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Transitional Measure on Technical Provisions IFoA Working Party Emerging Findings

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Andy Rogan
Anthony Plotnek

4 November 2016

What we will cover

- Overview of TMTP working party
- TMTP Background
- TMTP re-calculation
- When to recalculate the TMTP
- How to recalculate the TMTP

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Overview of TMTP working party

Working party

- **Short term working party** set up to provide timely input on topical issue.
- Key **focus** on:
  - **Challenges**
  - **Option available**
  - **What is good practise**
- Main **outputs** are:
  - A **paper**
  - A **presentation** at the Life Conference 2016

Workstreams

- Split into **three** workstreams:
  - Calculations **practicalities** and guidance review
  - **Managing Solvency** including ALM and hedging
  - **Communications** and looking to future
- This presentation focuses on first workstream

Members of working party

- Jamie Cooke (Chair)
- Andrew Scott
- David Smith
- Andy Rogan
- Ross Cooper
- Susan Morgan
- Anthony Plotnek
- Nicola Kenyon
- Shashank Bhalla

The views expressed in this presentation are the views of members of the working party and do not necessarily reflect the views of the IFoA or employers.

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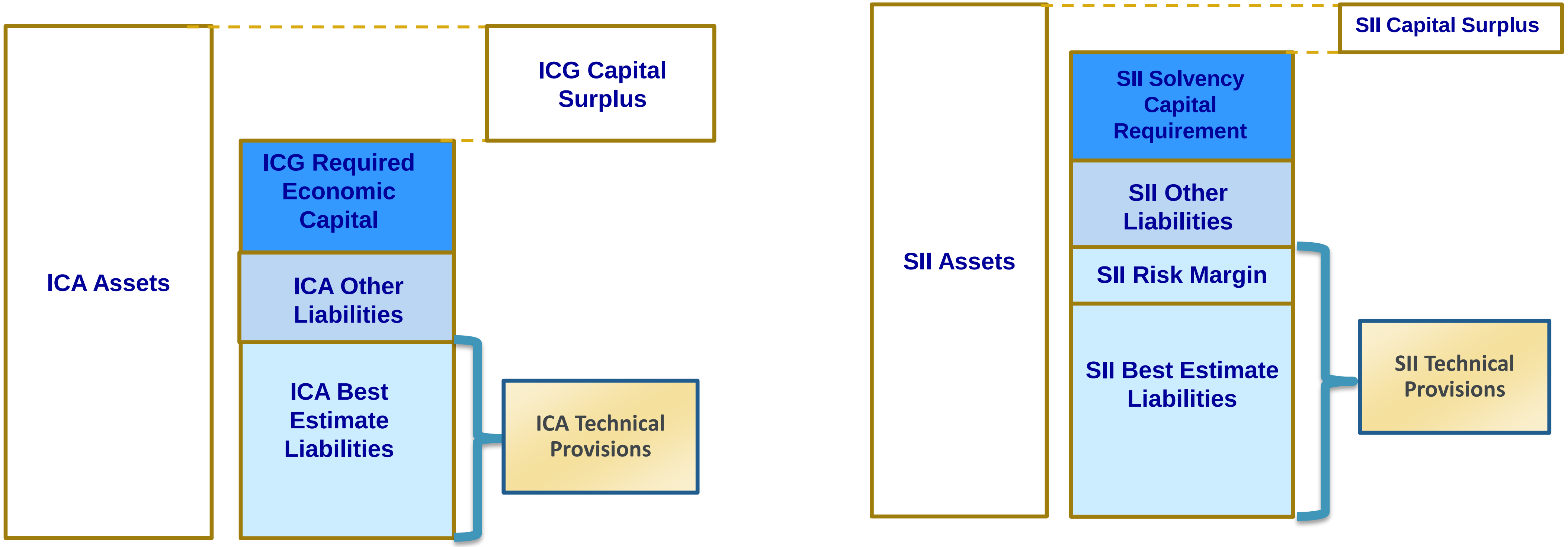
Why have a Transitional Measure on Technical Provisions (TMTP)?

- Solvency II generally increases the technical provisions (relative to ICA) of most firms



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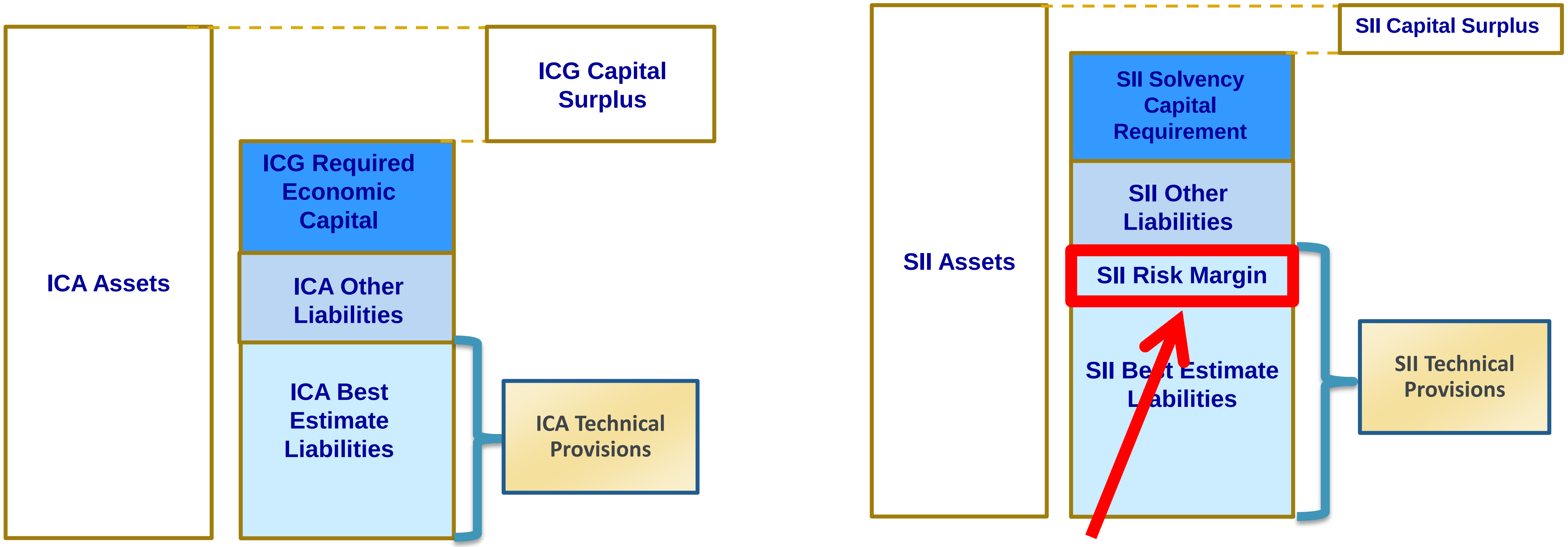
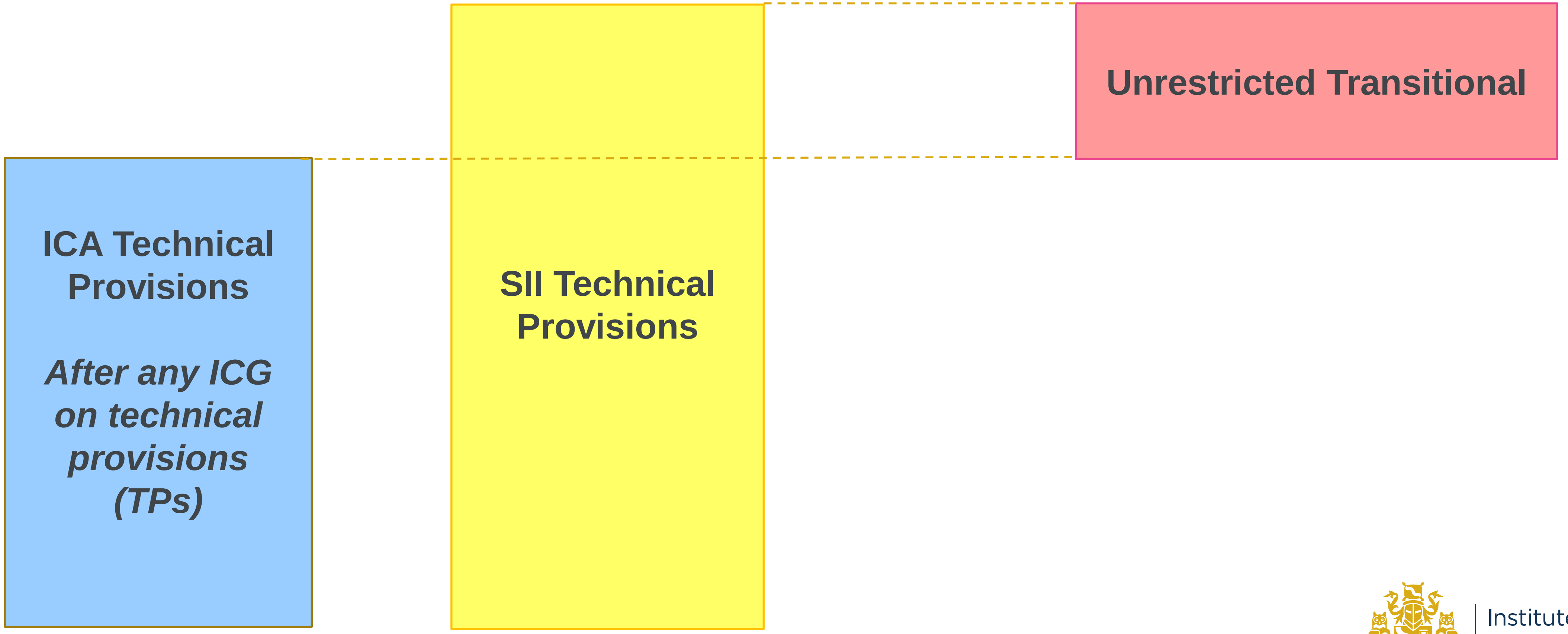


- This principally reflects the introduction of a risk margin component to the technical provisions together with other differences

How is the TMTP Determined?

1. The **Unrestricted Transitional** is the excess of the Solvency II Technical Provisions over the ICA Technical Provisions (after any ICG on technical provisions)



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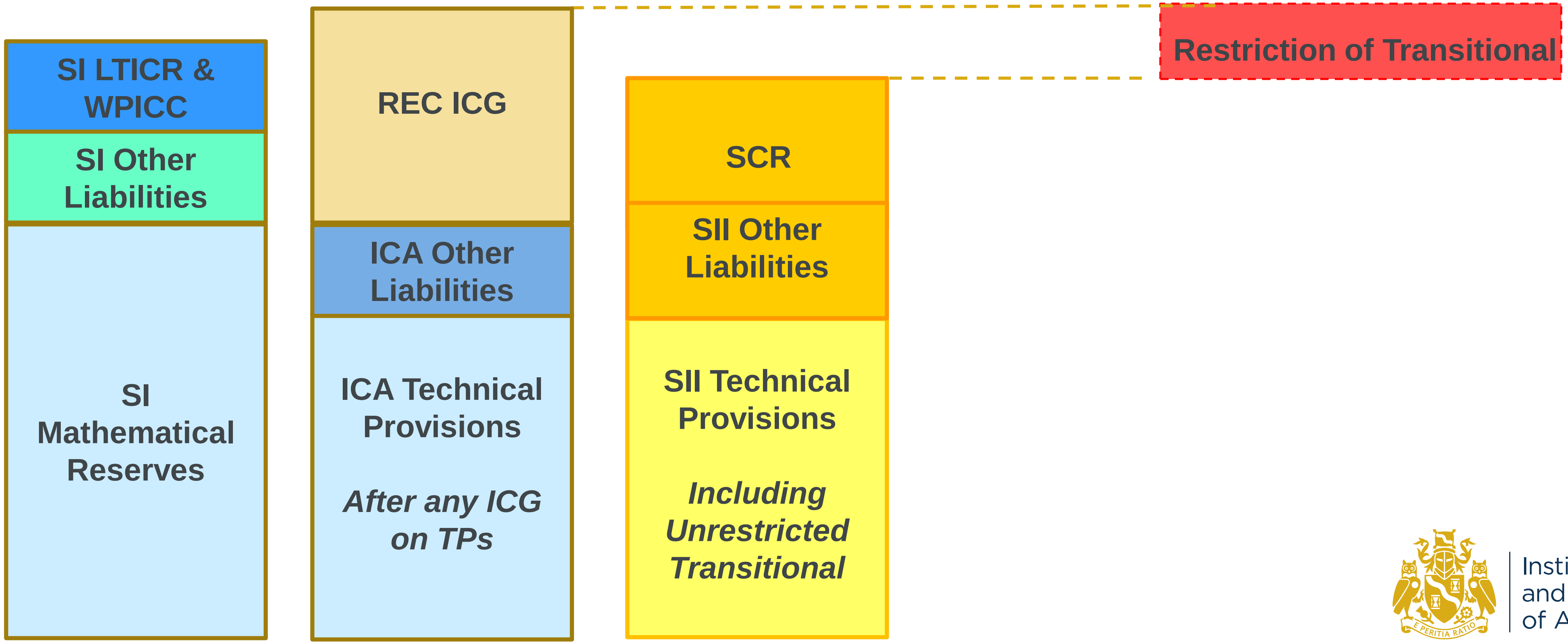
How is the TMTP Determined?

2. A **Restriction of Transitional** is applied if the Solvency II Financial Resource Requirements (FRR) are below those of the more onerous of Pillar 1 and ICA.

   FRR are the sum of technical provisions, non technical liabilities and capital requirements under the respective measure.



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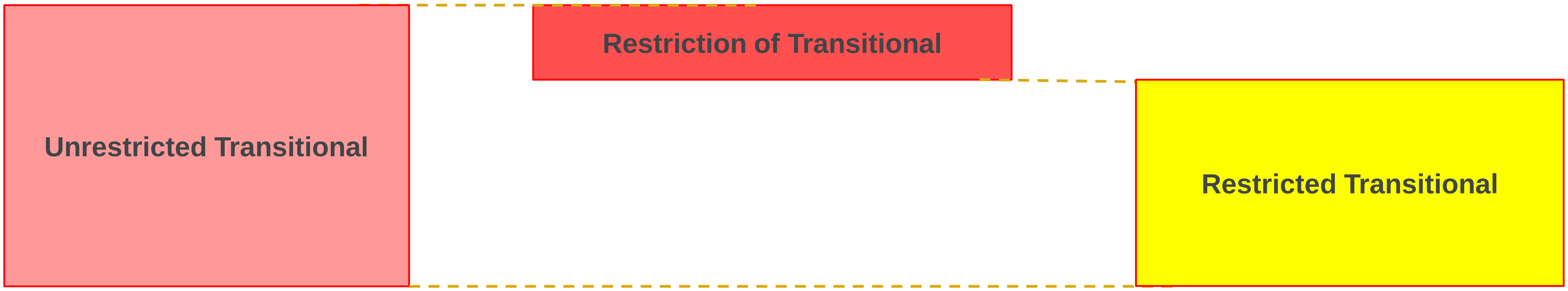
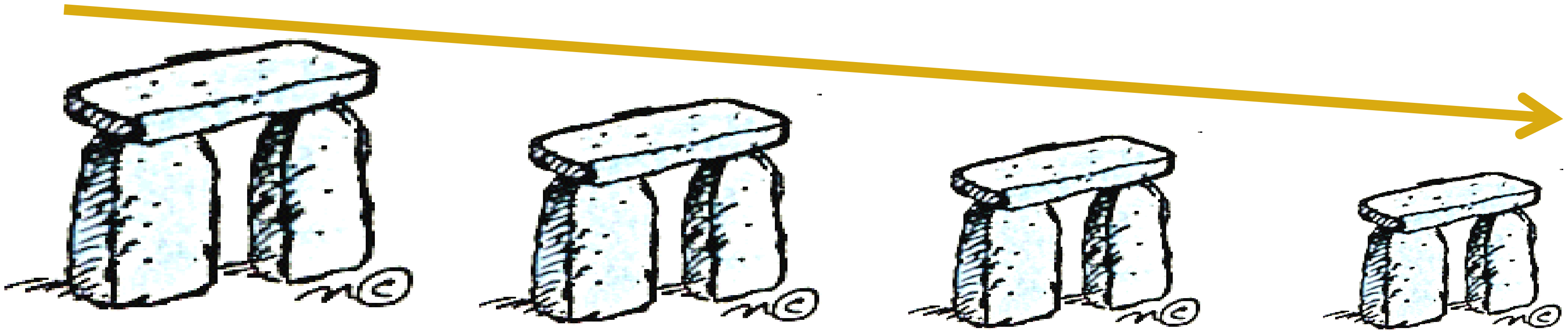
How is the TMTP Determined?

3. The **Restricted Transitional** is determined as the unrestricted Transitional less any restriction of transitional (if applicable).



TMTP - A straight line run-off?

- The transitional arrangements were designed to spread that impact over sixteen years
- During which time, most of the business in force on 1st January 2016 will have run off



- However Article 308d (3) of SII directive includes provision to allow recalculation…

…the transitional deduction referred to in paragraph 2(a) and (b) may be recalculated every 24 months, or more frequently where the risk profile of the undertaking has materially changed.

- And PRA supervisory statement SS6/16 ‘Recalculation of the TMTP under Solvency II’ was issued in May 2016 to reflect this.

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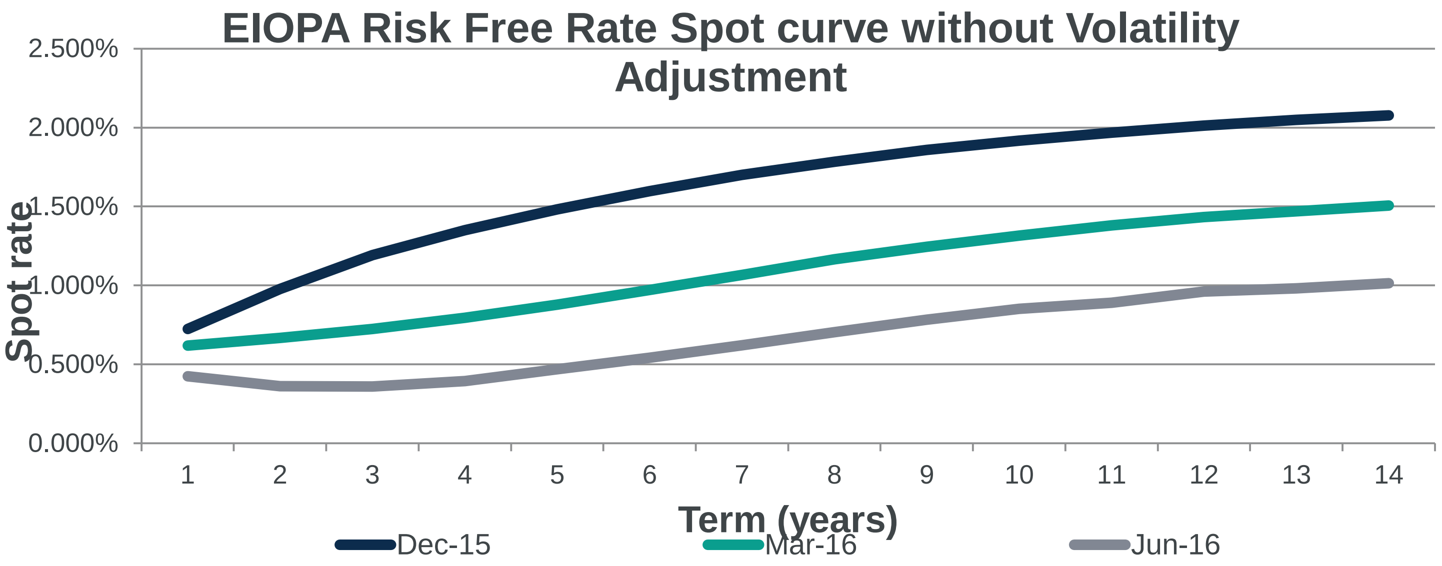
Why is recalculation of TMTP topical?

- Firms can apply to recalculate if they can demonstrate that a material change in risk profile has occurred.
- During the first half of 2016 **interest rates significantly reduced**.



- This resulted in an **increase to the Risk Margin** reflecting its sensitivity to interest rates...
- …and it became clear that **a number of firms would apply for a TMTP recalculation** as they could demonstrate that their increased Risk Margin had resulted in material change in their risk profile…..
- … and the PRA invited firms to seek approval for a recalculation as at 30/06/2016 (subject to meeting the materiality criterion)

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TMTP re-calculation

Who is responsible for?

- Setting recalculation **policy**
  - e.g. Chief Actuary
- Determining **when** to make a recalculation application
  - e.g. Board
- Overseeing recalculation **activity/monitoring**
  - e.g. Audit Committee / auditors

When to recalculate?

- To reflect a **material risk profile change**
- And **every two years**
- Defining **re-calculation triggers**: individual risk factors, solvency coverage ratio, coverage tiers/windows
- **Application process**: timeline for recalculation

How to recalculate?

- **At 01/01/16 or at re-calculation date** avoiding a double run-off (see later slide)
- **Asset hypothecation** for pre and post 01/01/16 pots
- **Apportionment of risk margin** between pre and post 01/01/16 business
- Various **simplifications** considered e.g. for FRR test
- **Timing of run-off**: stepped or linear; 31/12/15 or 01/01/16
- **Audit Committee** must approve recalculation

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When to recalculate the TMTP

- PRA clarified areas which could lead to a **material risk profile change** in SS6/16 ‘Recalculation of the TMTP under Solvency II’ (May 2016)

Changes in operating conditions	Including in: • interest rates or • market prices of other financial assets • crystallisation of an insurance risk exposure
Acquisition or disposal of business	priced and written before 1 January 2016
Material changes to the reinsurance programme	for business priced and written before 1 January 2016
Unexpected changes to the run-off pattern	of the insurance obligations in scope of the transitional measure
Use of Matching Adjustment or Volatility Adjustment	A change in the firm’s use of either the matching adjustment or the volatility adjustment; or

- In addition to the mandatory event every 2 years, the primary recalculation alert is deemed to be a greater than **5% change in Solvency Coverage ratio** arising from a recalculation, although firms should apply some judgement when monitoring this alert (e.g. if the alert is met, is it sustainable?) .
- Plus **appropriate evidence of a material risk profile change**. For example a comparison to expected frequency and likelihood of change occurring.

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Potential timeline for operating changes

- A recalculation for operating changes is a **mandatory event** every two years or could be **triggered**
- A typical **financial year** for a proprietary firm has:
  - Private quarterly QRT submissions and
  - Public half yearly market announcements
- One suggestion is to **limit full recalculation** to public **half yearly** market announcements:
  - This should ensure that approval of a TMTP recalculation is available for market announcements, and
  - Limit the number of recalculation applications for operating changes
- A firm's monthly **solvency monitoring process** could be developed to:
  - Estimate financial impact of resetting TMTP in-between these announcements
  - Monitor other triggers such as movement in interest rates
  - Populate tables required for TMTP application
- This proposal will only work if the **estimated TMTP recalculation can be allowed for** in intra-year dividend plans without a full recalculation being implemented
  - This will require buy in from a number of stakeholders including firms and the PRA.
- A TMTP recalculation may also be appropriate for strategic one-offs like a Part VII. Firms should ensure that they engage with the regulator with sufficient time so that they can effect the change in TMTP at the same time as the initiative.

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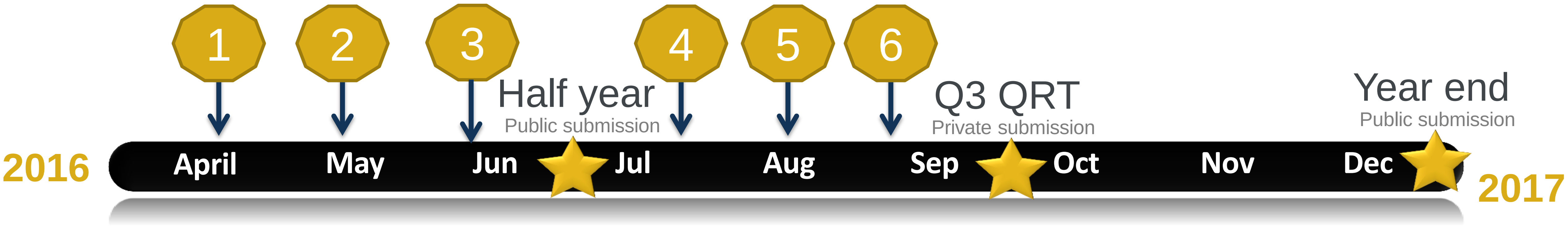
Potential timeline process for operating changes



1. Solvency Monitoring identifies that an **alert level has been reached** i.e. impact of resetting TMTP changes solvency coverage by more than 5% (increase or decrease). Following suitable governance, **PRA notified of intention to apply for TMTP reset**.

2. **Application submitted to reset at next half yearly public submission date** including output from Solvency Monitoring estimate process and rationale for a transitional reset is being sought.

3. **PRA grant approval** of the TMTP recalculation.

4. **Recalculation** with agreed simplification performed at half yearly submission date.

5. **Governance and review leading to Audit Committee** sign-off

6. **PRA notified** of outcome of recalculation

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How to recalculate the TMTP

Firm specific

- Depends on **materiality** of TMTP
- Depends on **complexity** of underlying business
- **Open or closed to new business** post 01/01/2016**.**
- Depends on whether a legal entity TMTP calculation is close to **FRR test restriction** or not
- And which Solvency I ‘Pillar’ is biting i.e. ICG or Pillar 1
- **Type of business** written e.g. mono-line annuities, protection business or multi-line insurers
- Reporting systems and process **constraints**

Proportional

- The TMTP arose from a **political compromise**
- **Proportional approach** and hence **simplification expected** as firms not expected to maintain ICAS and Pillar 1 models for 16 years
- But not clear **what this means** in practice?

Evolve over time

- As TMTP becomes **less material**
- As **full recalculation becomes harder** especially for a book of business open to new business
- Knowledge of Pillar 1 and ICA will **deteriorate** over time.

➢ The material the IFoA working party is preparing includes **potential suggestions** to meet some of these requirements. But ultimately the approach taken will need to agreed both internally within a firm and with the PRA.

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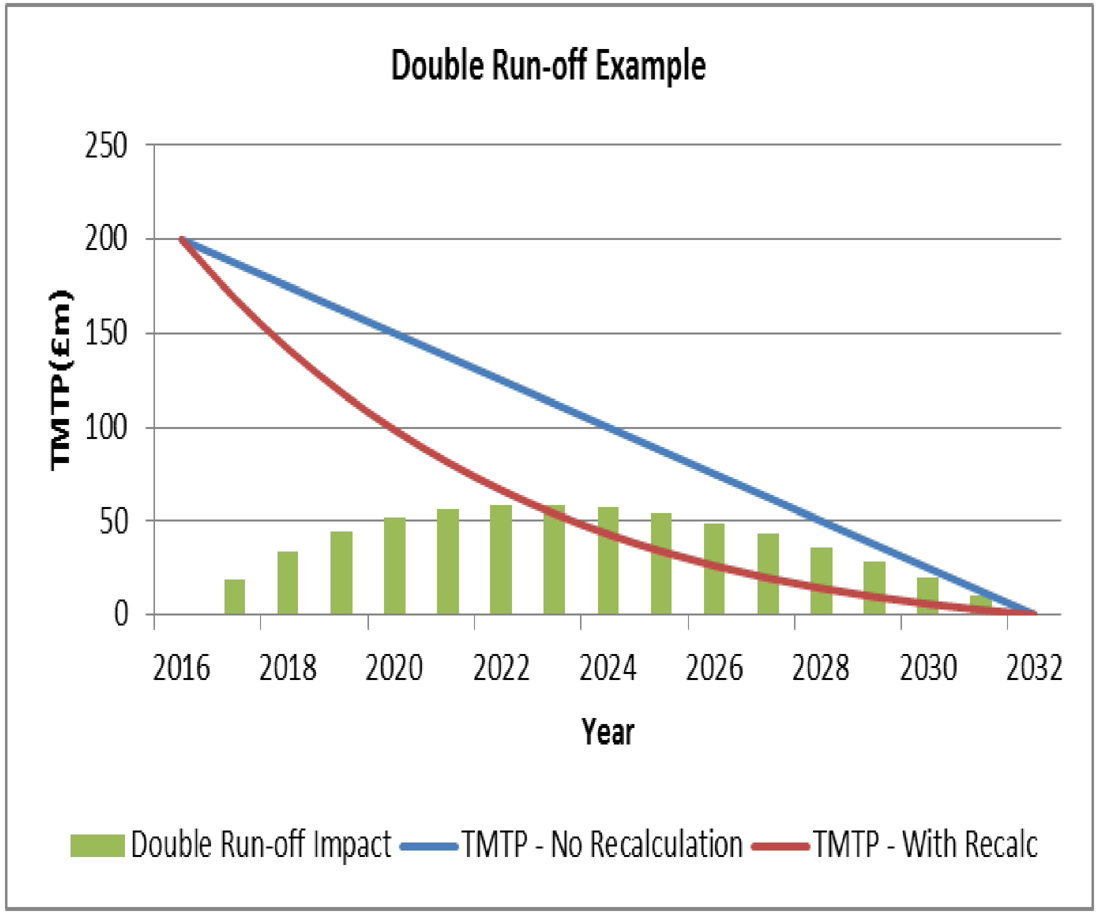
Double Run-off example

- **Double run-off exists** because at each recalculation,
  - the TMTP is potentially reduced by both the **actual run-off of business** since 1/1/16 AND
  - the **1/16th run-off factor** that is applied to the TMTP each year so that they are zero by the end of the transitional period
- The **PRA acknowledged that this was not intentional** and stated that **firms could propose their own methodology** if they wish to avoid this issue



- **Possible solutions:**
  - **Calculate using models and business in force at 01/01/16** but updating for current market conditions and using 1/16th run-off factor
  - **Adjust the amortization factor** to allow for actual business run-off but run off to zero at the end of the transitional period from the recalculation date
  - Use the current business in force but **scale the resulting TMTP by a factor** that reflects the run off of business since 01/01/2016

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Risk Margin example

Problems

- Defined **as discounted value of future modified non-hedgeable SCR**, multiplied by a **6% cost of capital**
- This construction means its **value is sensitive to interest rates** movements
- **Material** given low current levels of interest rates
- As TMTP only applies to pre 01/01/2016 business, a **split of business into pre and post 01/01/2016 segments** is required
- Segregation of Risk Margin includes:
  - An **segregation of non-hedgeable stresses** by pre and post 01/01/2016
  - And **methodology for fairly allocating diversification** benefit between pre and post 01/01/2016 segments

Possible solutions

- **Full recalculation is already sufficient** as it already includes segregation of pre/post 01/01/2016. An option for closed books of business
- **Develop full recalculation** to include segregation of pre/post 01/01/2016 business
- **Recalculate using 01/01/2016 models,** allow for interest rate changes and run-off of business

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Illiquidity Premium versus Matching Adjustment example

Problems

- Increase in the risk free liability discount rate curve by **an illiquidity premium**.
- The Solvency II matching adjustment and the ICA illiquidity premium are **conceptually similar** but there are **significant differences**.
- **SII and ICA illiquidity premiums can differ** as:
  - Matching adjustment uses EIOPA Fundamental Spreads whilst ICAS uses an internal view
  - Differences in cashflow matching tests
  - Constraints in Matching Adjustment methodology
  - Certain assets may not be eligible under SII or may require transformation e.g. Equity Release Mortgages
  - Differences in assets allocated to the SII MA portfolio and ICA illiquidity premium portfolio
- Which results in **differences in the value of the liabilities.**

Possible solutions

- **Maintain four illiquidity premium portfolios.** Reflecting:
  - The two regimes: ICA and SII
  - Pre and post 01/01/2016
- **Maintain the bps differences** between ICA and SII at 31/12/2015
  - Apply to business written pre 01/01/2016 at recalculation date
  - Or apply using 01/01/2016 data and models and run-off appropriately
- **Maintain the bps differences** between ICA and SII at 31/12/2015 and **adjust over time**
  - As above but adjust for relative differences in SII and ICA illiquidity premium
  - Such as credit risk deduction changes, changes in allocation over time, divergence in view of risk (FS and internal view).

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Recalculation of ICG capital requirements example

Problems

- **ICG capital requirements likely to be required** for a recalculation where the Pillar 2 FRR is, or close to, biting
- For a **Part VII transfer,** or similar change, it is likely to be required to demonstrate the impact of the FRR comparison test
- The are a **number of issues** which arise upon recalculation:
  - What assumptions are used for the ICA capital requirement calculation? e.g. those used as at 01/01/2016, or should they be updated?
  - If the calculation methodology has changed, in Internal Model, should this be reflected in the ICA capital requirements?
  - How does strengthening or weakening of ICA get reflected in ICG capital requirements?
  - Where a split of pre/post 01/01/2016 business is required, how are the assets split?

Possible solutions

- **FRR restriction does not bite at 01/01/2016**, it could be assumed that the cap would never bite
- **Derive SCR and ICG capital requirements assuming both pre and post 01/01/2016 business.**
  - Removes onerous requirement to split stresses
  - Assumes incremental impact of post 01/01/2016 business is materially similar under ICG and SII
- Develop **simplistic way of adjusting the SII SCR** to derive an approximate ICG capital requirement
  - Align aggregation methodology to SII methodology
  - Remove binary differences in regimes e.g. ICA cost of closure and derive factors to reflect the remaining differences as at 01/01/2016.
  - Adjust ICG add-on to maintain 01/01/2016 ICG level of capital requirements

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Summary

- Solvency II includes a TMTP to facilitate a smooth transition from previous regime
- TMTP can be recalculated to reflect a material risk profile change
- Key questions for firms and the regulator regarding TMTP recalculation include:
  - Who is responsible?
  - When to recalculate?
  - How to recalculate?
- Benefits from transparent timelines for changes in operating conditions
- Recalculations methods are firm specific and should be proportional including simplifications
- Methods of calculation will evolve over time

If you any feedback on this presentation or the working party please contact the working party chair on:

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Questions

Comments

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