurisdictions)
Non-Life and Catastrophe risk	Bank of England (UK)	Bermuda, Canada, Chinese Taipei, France, Japan, Korea, Netherlands, Switzerland, US
Interest Rate risk	Co-led by Office of the Superintendent for Financial Institutions (Canada), Federal Reserve Board (US) and Federal Reserve Bank of New York (US)	Europe, France, Germany, Japan, Korea, Netherlands, US
Equity and Real Estate risk	Autorité de contrôle prudentiel et de résolution (France)	Canada, France, Korea, US
Currency risk	Office of the Superintendent for Financial Institutions (Canada)	France, Korea, UK, US
Credit risk & Asset Concentration risk	Office of the Superintendent for Financial Institutions (Canada)	France, Italy, Japan, Korea, Netherlands, US
Operational risk	National Association of Insurance Commissioners (US)	Europe, Japan, US
Aggregation and Diversification	Bank of England (UK)	Germany, Japan, US

ICS development timeline (1)

Date	Action
20 May 2016	Launch Field testing package Begin Field testing period
17-24 June 2016	3 volunteer workshops – 17 June Budapest, 21 June New York, 24 June Hong Kong
20 June 2016	Stakeholders' meeting in New York
19 July 2016	Publish ICS Consultation Document (CD) (3-month consultation period) and 2016 Field Testing Technical Package
3 August 2016	Phase 1 Field testing data due (Discounting, BCR and HLA confidential reporting)
15 Sept 2016	Phase 2 data due (including non-life supplementary data for future calibrations)
19 Oct 2016	Deadline for responses on ICS CD
31 Oct 2016	Phase 2+ Life risks supplementary data due (for future calibrations) Comments due on ICS CD
Mid-2017	Adoption & Publication of ICS Version 1.0 for confidential reporting <i>(a comment period will be provided to stakeholders after publication; the comments received will be taken into account in ICS Version 2.0 development)</i> Launch of 2017 confidential reporting process

ICS development timeline (2)

Date	Action
Sep/Oct 2017	Data due for 2017 confidential reporting process
May/Jun 2018	Launch of 2018 confidential reporting process
Mid-2018	Publication of comprehensive ComFrame consultation including ICS Version 2.0 Consultation
Sep /Oct 2018	Data due for 2018 confidential reporting process Comments due on ICS Version 2.0 and ComFrame consultation
Apr/May 2019	Launch of 2019 confidential reporting process
Aug/Sep 2019	Data due for 2019 confidential reporting process
IAIS 2019 General Meeting	Adoption of ComFrame, including ICS Version 2.0

2. ICS CONSULTATION DOCUMENT (“ICS CD”)

2016 ICS CD – an overview

- Published on 19 July 2016
- Recognising the importance of this consultation – consultation period extended to 3 months (to 19 October 2016)
- Since the 2014 ICS CD was published there have been a number of interactions with stakeholders that essentially update them on how the IAIS is dealing with important issues regarding the ICS:
 - 2015 – 4 Capital-related 1 day stakeholder meetings (February 2015 USA, March 2015 Italy, May 2015 USA and Japan) and part of October 2015 IAIS Stakeholder Sessions and Dialogues
 - 2016 – 3 Capital-related 1 day stakeholder meetings (March 2016 Singapore, April 2016 Basel, June 2016 New York)
- **Most of the key issues for the ICS CD have been previewed with stakeholders through this informal consultation process**

2016 ICS CD – an overview

- The focus of this CD is on technical questions (some strategic issues also included)
 - In the 2014 ICS CD, questions were exploratory in nature aiming to solve a number of strategic and technical issues.
 - Focus of the 2016 ICS CD is on specific details for valuation, capital resources and the ICS Standard Method for the capital requirement.
- A large number of issues are under consultation. The CD contains over 200 questions.
- Most questions have been phrased as a ‘yes or no’ question followed by a request for explanation.

Answers will be most helpful for the IAIS if they:

- Explicitly indicate ‘yes or no’ upfront
- Provide logical explanations with clear, detailed rationales
- Are in line with the role of the ICS as a **global minimum standard**
- In some cases stakeholders are requested to provide justification for using an alternative approach. Where available, please provide details, references and sources.

2016 Field Testing package

- The ICS CD focuses on technical issues related to the Version 1.0, providing background and rationales for the approaches that are considered in 2016 Field Testing
- The 2016 Field Testing package (Technical Specifications, Template, Questionnaire etc.) provides more technical details and was made public at the same time as the 2016 ICS CD
- The ICS CD contains cross-references to the 2016 Field Testing Package. These will help stakeholders to provide feedback on approaches described

Topics covered in ICS CD

- ICS Valuation
 - Market-Adjusted Valuation (MAV); and
 - GAAP (Generally Accepted Accounting Principles) with Adjustments (GAAP Plus);
 - ICS capital resources;
 - ICS capital requirement based on the standard method;
 - Scope of the group: perimeter of the calculation of the ICS;
 - Preliminary considerations for a holistic approach to tax
-
- **Note that issues covered are focused on ICS Version 1.0**
 - **Separate consultation will be conducted for ICS Version 2.0 in 2018 (see timeline)**

Some topics *not* covered in ICS CD

- Longer-term strategic issues are not part of the CD. Difficult to answer many questions on these issues until the technical nature of the ICS is more settled.
- For example:
 - **Internal models** - This matter will be considered in the progression from ICS Version 1.0 to ICS Version 2.0 – see ICS Goals
 - The manner in which **comparability** of the ICS will be assessed in practice
 - The possibility of the ICS being part of the International Monetary Fund's (IMF) Financial Sector Assessment Program (**FSAP**).
 - The manner in which ICS Version 2.0 will be communicated to the public including consumer and investor education.
 - **Transitional arrangements** from existing supervisory regimes to the implementation of the ICS.
 - Interaction between local legal entity capital requirements and the ICS as a consolidated group-wide capital requirement
 - Issues related to **fungibility** of capital

3. VALUATION

MARKET ADJUSTED VALUATION (“MAV”)

Adjustment to the base yield curve

- Volunteers remain concerned about **the volatility that the methodology used for the 2014 and 2015 Field Testing could potentially introduce on Capital Resources in a stress scenario**
- To this end, Volunteers have been advocating for a change to the adjustment methodology, to better align the behaviour on the two sides of the balance sheet
- As a response, the IAIS has committed to explore possible refinements to the adjustments to the basic curves, including their appropriateness during a stress scenario
- 2016 Field Testing Exercise and ICS CD will collect both data and feedback to try to assess and resolve the issue

Adjustment – main points under consideration

- The 2016 Field Testing and the Draft 2016 ICS CD include discussion and options on several policy issues:
 - Approach to portfolio selection for the calculation of spreads
 - Approach to liability bucketing
 - Level of granularity of the calculation
 - Methodology for the adjustment of spreads for default and other risks
 - The segments of the base yield curve that should be affected by the application of the adjustment
- In addition, the identification/design of a “stress scenario” (e.g. 2008) is fundamental to assess the appropriateness of any of these options

Approach to 2016 Field Testing

- It is important that during the 2016 Field Testing **the IAIS collects the necessary information** to allow for **sound and evidence-driven policy decisions**
- To this end, part of the 2016 Field Testing exercise will be used to test a range of different options concerning the design of the adjustment
 - Streamlining the number of field testing options has been essential to keep the exercise manageable – options selected do not prejudice outcome for ICS v 1.0
- **Each of the options will be tested under two different economic scenarios (end-2015 and 2008-type of scenario)** - This will allow the IAIS to assess the appropriateness and effectiveness of the different proposed measures under different economic conditions
- Stakeholders' feedback on the various approaches will be sought in the ICS CD (stakeholders will need to refer to the 2016 Field Testing Technical Specifications for details of the approaches)
- This approach will allow the IAIS to assess the effectiveness of the different approaches in the mitigation of excessive volatility of Capital Resources in the MAV balance sheet

Discounting in 2016 FT – Reference Methods

Collected for information to allow the IAIS to explore discounting options

- Reference Method 1: **Discounting with no adjustment to the base curves** (liabilities are discounted using the base yield curve)
 - Will be used to assess the effectiveness of the options under consideration in order to make a decision after the 2016 Field Testing exercise
- Reference Method 2: **applying the 2014/15 field testing Approach**
 - IAIS-defined adjustment for each currency based on 40% of a good quality corporate bond index
 - Default approach throughout 2016 Field Testing to ensure comparability with other years' data
- Reference Method 3: **using entity-specific portfolio of assets**
 - Emphasis is on alignment between the asset portfolio held and the adjusted yield curve used to discount insurance liabilities
 - Allow the IAIS to assess the degree of basis risk introduced by other methods (i.e. the extent to which the assets held by IAIGs deviate from those captured in the reference/representative portfolios)

Discounting in 2016 FT – Options

Discounting options being explored in 2016 Field Testing (does not pre-judge discounting for ICS Version 1.0)

- Option 1: **representative portfolio that aims to reflect the assets typically held by all IAIGs in a particular currency**
- Option 2: **weighted average of market portfolios (WAMP)** that should be weighted by each IAIG depending on its specific asset exposures
 - Aims to achieve a balance between sensitivity to the actual exposures of the IAIG and comparability of insurance liability valuation across IAIGs
- Option 3: similar to Option 2 but with bucketing of liabilities

Asset portfolios	Bucket	Mapping criteria	Application Ratio
Licenced life insurers*	Bucket 1	Life insurance and disability annuities in payment with no cash benefits on withdrawal	80% of the spread for the group of assets backing life liabilities
	Bucket 2	Life insurance liabilities with cash benefits on withdrawal	60% of the spread for the group of assets backing life liabilities
Licenced non-life insurers	Bucket 3	All other liabilities	40% of the spread for the group of assets backing non-life and reinsurance liabilities

GAAP WITH ADJUSTMENTS (“GAAP PLUS”)

Similarities and Differences: GAAP+ and MAV

Similarities:

1. Both start with jurisdictional GAAPs and make adjustments thereto
2. Both adjust technical provisions to current estimates
3. Both aim for a reasonable approach that would limit undue volatility and procyclicality (the approach to do so may differ between the two valuation bases)
4. Both utilize the same definition/specifications for capital resources

Differences:

1. For all amounts and adjustments, GAAP+ relies on amounts, processes and/or systems that are subject to audit by independent auditors. That can also occur for MAV, but for MAV such reliance on audit is not an explicit principle.
2. Unlike MAV, GAAP+ adjustments to reported GAAPs may differ by jurisdiction (and in some cases, by firm) in order to maximize the use of balances or processes subjected to audit and to produce symmetrical valuation of assets and liabilities.
3. For some jurisdictions, certain GAAP+ figures are not market-based, and will react differently to stress, compared with stresses applied to MAV data.

New for 2016 Field Testing of GAAP+

- Updates of specifications, template and questionnaire for the 2016 field test exercise; changes are relatively minor, with the following exceptions:
 - “AOCI adjustment” for GAAP+ to address asymmetrical valuation of assets and liabilities.
 - Application of the AOCI adjustment to U.S. GAAP example initially
 - Data collection for all jurisdictions where invested assets unrealized gains/losses are reported in AOCI to evaluate whether appropriate for other jurisdictional GAAPs
 - New 2016 GAAP+ examples: IFRS/GAAPs in Korea, Singapore, and Chinese Taipei
 - For 2016, will test capital requirements for all subject risks; approach will be consistent to MAV except for Interest Rate risk and Real Estate risk:
 - Two methods under interest rate risk will be evaluated
 - Alternate method to address Real Estate reported at cost under GAAP+

2016 Field Testing: Key Objectives for GAAP+ (1)

General

- Seeking to improve quality of data collected
 - Minimize outliers caused by misinterpretation or deviation from instructions
 - Obtain more complete responses on qualitative questions, narrative descriptions, and suggestions to improve GAAP+

Valuation

- Understanding the key differences between GAAP+ and MAV, identified by Volunteer IAIGs through the Reconciliation template and narrative responses
- Requesting input from Volunteers to refine GAAP+ examples, highlight any operational concerns, improve comparability among jurisdictions

2016 Field Testing: Key Objectives for GAAP+ (2)

Capital Resources

- Collecting data to evaluate and further refine the AOCI adjustment

Capital Requirements

- Test options and evaluate the appropriateness of design across all risks. Calibration will also be considered and evaluated.

Not specifically addressed in 2016 Field Testing

- Adapting consistent and comparable MOCE for GAAP+
- Changes that may result from holistic approach to tax (not addressed in 2016 for MAV either)

MARGIN OVER CURRENT ESTIMATE ("MOCE")

Margin over Current Estimate (MOCE)

- Two different types of MOCE proposed as options in ICS CD and 2016 Field Testing
 - Cost of capital MOCE
 - Prudence MOCE
- Cost of capital MOCE
 - Expected value of the uncertainty around the valuation of the liabilities is measured as the cost of providing the required capital over the lifetime of the liabilities
- Prudence MOCE
 - A way to calculate a consistent margin based on the IAIG's own-fulfilment view
- ICS CD addresses the rationale for the inclusion of a consistent and comparable MOCE
- ICS CD addresses how the MOCE should interact with the other components of the ICS (e.g. required capital, capital resources)

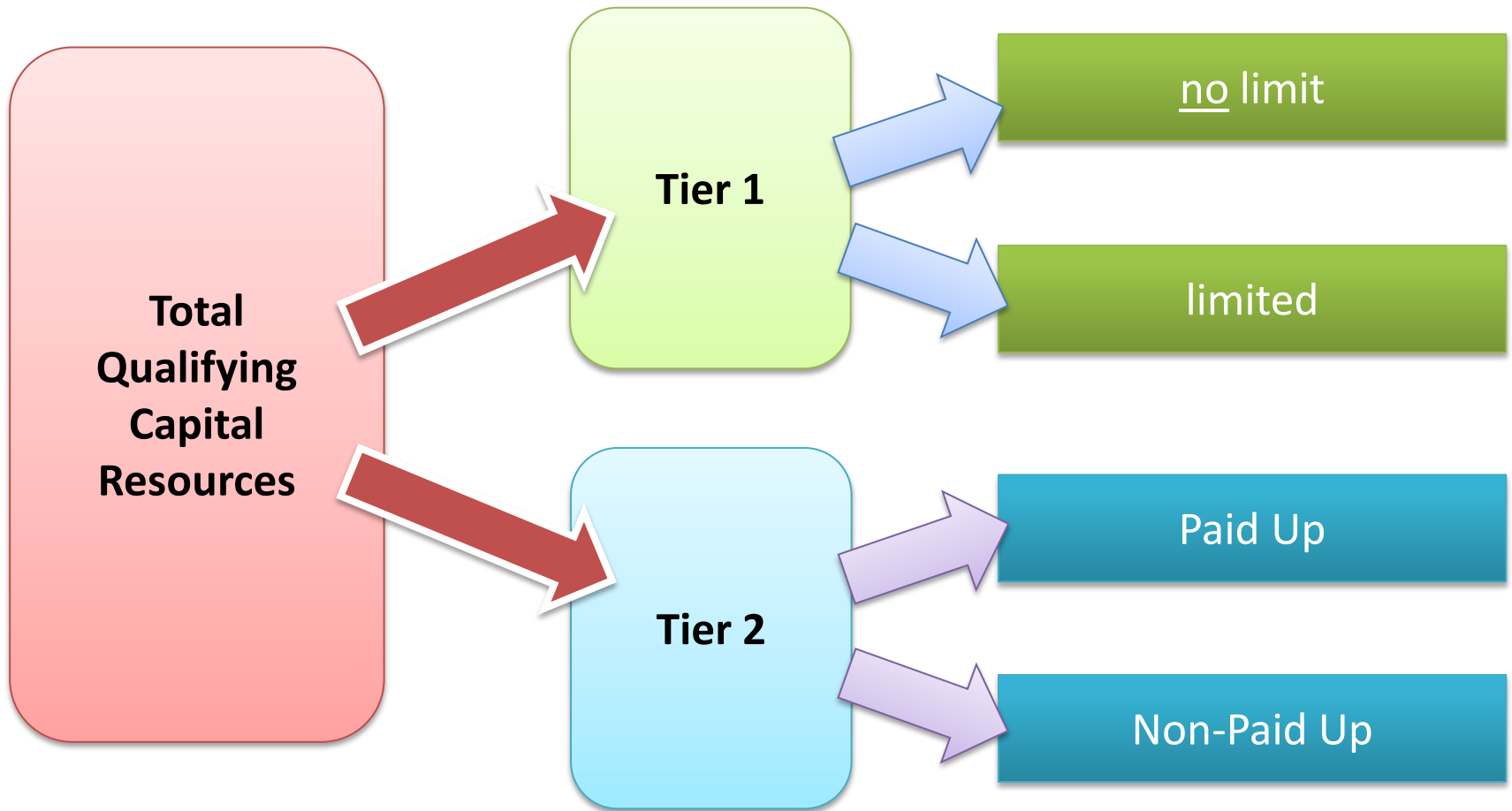
4. CAPITAL RESOURCES

Capital Resources – Overview

- Capital resources comprise both financial instruments and other capital elements (e.g. retained earnings, regulatory reserves, etc.)
- Qualifying capital resources are determined through an assessment of the nature, quality and suitability of all potential capital resources
- The assessment considers the absolute or relative degree of:
 - Subordination
 - Availability to absorb losses
 - Loss absorbing capacity
 - Permanence
 - Absence of encumbrances and mandatory servicing costs

Capital Resources

The tiering being considered:




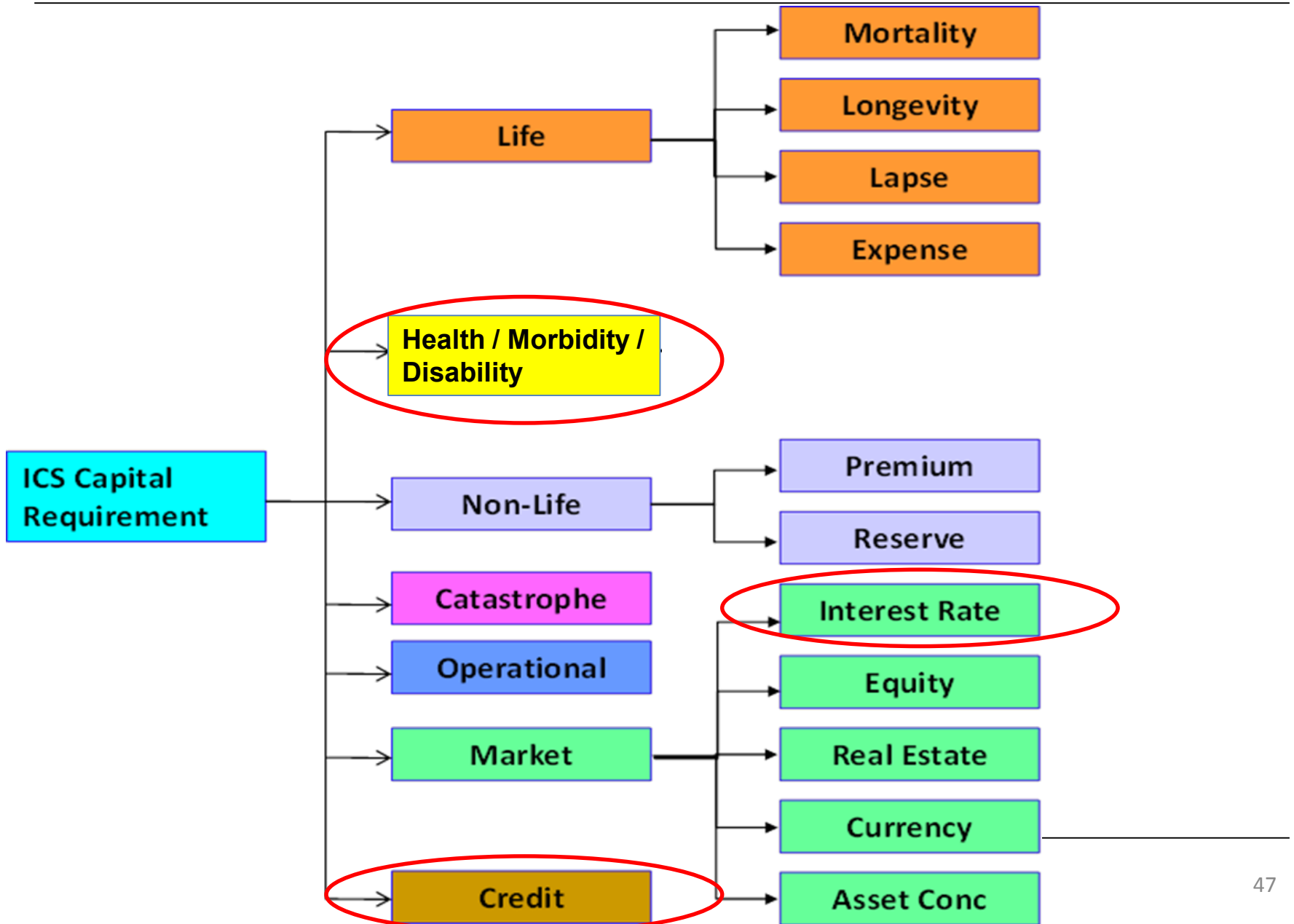
Capital Resources in 2016 ICS CD

- The approach in the 2014 ICS CD is further elaborated
- Key issues for consultation include:
 - structural vs contractual subordination (treatment of senior debt)
 - treatment of mutual IAIGs
 - Inclusion of non-paid-up capital
 - Determination of capital composition limits

5. ICS CAPITAL REQUIREMENT

Overview of risks

 → Risks covered in this presentation. For details of other risks please refer to 2016 Field Testing materials



Significant changes from 2015 Field Testing

- Health / Morbidity / Disability Risks
 - Two options for dealing with Health risk, which was including Morbidity / Disability risk
 - Deletion of Morbidity / Disability risk from Life insurance risk module
- Credit Risk
 - A more granular approach for mortgage loans is being proposed
 - Issues around the use of credit assessments are being described
- Interest Rate Risk
 - Method of calibration
 - Differentiated approach between valuation methods

HEALTH / MORBIDITY/DISABILITY RISKS

Morbidity and disability risk – 2016 field testing

- Two proposals are under consideration (feedback will be sought in the 2016 ICS Consultation on both proposals)
- **Proposal 1:** create a new health module, thereby removing the distinction between “similar to life” and “similar to non-life”
 - stress approach is employed, based on a segmentation by Health lines of business
 - proportional shock factor (by health line of business) would be specified and applied directly to the claim amounts and expenses
 - a specific Health Lapse risk would be included
- **Proposal 2:** addresses the key risk drivers of two very distinct classes of (similar to life) health products:
 - Products that provide medical treatment due to illness, accident, disability or infirmity or financial compensation that is directly linked to the cost of such treatment
 - Products that provide a financial compensation arising from illness, accident, disability or infirmity that is not directly linked to the cost of medical treatment

CREDIT RISK

Credit Risk – key changes for 2016 field testing

- Credit for management actions
 - No credit for management actions permitted in 2015 field testing as methodology was designated as a “factor-based approach”
- Expanded use of external credit ratings/ designations
 - Allowing use of A.M. Best ratings for reinsurance exposures
 - Volunteers may recognise any ratings agency currently recognised by their home insurance regulator for local capital determination purposes, subject to clear instructions provided by the home regulator on how to map those credit agency ratings to the ICS Rating categories and explicit acceptance of the use of those ratings by the IAIS as indicated through future communications provided to Volunteers in advance of field testing submission deadlines
 - Data will be collected on the impacts of use of NAIC designations

Credit Risk – key changes for 2016 field testing

- More granularity for commercial and residential mortgage factors
 - Three granular approaches for commercial mortgages based upon loan to value (LTV) & debt service coverage (DSC) data availability
 - Separate calibrations for agricultural mortgage loans based on LTVs
 - Residential mortgages factors: performing = 3.6%, non-performing = 38%
- Multilateral development bank / Supranational obligations will be given 0% stress factor
 - Consistent with BCBS approach
 - Exposure data will be requested within the supplementary data collection
- Re-labelling of sovereign exposures as exposures to national gov't's
 - Avoid certain definitional issues when referring to monetary unions
 - Still 0% factor, with exposure data part of supplementary data collection

Credit Risk – open items for ICS CD

Feedback will be sought on the:

- Various considerations around the use of credit ratings assessments from external agencies and from supervisory owned processes
- More granular approach for commercial and residential mortgages
- Treatment of reinsurance exposures, especially for collateralised reinsurance

INTEREST RATE RISK

Negative yields and low yields prevalent

Sovereign Bond Yield Curves

Jan 29 2016

	1Y	2Y	3Y	4Y	5Y	6Y	7Y	8Y	9Y	10Y	11Y	12Y	13Y	14Y	15Y	20Y	30Y
Switzerland	-0.90	-1.00	-0.95	-0.85	-0.77	-0.65	-0.57	-0.45	-0.35	-0.29	-0.22	-0.16	-0.11	-0.06	-0.01	0.14	0.31
Japan	-0.07	-0.08	-0.07	-0.07	-0.07	-0.08	-0.05	-0.01	0.04	0.10	0.15	0.21	0.27	0.33	0.39	0.81	1.07
Germany	-0.46	-0.48	-0.45	-0.41	-0.30	-0.19	-0.07	0.05	0.21	0.34	0.38	0.43	0.47	0.52	0.56	0.81	1.05
Netherland	-0.45	-0.46	-0.42	-0.35	-0.26	-0.14	-0.02	0.14	0.28	0.45	0.49	0.53	0.57	0.61	0.65	1.05	1.20
Australia	-0.43	-0.44	-0.39	-0.30	-0.23	-0.10	0.10	0.24	0.41	0.58	0.61	0.64	0.68	0.71	0.74	1.23	1.42
Finland	-0.42	-0.42	-0.38	-0.32	-0.20	-0.14	0.05	0.17	0.35	0.60	0.70	0.80	0.90	1.01	1.11	1.16	1.26
Denmark	-0.28	-0.28	-0.18	-0.08	0.02	0.11	0.20	0.30	0.46	0.61	0.64	0.66	0.69	0.71	0.74	0.87	1.13
France	-0.41	-0.41	-0.34	-0.24	-0.13	-0.01	0.14	0.26	0.47	0.65	0.76	0.87	0.98	1.09	1.21	1.35	1.66
Belgium	-0.40	-0.41	-0.34	-0.28	-0.18	-0.04	0.11	0.43	0.62	0.78	0.87	0.97	1.06	1.15	1.25	1.35	1.64
Ireland		-0.35	-0.24	-0.08	0.03	0.24	0.43	0.68	0.76	0.85	0.87	0.89	0.92	0.94	0.96	1.09	1.35
Sweden	-0.56	-0.37	-0.21	-0.04	0.23	0.33	0.43	0.61	0.73	0.86	1.37	1.40	1.43	1.47	1.50	1.67	
Canada	0.43	0.39	0.41	0.46	0.63	0.65	0.81	0.95	1.06	1.17	1.25	1.33	1.41	1.48	1.56	1.96	1.99
Norway	0.54	0.58	0.58	0.58	0.73	0.88	1.01	1.14	1.22	1.32							
Italia	-0.07	-0.01	0.04	0.24	0.45	0.72	0.88	1.03	1.29	1.44	1.52	1.61	1.69	1.78	1.86	2.16	2.59
Spain	-0.08	-0.01	0.06	0.22	0.47	0.79	1.05	1.20	1.43	1.54	1.65	1.76	1.86	1.97	2.08	2.51	2.73
UK	0.35	0.34	0.51	0.67	0.91	1.04	1.23	1.37	1.49	1.58	1.65	1.72	1.79	1.86	1.94	2.16	2.35
US	0.43	0.78	0.99	1.17	1.35	1.52	1.69	1.77	1.85	1.93	1.97	2.01	2.05	2.09	2.13	2.34	2.74
Israel	0.07	0.25	0.33	0.59	0.75	1.22	1.34	1.47	1.70	1.96	2.01	2.06	2.12	2.17	2.22	2.48	3.00
Portugal	-0.01	0.38	0.86	1.29	1.58	2.12	2.49	2.68	2.78	2.88	2.96	3.05	3.13	3.22	3.30	3.66	3.83
Greece		12.95	12.21	11.46	11.12	10.78	10.43	10.09	9.75	9.40	9.35	9.30	9.25	9.20	9.15	8.95	

	$i < 0\%$
	$0\% \leq i < 0.5\%$
	$0.5\% \leq i < 1.0\%$
	$1.0\% \leq i$

(Source: Bloomberg)

Interest rate risk: MAV approach

- The shocked interest rate curves for MAV have been generated by using the Principal Component Analysis (PCA), with confidence level set at VaR 99/5%, 1-year time horizon
- Reduced calibration data – focusing on data from January 2010, rather than 20 years, which corresponds to post crisis era of monetary policy
- Current approach/methodology chosen is a tradeoff between reasonable calibration levels and smooth, appropriately shaped curves. The IAIS will continue to explore other options or improve the methodology and calibration processes in the future
- Feedback is sought in the ICS CD on the appropriate calibration methods

Interest Rate risk: GAAP+ approach

- Under GAAP+ in certain jurisdictions (e.g., the U.S.), the valuation of long-term insurance current estimates utilises a discount rate representing a blend of the portfolio return rate and a reinvestment rate based on current market assumptions.
- Short-term changes in interest rates would impact reinvestment assumptions, but have little to no impact on a long-term average portfolio return rate.
 - Interest rate stress under MAV, which shocks the discount rate applied to liability cash flows at each tenor, and fair values assets, would not be consistent with the GAAP+ approach where liability valuation and capital resources are largely based on book values.
 - Nonetheless, for analytical purposes data will be collected from volunteers to evaluate interest rate risk as determined under the MAV as applied to GAAP+ (“Method 1”)
- In addition, an alternative approach for valuing liabilities under interest rate stress that is more consistent with the proposed GAAP+ stress on the assets backing them will be tested. The impact of the interest rate shock is reflected in the reinvestment rate. (“Method 2”)
- Additional data requested to assess comparability/differences between MAV interest rate risk and 2 methods of GAAP+ interest rate risk

6. TAX ISSUES

Developing a Holistic Approach to Tax

2016 Field Testing

- Understand current approaches being used by Volunteers to reflect tax impact in GAAP+ and MAV
- Collecting data to begin to assess the impact of DTAs on capital resources
- No changes for MOCE or capital requirements proposed for 2016 Field Test exercise

2016 Consultation Document

- Seeking input on developing approaches for reflecting deferred taxes in the GAAP+ and MAV balance sheet, capital resources and capital requirements
- Specific questions posed related to discussion items in previous slide, with an aim to balance accuracy, transparency and simplicity

Outreach

- Discussions or roundtables with Volunteers/Stakeholders planned for later in year to gather additional input and follow up on responses to questions posed in the 2016 ICS Consultation Document