



Institute
and Faculty
of Actuaries

Global capital standards and implications for the insurance industry

Loic Bellettre, EY
Bouke Evers, EY

26 October 2016



Agenda

- Background and story so far
- The current Insurance Capital Standard (ICS) specifications
- Future development and potential implications



Institute
and Faculty
of Actuaries

26 October 2016

2



Institute
and Faculty
of Actuaries

Background and story so far

26 October 2016

Who are the IAIS?

- The *International Association of Insurance Supervisors* (IAIS) was established in 1994 to **promote cooperation among insurance supervisors** around the globe and with supervisors in other financial sectors.
- Voluntary membership organization:
 - Regulators from more than 200 jurisdictions in more than 140 countries
 - 97% of the world's insurance premiums
 - All EU member states and EIOPA are represented in IAIS
- Its objectives are to:
 - Promote **effective and globally consistent** supervision of the insurance industry
 - Contribute to **global financial stability**



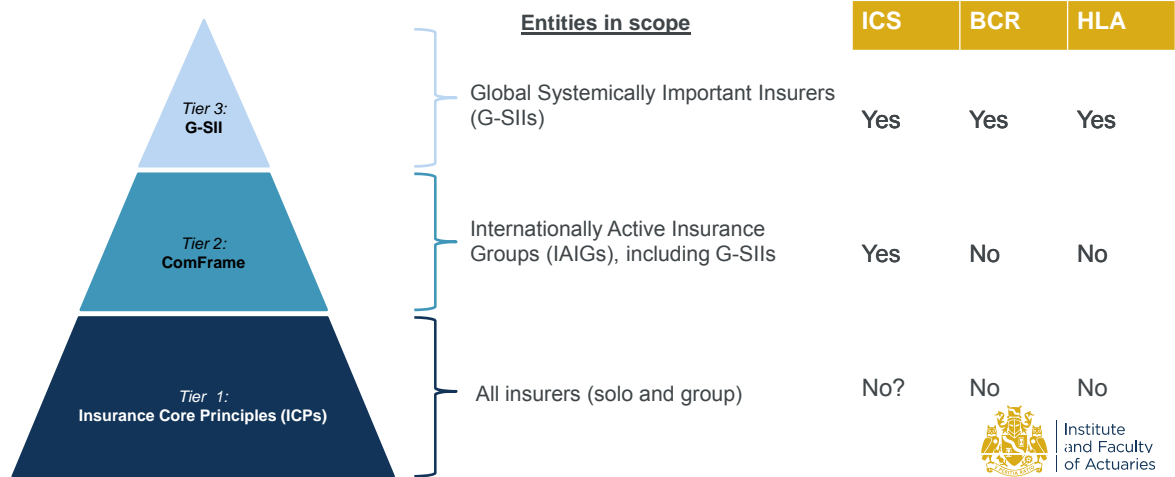
Institute
and Faculty
of Actuaries

22 September 2016

4

IAIS: Proposed group regulatory framework

- The IAIS is proposing a three-tiered global regulatory framework for insurance groups

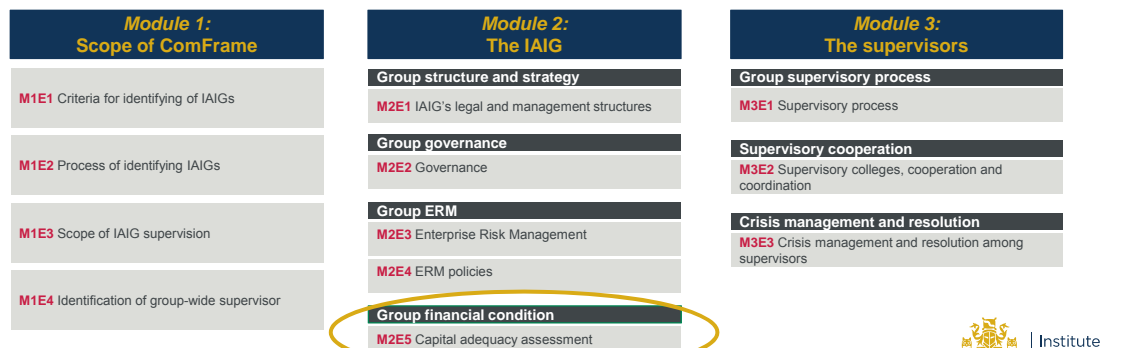


22 September 2016

5

ComFrame: Context of ICS

The Insurance Capital Standard (ICS) forms part of the *Common Framework for the group-wide supervision Internationally Active Insurance Groups* (ComFrame), under development by the IAIS.



Source: Draft ComFrame, September 2014

22 September 2016

6

Scope of ICS

Internationally Active Insurance Groups (IAIGs) are designated by their lead regulator, considering the following criteria:

- Size:
 - **\$50bn** total assets, OR
 - **\$10bn** gross written premiums
- International activity:
 - Premiums written in **three or more jurisdictions**, AND
 - At least **10%** of the group's total gross written premium written **outside the home jurisdiction**

There are expected to be ~55 IAIGs globally.



22 September 2016

7

The story so far

Date	Event
Sep 2013	Principles for the development of ICS released
Apr 2014	First round of field testing commences
Oct 2014	IAIS and FSB agree details of BCR proposal
Dec 2014 – Feb 2015	Risk-based global ICS consultation.
Apr 2015	Second round of field testing commences
Jun 2015	Submission of Part 1 of second quantitative field testing information from supervisors to IAIS
Jun – Aug 2015	HLA consultation process.
Sep 2015	Submission of Part 2 of second quantitative field testing information from supervisors to IAIS
Oct 2015	Approval of HLA within IAIS and HLA document provided to G20
Nov 2015	HLA endorsed by G20 at Leaders' Summit
From 2016	Confidential reporting of HLA and BCR commences
Feb – Apr 2016	IAIS workshops and written feedback on draft technical specifications
May 2016	Third round of field testing commences.
Jul 2016	Second ICS and ComFrame consultation released

Significant political will behind development

Increased momentum over the past 12 months in particular

34 field test participants over 2014 and 2015

Over 40 field test participants in 2016

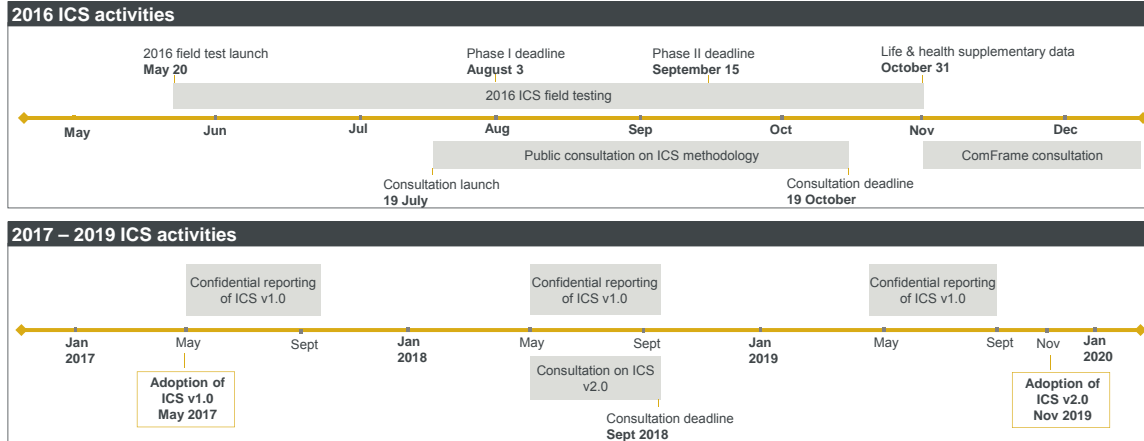
Continuous lobbying and discussions



26 October 2016

8

Planned ICS timeline



... Ultimate Goal of a single global methodology at a date not yet defined



Institute
and Faculty
of Actuaries

22 September 2016

9

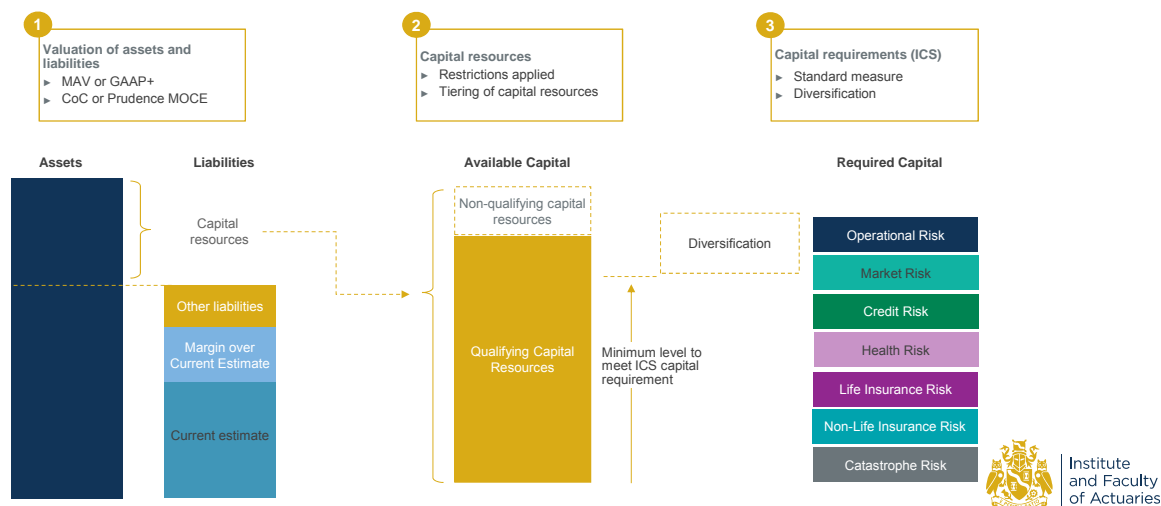


Institute
and Faculty
of Actuaries

The current ICS specifications

26 October 2016

ICS overview



26 October 2016

11

ICS balance sheet – key issues

- **Market Adjusted Valuation (MAV) vs. GAAP Plus**
 - MAV similar to Solvency II
 - GAAP Plus varies by jurisdiction
- **Cost of Capital MOCE vs. Prudence MOCE**
 - CoC-MOCE similar to Solvency II Risk Margin (but with 5% cost of capital rate)
 - P-MOCE adds a margin for prudence considering the distribution of underwriting risks for life business, and avoids recognition of future profits for non-life business
- **Discount rate for MAV**
 - Base curve (including UFR)
 - Spread adjustment

26 October 2016

12

Discount curve (MAV): credit spread adjustment

- Three options tested in 2016, along with three reference methods:

	Reference Methods			Options		
	Risk-free	2015 methodology	Asset earned rate	Option 1: Currency-specific	Option 2: Firm-specific	Option 3: Bucketing
Liability segmentation (buckets)	N/A	1	3	1	1	3
Portfolio Composition	N/A	Reference portfolio per jurisdiction	IAIG's own portfolio – own view of asset earning rate	Representative portfolio per currency	Weighted average based on firm's assets	Weighted average based on firm's assets
Default Deduction	N/A	Included in 60% deduction of spread	Risk Correction	Risk Correction	Risk Correction	Risk Correction
Liquidity buckets	1	0%	100%	80%	100%	80%
	2		60%			60%
	3		40%			40%



Institute
and Faculty
of Actuaries

22 September 2016

13

Capital resources

- Capital resources are subject to tiering and other eligibility restrictions, similar to Solvency II.

	ICS Capital Resources	Solvency II Own Funds
Number of tiers	Two tiered system Tier 1: Unlimited / Limited Tier 2: Paid-in / Not paid-in	Three tiered system Tiers 2&3: Basic / Ancillary
Composition limits	Tier 1 limited: (two approaches) • <10% of ICS, or • <20% of Tier 1 capital Tier 2 < 50% of ICS Tier 2 non-paid up <10% ICS	Tier 1 > 50% of SCR Tier 2 & 3 < 50% of SCR Tier 3 < 15% of SCR
Structural subordination	Currently not eligible, but being consulted on	Not eligible
Encumbered assets	Encumbered assets not eligible	Restrictions based on encumbrance, but assets may be eligible at lower tier

Senior debt issued by the holding company and pushed down to subsidiaries is structurally, but not contractually, subordinated to policyholders



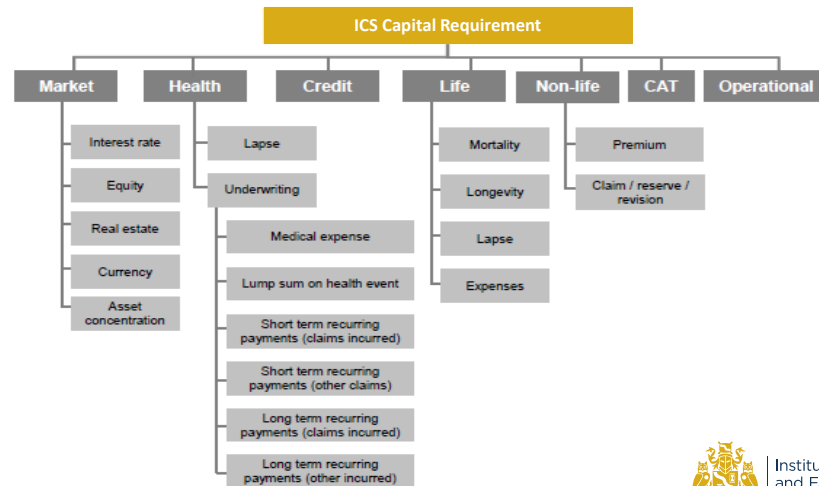
Institute
and Faculty
of Actuaries

22 September 2016

14

ICS capital requirement – structure

- Standard Method only – no Internal Models currently
- The structure of the Standard Method is similar to the SII Standard Formula – but there are differences in the detail



Institute
and Faculty
of Actuaries

22 September 2016

15

Risk categories included

Types of risks	IAIS (ICS)	Solvency II (SF SCR)	US (RBC)	China (C-ROSS)
Market risk				
Interest rate risk	✓	✓	✓	✓
Equity risk	✓	✓	✓	✓
Property risk	✓	✓	✓	✓
Spread/credit default risk	Included in credit risk	✓	✓	✓
Concentration risk	✓	✓	✓	No (considered qualitatively in control risk)
Currency risk	✓	✓	No	✓
Life underwriting risk				
Mortality risk	✓	✓	✓	✓
Longevity risk	✓	✓	No (in development)	✓
Morbidity/disability risk	✓	✓	✓	✓
Lapse risk	✓	✓	✓	✓
Expense risk	✓	✓	No	✓
Non-life underwriting risk				
Premium risk	✓	✓	✓	✓
Reserve risk	✓	✓	✓	✓
Catastrophe risk				
Natural catastrophe risk	✓	✓	Implicit in prem / res risk (explicit in development)	✓
Man made catastrophe risk	✓	✓	Implicit in prem / res risk	✓
Health risk				
Health risk	✓	✓	✓	✓
Credit/counterparty risk				
Credit/counterparty risk	✓	✓	✓	✓
Operational risk				
Operational risk	✓	✓	No (in development)	No (considered qualitatively in control risk)



Institute
and Faculty
of Actuaries

22 September 2016

16

Market risks

	ICS	Solvency II
Interest rate risk	Three IAIS prescribed shocks to yield curves: <ul style="list-style-type: none"> • Up • Down • Flattening 	Two EIOPA prescribed shocks to yield curves: <ul style="list-style-type: none"> • Up • Down
Equity risk	35% decrease in listed shares, developed mkts 48% decrease in emerging market shares 49% decrease in all other types of assets Increase in volatilities, depending on maturity Decrease in hybrid debt, by credit rating	39% decrease in listed shares, developed mkts 49% decrease in emerging market shares ...plus symmetric adjustment between +/- 10% 22% decrease in strategic participations
Real estate risk	30% decrease in value of real estate exposure (including own use)	25% decrease in value of real estate exposure (including own use)
Currency risk	Risk charge on pairwise currency interactions Applied to excess of assets over "liabilities + 10% net insurance liabilities", with latter term representing subsidiary's contribution to ICS	25% increase or decrease in foreign currency values Applied to excess of assets over liabilities for each currency
Asset concentration risk	Charges on assets exceeding threshold, by credit rating	Charges on assets exceeding threshold, by credit rating



Institute
and Faculty
of Actuaries

22 September 2016

17

Life risks

	ICS	Solvency II
Mortality risk	10% increase in mortality rates at all ages	15% increase in mortality rates at all ages
Longevity risk	15% decrease in mortality rates at all ages; and 1% in mortality improvement rates	20% decrease in mortality rates at all ages
Lapse risk	Upward shock: increase of 40% in assumed option take-up rates in all future years Downward shock: decrease of 40% in assumed option take-up rates in all future years Mass lapse shock: immediate surrender of 30% of retail policies and 50% of non-retail policies	Upward shock: increase of 50% in assumed option take-up rates in all future years Downward shock: decrease of 50% in assumed option take-up rates in all future years Mass lapse shock: immediate surrender of 40% of retail policies and 70% of non-retail policies, only applied to policies with a surrender strain
Expense risk	Increase of x% in unit expense assumptions and increase of y% per annum in expense inflation <ul style="list-style-type: none"> • x% and y% differ by region (6% and 1% respectively for EEA) 	Increase of 10% in unit expense assumptions and increase of 1% per annum in expense inflation



Institute
and Faculty
of Actuaries

22 September 2016

18

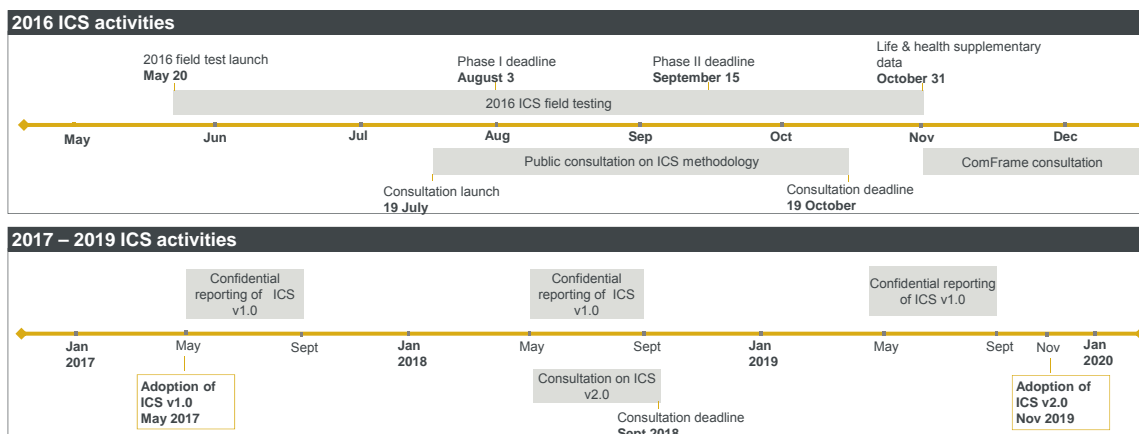


Institute
and Faculty
of Actuaries

Future development and potential implications

26 October 2016

Planned ICS timeline reminder



... Ultimate Goal of a single global methodology at a date not yet defined



Institute
and Faculty
of Actuaries

22 September 2016

20

Regional perspectives

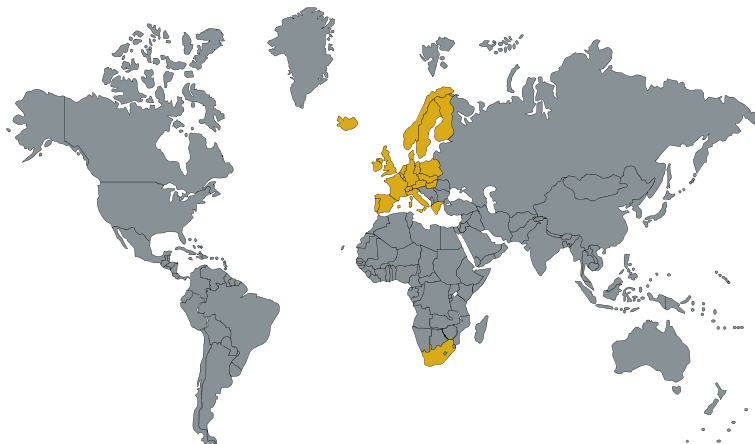


Institute
and Faculty
of Actuaries

26 October 2016

21

Regional perspectives

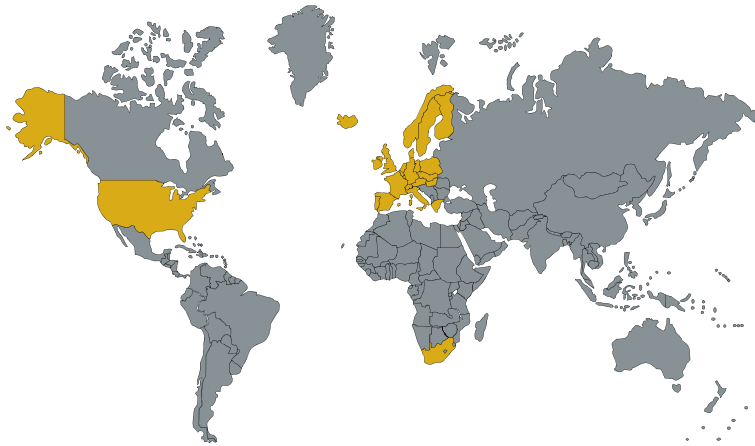


Institute
and Faculty
of Actuaries

26 October 2016

22

Regional perspectives

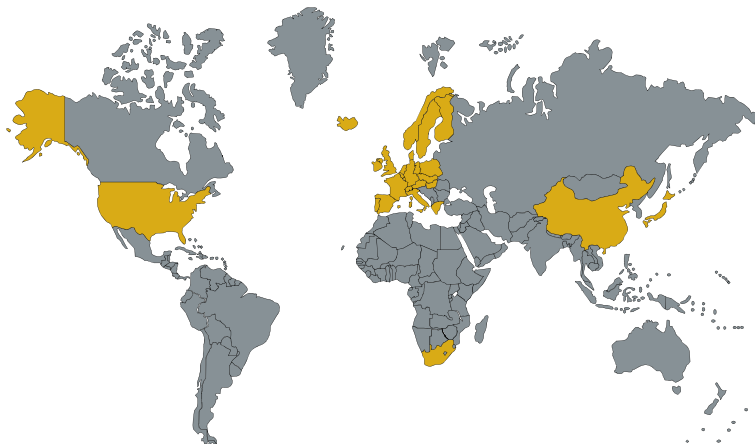


Institute
and Faculty
of Actuaries

26 October 2016

23

Regional perspectives



Institute
and Faculty
of Actuaries

26 October 2016

24

Key issues being debated

- Significant task for IAIS to get agreement on key issues – some being deferred until after v1.0



Institute
and Faculty
of Actuaries

26 October 2016

25

How could the ICS develop?

Will confidential reporting
begin in 2017?

Will the ICS be fully adopted
and how long could this
take?

How could the ICS
influence local regimes?

Will internal models survive?



Institute
and Faculty
of Actuaries

26 October 2016

26

Questions

Comments

The views expressed in this [publication/presentation] are those of invited contributors and not necessarily those of the IFoA. The IFoA do not endorse any of the views stated, nor any claims or representations made in this [publication/presentation] and accept no responsibility or liability to any person for loss or damage suffered as a consequence of their placing reliance upon any view, claim or representation made in this [publication/presentation].

The information and expressions of opinion contained in this publication are not intended to be a comprehensive study, nor to provide actuarial advice or advice of any nature and should not be treated as a substitute for specific advice concerning individual situations. On no account may any part of this presentation be reproduced without the written permission of the IFoA or authors.



Institute
and Faculty
of Actuaries

26 October 2016

27

Contact details



Loic Bellettre

- Senior Manager, EMEIA Insurance – Risk and Actuarial Services
- Based in London
- Email: lbellettre@uk.ey.com
- Phone: +44 7467 441 441



Bouke Evers

- Senior Manager, EMEIA Insurance – Risk and Actuarial Services
- Based in Amsterdam
- Email: Bouke.Evers@nl.ey.com
- Phone: +31 88 407 3141



Institute
and Faculty
of Actuaries

26 October 2016

28