



Solvency II – Asset look-through

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Manchester 5 March 2015

Agenda



Solvency II
Background

Capital Management
and SCR calculations

Pillar 3 asset
reporting

Risk Management

Solvency II is on the horizon



It will be alright on the night!

It's not quite as easy as that!



Solvency II

Fundamental reform: more risk sensitive regulatory framework

Linkage between capital and risk management

Prudent person principle (Article 132)

Enhanced system of governance standards

Requirements still evolving

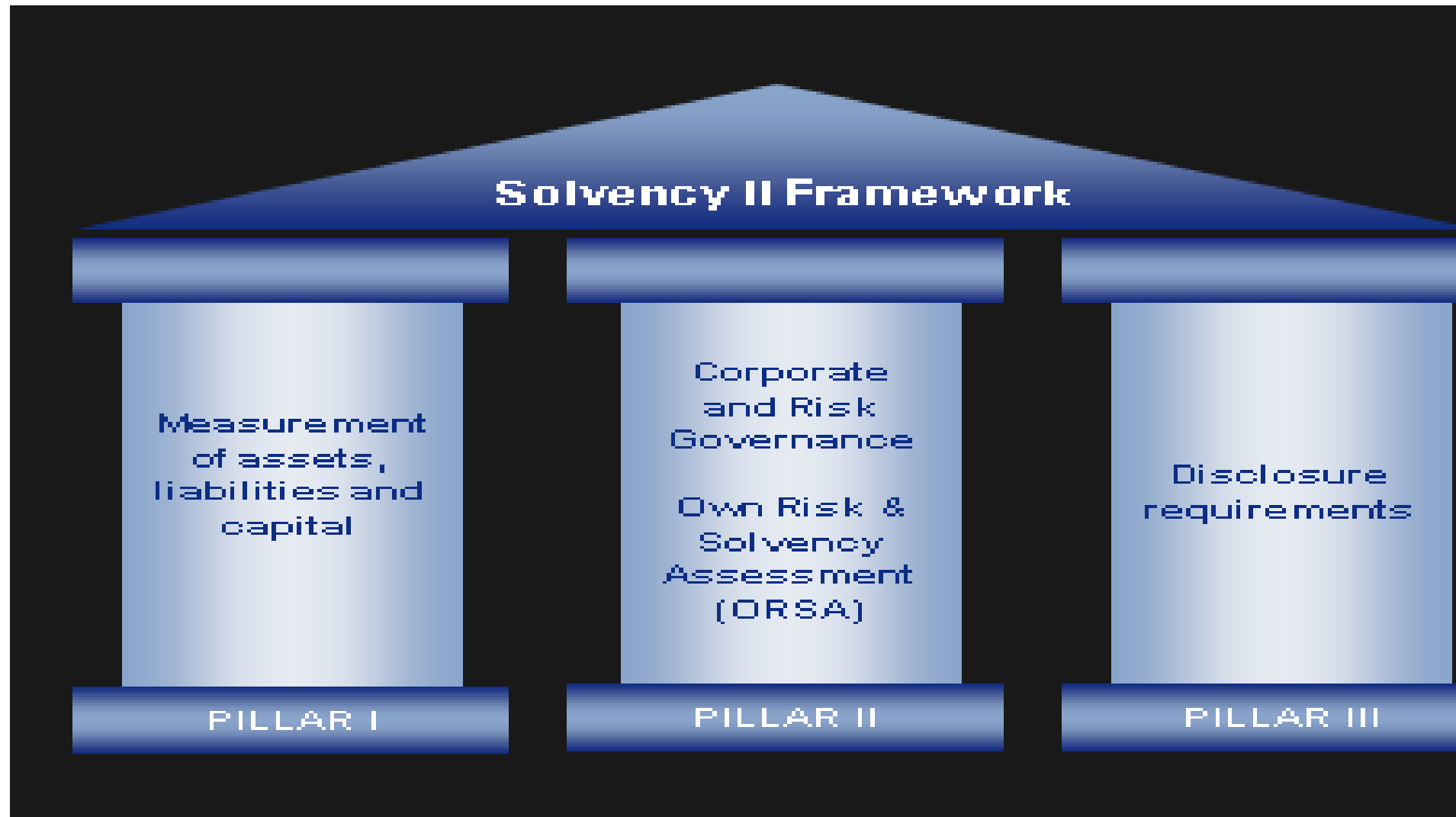
Potential to require business process 'disruptive technology'

Risk based capital

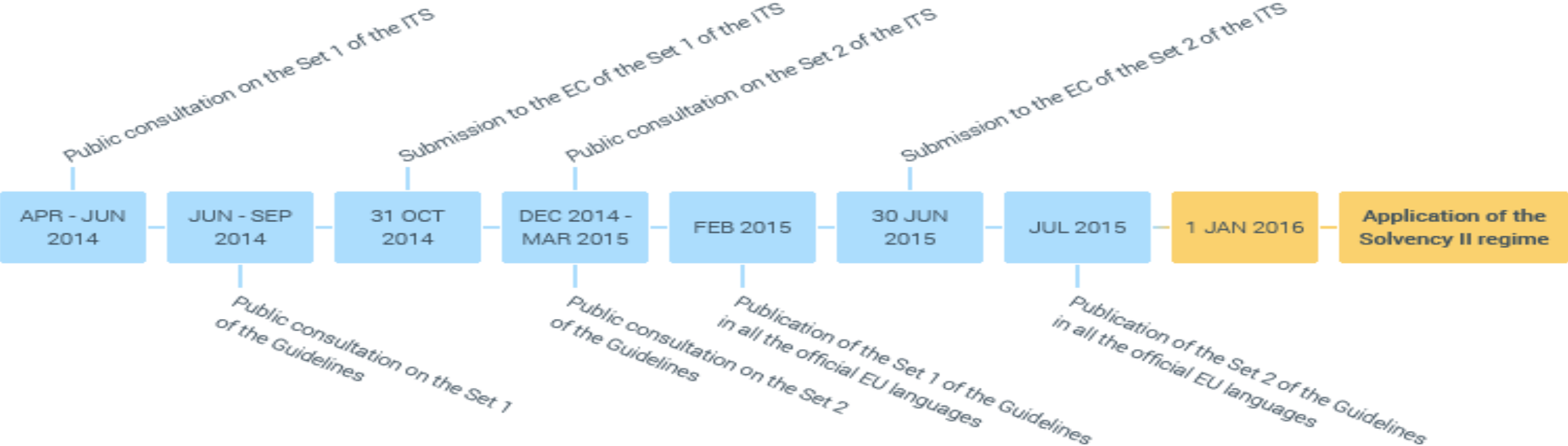
Know your assets

Board Responsibility

Solvency II: The Three Pillars



Solvency II Timelines



Annual June 15
(22 weeks)

Quarterly Nov
15 (8 weeks)

- c. S.02.01.b – Balance sheet;
 - d. S.02.02.b – Assets and liabilities by currency;
 - e. S.06.02.b – List of assets;
 - f. S.08.01.b – Open derivatives;
- c. S.02.01.a – Balance sheet;

Asset look-through: The various strands



SCR Calculations

Capital Management

Pillar 3 asset
reporting

Risk Management
(IMMMCR)

SCR calculations: Market Risk

Economic substance approach – apply sub-modules to assets in underlying CIUs

Multiple iterations – capture all material risks

Active and passive funds

Target allocation – granularity and strictly managed and data groupings $\leq 20\%$

Equity type 2 charge

Market risk sub-modules

- Interest
- Equity
- Property
- Spread
- Currency
- Concentration

$$SCR_{mkt} = \sqrt{\sum_{r,c} CorrMkt_{r,c} \cdot Mkt_r \cdot Mkt_c}$$

SCR.5.43. The equity shock scenarios for the individual categories are specified as follows:

	<i>Type 1</i>	<i>Type 2</i>
<i>equity shock_i</i>	46.5%	56.5%

Note that the equity stresses above take account of a symmetric adjustment according to Article 106 of Directive 2009/138/EC of +7.5%%. The base levels of the two stresses are 39% for type 1 exposures and 49% for type 2 exposures. The applied



Capital Management

Capital Management: Questions for life companies

What will be the solvency capital requirement (SCR)?

How much capital have I got?

What is my SCR coverage?

What are the risks to my capital and my capital coverage?

What are the possible capital management initiatives?

Capital Management

EIOPA Insurance Stress Test 2014

Core Stress Test Module: 14% had <100% SCR

Market shock core stress module CA1: 44% (and 31% of top 30) <100%

Importance of Asset Liability Matching

Unit linked matching process

Subject to caveats

Issues

- Minimise volatility of own funds
- Reduce market risk SCR
- Release cash

<http://www.actuarialpost.co.uk/article/minimising-volatility-of-solvency-ii-funds-and-reducing-scr-7167.htm>



Home Pensions Investment Life & Health General Insurance Software



Investment - Articles - Minimising volatility of Solvency II funds and reducing SCR

George McCutcheon, Director of Research, Financial Risk Solutions (FRS) describes how an appropriate unit-linked matching policy would release cash, minimise volatility of Solvency II funds and reduce market-risk solvency capital requirement (SCR)

In the Solvency II world, capital efficiency will be of paramount importance. For life insurers with large unit-linked portfolios, choosing an appropriate unit-matching process will be an important part of their capital management programme. There will be the potential to release cash from the unit-linked funds for other capital purposes, with the elimination of unnecessary forced investment into the unit-funds being a very welcome development for finance directors. This article details the practical issues involved and the systems required to operate the business processes with appropriate risk management and reporting.

Article 132(3) of the Solvency II requirement states that technical provisions for unit-linked contracts must be represented as closely as possible by units. However the investment policy for the amount ('excess value amount') representing the excess of the face value of the unit-linked liabilities over the Solvency II technical provisions is not specifically prescribed.

SCR: Market Risk

Gross assets	1,000
Face value of liability	1,000
Net income items proportional to unit values	40
Net income items not proportional to unit values	-30



Computed based on net change in assets and liabilities

Excess of A over B: A being u/l assets and B=liability items proportional to unit values

Technical provisions are 990

A is 1000 (or 990 or 960?) and B is 960 and hence 4% of gross unit-linked assets

Apply market shocks; derive $C = \% \text{ change in unit prices}$ and result is $\text{Sum(funds)} (A - B)/A * C$



Pillar 3 asset reporting

Solvency II Regulatory Reporting



Balance sheet doesn't operate on a look-through

R0220 (unit-linked assets) & R0180 (investment funds non-UL)

SCR calculations are on a look-through basis

Reflect economic exposure; reflect asset/liability matching for U/L

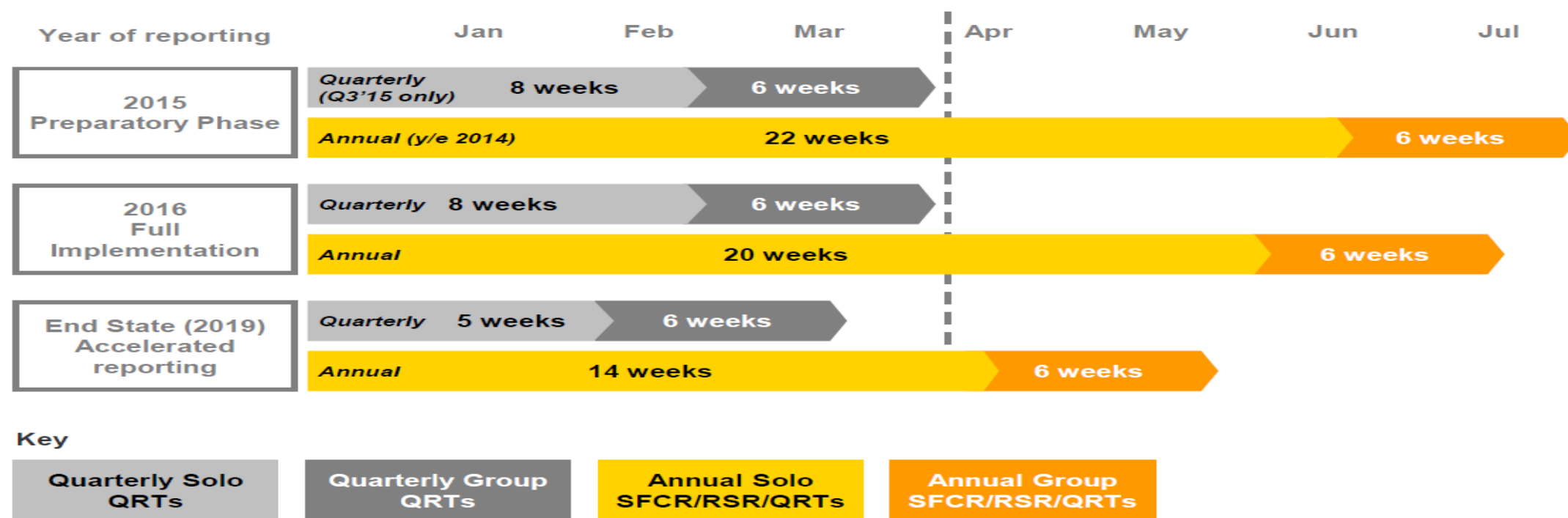
Assets D4 on a look-through basis

Major focus on this but there are other important elements also!

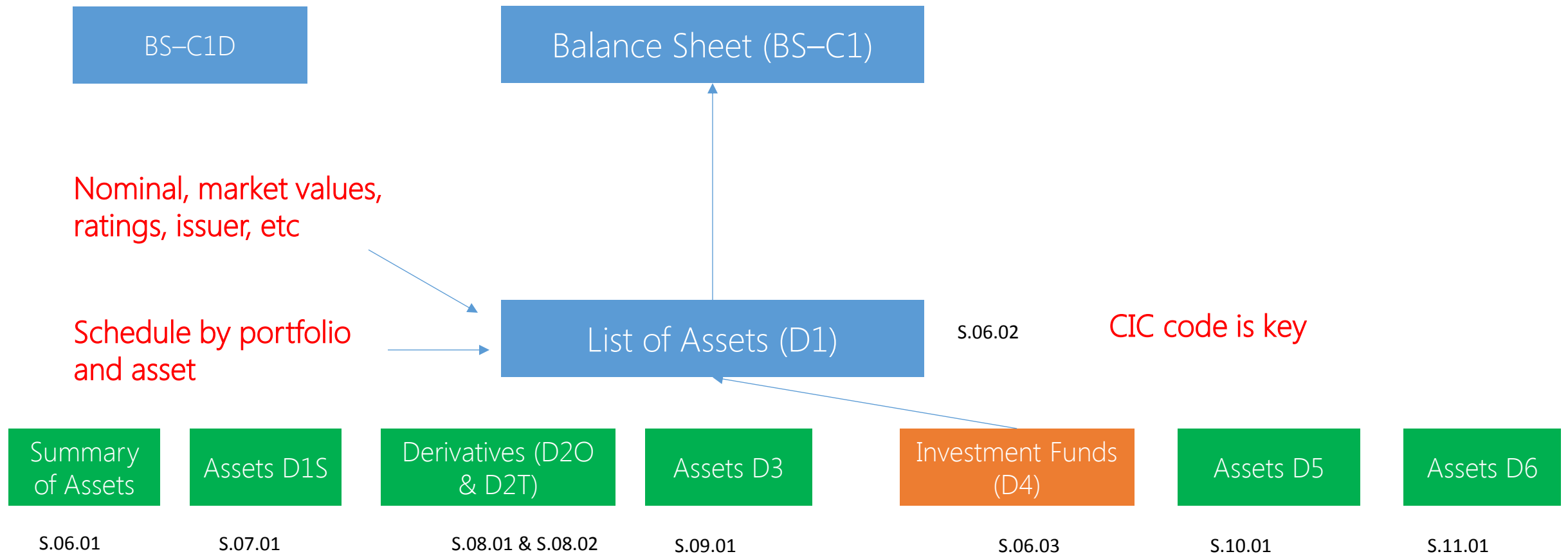
GRC needs to be based on a look-through mind-set

Litigation risk

Pillar 3 requirements: What are the deadlines for reporting?



Structure of Asset Reports



Asset QRTs

Assets D1	Q	A	Properly assessing financial risks	Central to QRTs
Summary of Assets		A	Basic information on investments	
BS –C1	Q	A	Balance sheet	Central to QRTs
Assets D1S		A	Structured notes and collateralised securities	
Derivatives (D2O & D2T)	Q	A	Open and closed derivatives	High profile
Assets D3		A	Assess investment performance by asset category	
Investment Funds (D4)	Q	A	Asset category, geographical area & currency	
Assets (D5)		A	Repos and securities lending	
Assets (D6)		A	Assets held as collateral	

Portfolio

- 1 - Life
- 2 - Non-life
- 3 - Ring fenced funds
- 4 - Other internal funds
- 5 - Shareholders' funds
- 6 - General

Fund number

Applicable to assets held in ring fenced funds or other internal funds (defined according to national markets).

Assets D1



Information on positions held

Valuation method	Acquisition price	Total Solvency II amount	Accrued interest
C0150	C0160	C0170	C0180
A24	A25	A26	A30

Asset ID Code	Asset ID Code type	Portfolio	Fund number	Matching portfolio number	Asset held in unit linked and index linked contracts
C0040	C0050	C0060	C0070	C0080	C0090
A4	A5	A1	A2		A3

Information on assets

23 data items

- Issuer name, sector, group, country
- Currency
- Ratings
- Price, Duration, Maturity Date

This template contains information on the look through of collective investment undertakings, including when they are participations, by underlying asset category, country of issue and currency. The look through shall be performed until the asset categories, countries and currencies are identified. In case of funds of funds the look-through shall follow the same approach.

Information on CIUs

Collective Investments Undertaking ID Code	Collective Investments Undertaking ID Code type
C0040	C0050
A1	A2

Underlying asset category	Country of issue	Currency	Total amount
C0060	C0070	C0080	C0090
A4	A5	A6	A7

Annual is mandatory; quarterly subject to 30% tolerance

Quarterly exemption: What about SCR; risk management & prudent person principle?



Industry issues

Asset managers: data provision

Data required from asset managers

Life insurer – single or multiple data sources/data formats?

Asset manager – single or multiple data recipients/data formats?

Commercials

Other issues

Issues

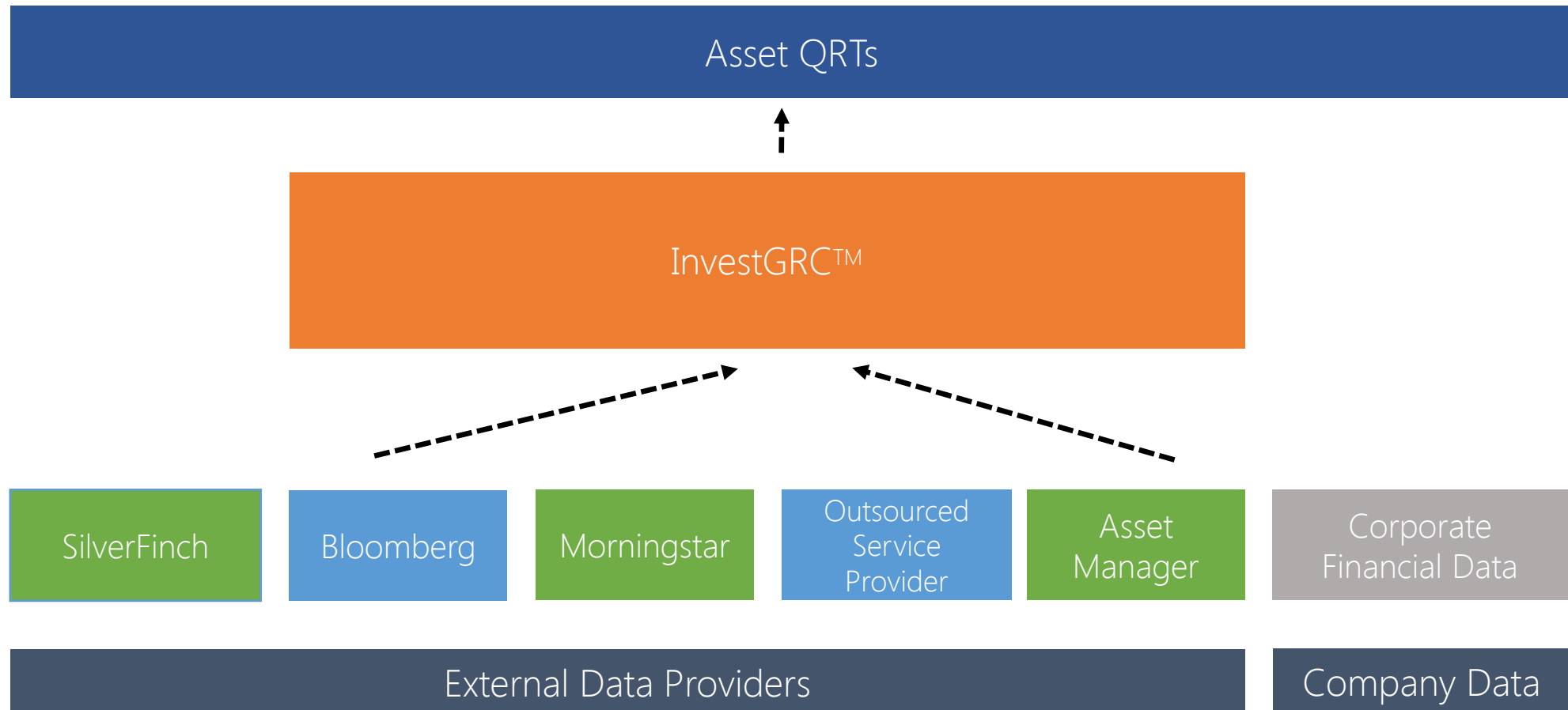
- Confidentiality - intellectual capital
- Fund of funds
- Data transmission process
 - Direct
 - Third-party e.g. Morningstar, Silverfinch
- Data formats
- Data enhancements
- Timescales – D4 dependency

- Morningstar – insurer pays
- Silverfinch – asset manager pays

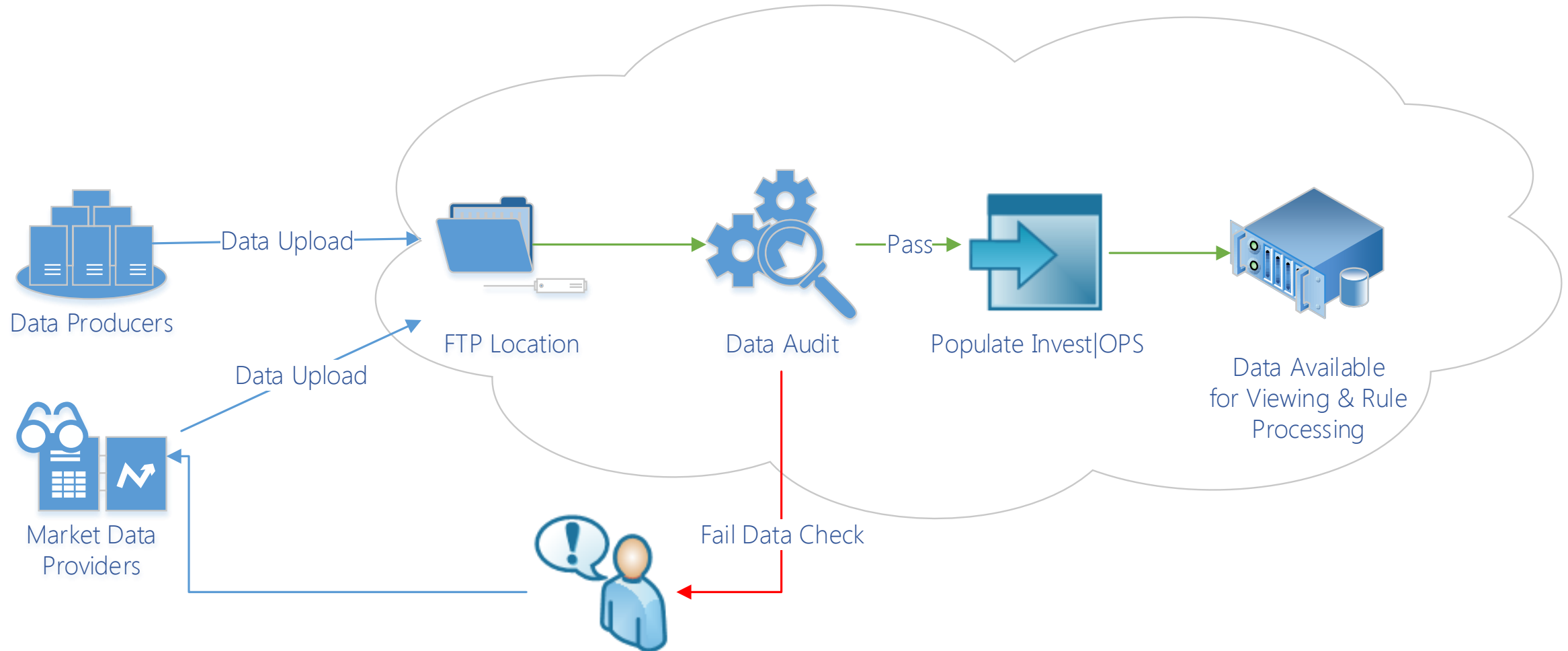
Three perspectives

- Asset QRTs
- SCR calculations
- Risk management

Solvency II QRTs



Invest|GRC™ – Data Upload Process



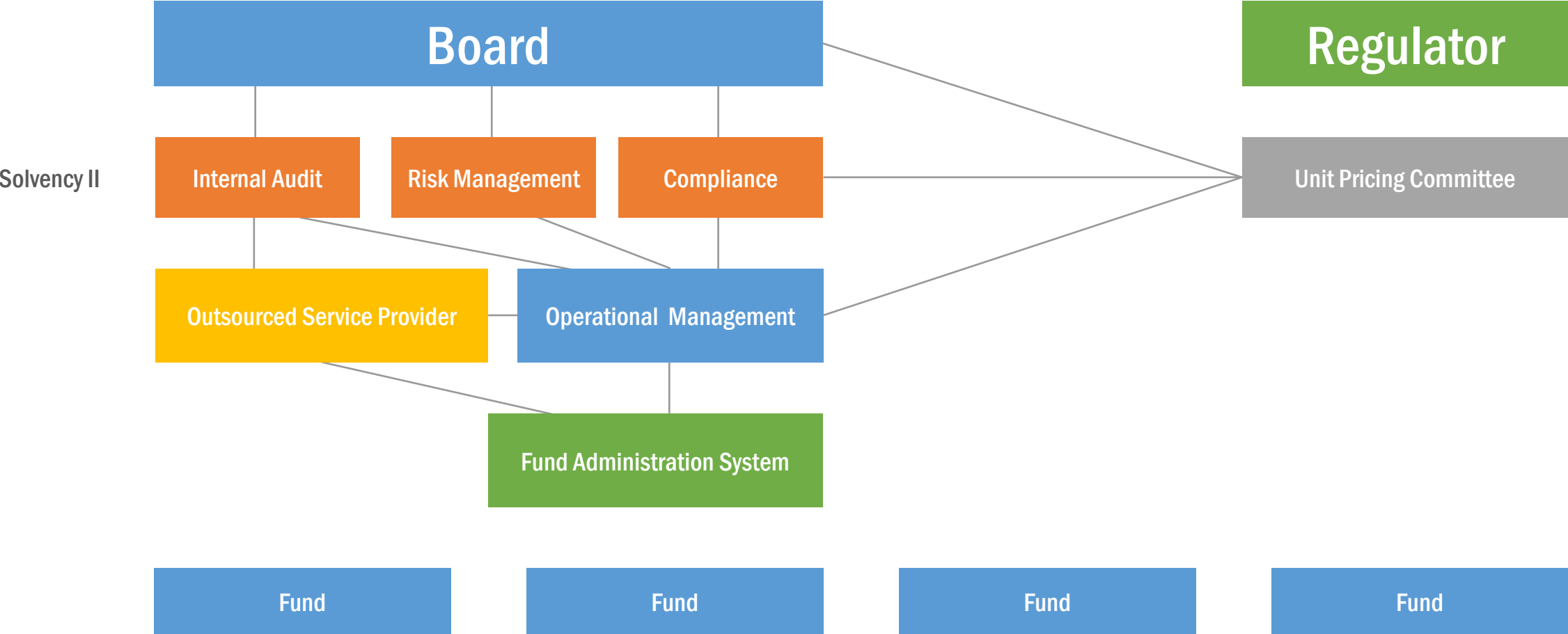


Risk management

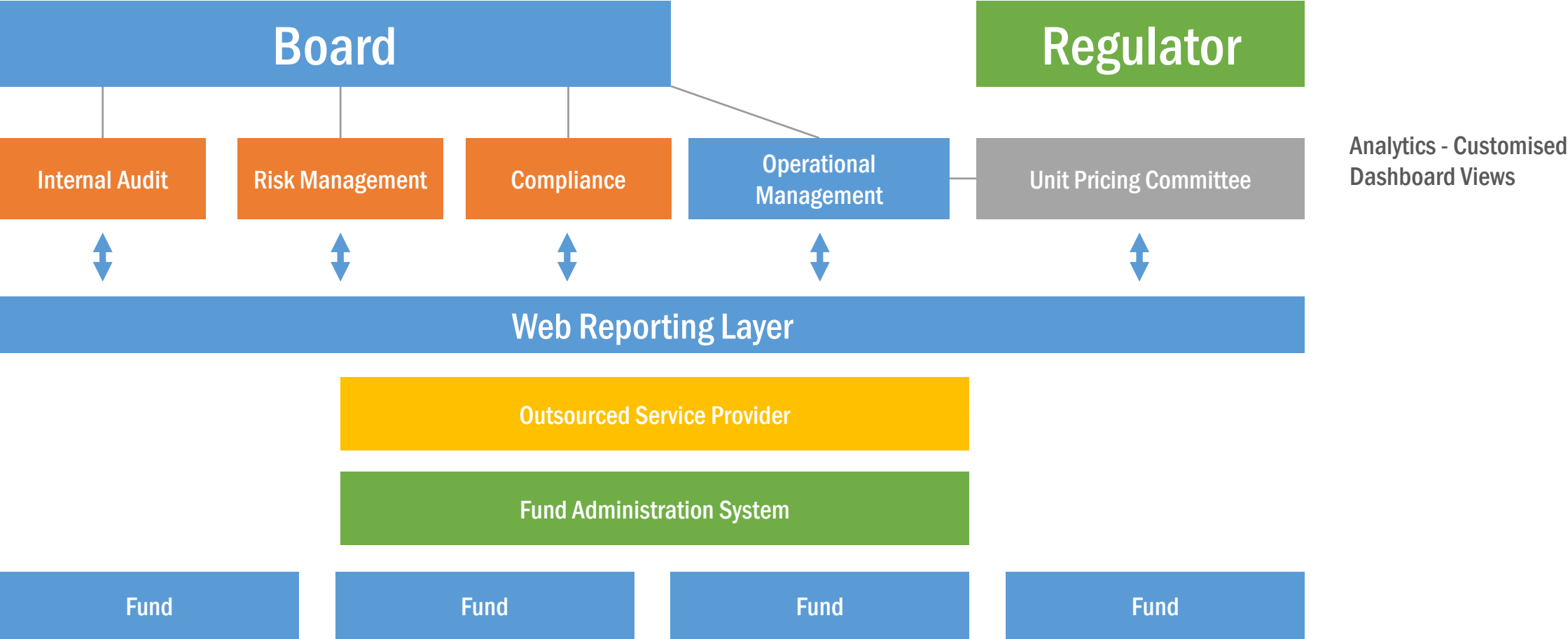
Governance Structure



Governance Structure



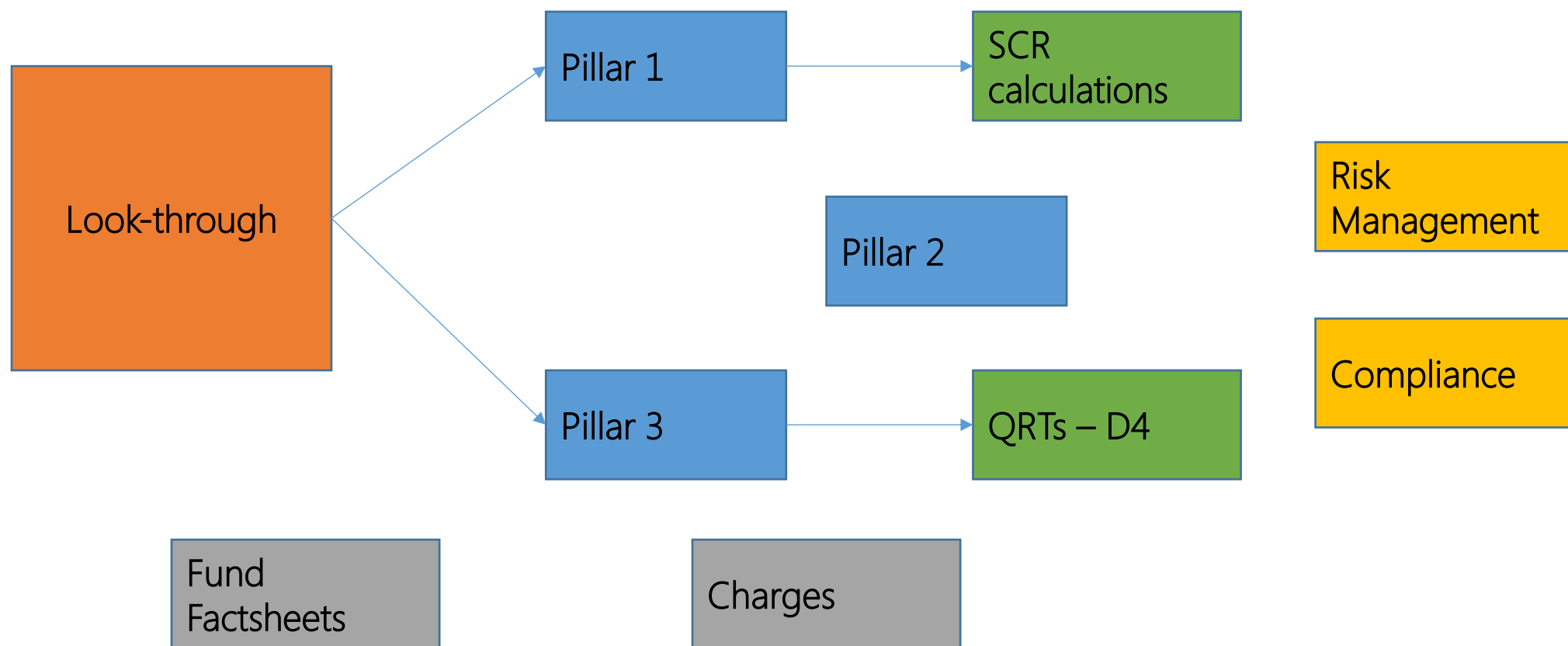
Governance Structure





Summary

Solvency II – Look-through





Key messages for life insurers



Three strands to look-through

SCR, GRC & Reporting – it's not optional!

'Know your assets' requirement

On-going GRC requirement, unit-linked in scope; also litigation risk

Greater control and insight into asset portfolio

Economic benefits; capital management

All-in technology solution

Regulatory Reporting (Solvency II), Oversight, GRC

Key messages for asset managers



Disruptive event

Is approach strategic?; risk to mandates; win more business

Understand insurers' requirements

Is it just Assets D4? Is it GRC? Is it SCR calculation?

Use of third-party data aggregators

Silverfinch; Morningstar

All-in technology solution

Regulatory Reporting (Solvency II), Oversight, GRC

Major themes



Multi-organisational perspective required

Internal and external functions

Disruptive event - greater interchange of data

Between asset managers and insurers

Real-time communications, insight and information flow across the organisations

It's about partnership, co-operation

All-in solution

Regulatory Reporting (Solvency II), Oversight, GRC

Risk based framework



Risk Based Framework: Checklist

Is approach strategic?



Focus on management of interaction of risk and capital



'Know your assets' capability



Risk management and compliance functions empowered



Analytics capability (customised dashboards, risk metrics)



Organisation gets economic benefits





North West Actuarial Society



Manchester
5 March 2015