BANK OF ENGLAND
PRUDENTIAL REGULATION AUTHORITY

PRA Solvency II Regulatory Reporting Industry Working Group, 22 November 2018

Firm representative	Organisation and representing
Darren Sait	JP Morgan for The Investment Association
Elzbieta Woynowska	Aviva, for ABI
Helen Dalziel	International Underwriting Association
Jane Tusar	Society of Lloyd's
Kim Harmer	E&Y, for ILAG
Matthew Reed	Prudential, for ABI
Roni Ramdin	RSA, for ABI
Robert Warren	Association of British Insurers
Susan Said	Lancashire Group, for IUA
Tim Machin (standing in for Mike Schofield)	Assurant Solutions, for ABI
Tony Gellett	Financial Conduct Authority
Bank of England	**Role**
Lewis Webber - Chair	Head of Division, Insurance Analytics Division
Danielle Martis	Reporting and Disclosure Policy
David Simmons	General Insurance Actuaries
Emily Estcourt	Insurance Analytics Division
Joanna Rose	Data and Statistics Division
Joshua Allen	Regulatory Data Group
Rachel Evans	Insurance Analytics Division
Ron Pisa	Data Collection and Publication
Apologies	
Andrew Smith	XL Catlin, for ABI
Barbara Kubis-Labiak	Financial Conduct Authority
Cara Whatford	One Family, for AFM
David Scott	Financial Conduct Authority
Jim Troy	Legal and General
Martin Shaw	Association of Financial Mutuals
Paul Appleton	Society of Lloyd's
Steve Dixon	Steve Dixon Associates, for AFM
Willem Van Der Westhuysen	Thomas Miller, for P&I Clubs

These notes are intended as a record of the discussions held at the PRA on 22 November 2018. They are not verbatim minutes and, for the benefit of those organisations that are not members of the industry working group (IWG), they indicate the themes of the discussion and questions that were raised. The views expressed are those of IWG members and do not represent guidance from the PRA.

Firms seeking clarification on aspects of these notes, or wishing to raise questions regarding regulatory reporting for discussion at the IWG, should contact the appropriate industry representative in the first instance. If firms are not represented at the IWG by a member organisation, they should submit their question to: PRA.FirmEnquiries@bankofengland.gsi.gov.uk.

Notes from the meeting on 22 November 2018 covering agenda items:

Agenda

1. Welcome and progress
2. Reporting publications
3. NtA consultation
4. Plausibility tools
5. Taxonomy update
6. BEEDS technical update
7. AOB

Key points:

1. **Welcome and progress, Lewis Webber**

   - Introduction.
   - Update on progress since last meeting.
   - Paperless meetings going forward.

2. **Reporting publications**

   2.1 PS24/18 - 'Solvency II: Updates to internal model output reporting'

   - Published on 17 October 2018.
   - Updates to SS25/15 and SS26/15 on internal model outputs.

   For life firms:

   - Biting scenario information included within internal model outputs.

   For general insurance firms:

   - Number of changes to catastrophe information.
   - Updates to LOG files.

   2.2 PS21/18 - 'Solvency II: Changes to reporting format'

   - Published on 26 July 2018.
   - Change in format of reporting from Excel files to XBRL in line with Solvency II.
     Quantitative reporting templates for:
     – national specific templates;
     – internal model outputs;
     – market risk sensitivities; and
     – standard formula reporting for firms with an approved internal model.
   - Applies from 31 December 2018.

2.3 PS16/18 - 'Changes in insurance reporting requirements'

- Published on 6 July 2018.
- Updates scope, content and format of eight national specific templates (NST).
- NST LOG files formally contained within a supervisory statement.
- Updated policy on quarterly reporting waivers.
- Amended rule for change in control reporting for mutuals without a controller.

Q1: With regards to PS21.18 application dates, what is the PRA's thoughts based on feedback that the dates were too soon?

A1: Following the discussion at the previous meeting, the PRA considers the dates to be sufficient, although we do appreciate that timings may be tight. Should individual firms have concerns then they are encouraged to contact their usual supervisory contact.

3. NtA consultation

CP26/18 consultation on onshoring the ITS

- CP26/18 which closes on 2 January 2019, makes proposals to correct deficiencies in the ITS to ensure these are legally operable after the UK leaves the EU.
- The PRA issued near-final policy following this consultation, details are available on the dedicated [EU withdrawal webpage](#).
- Some of the proposals relevant to reporting and disclosure include:
    – onshored BTS' including the Solvency II reporting and disclosure ITS';
    – expectations for firms in the temporary permissions regime (TPR); and
    – how firms interpret non-binding PRA and EU material.

<u>ITS' on Reporting and SFCR disclosure templates</u>

- The PRA is not proposing to make changes to templates, or reporting instructions in the ITS's for Day 1. CP26/18 proposes clarifications for how firms should interpret the onshored ITS in light of the UK's exit from the EU.
- Where there are changes to EU version of the ITS made during any transition period, firms should plan on the assumption that any potential changes will apply.

<u>TPR</u>

- For firms who enter TPR, the PRA is considering the use of transitional powers to defer aspects of onshored requirements that may be unduly burdensome for firms to comply with on Day 1.

<u>Non-binding material</u>

- Whilst these will not be onshored, the Guidelines may continue to be relevant to firms' compliance with the regulations that apply to them.
- CP25/18 consults on the approach to EU Guidelines including EIOPA's Solvency II Guidelines.

4. Plausibility tools

4.1 Bank of England Electronic Data Submission (BEEDS) portal

- BEEDS portal is an online application that manages regulatory data submissions between PRA-authorised firms and the Bank of England.
- Contains core validation checks – must pass all validation before submitting files.
- Files are then checked for plausibility. PRA defined rules used for quality checking may raise flags that seem implausible in the context of other data.

4.2 Solvency II data journey
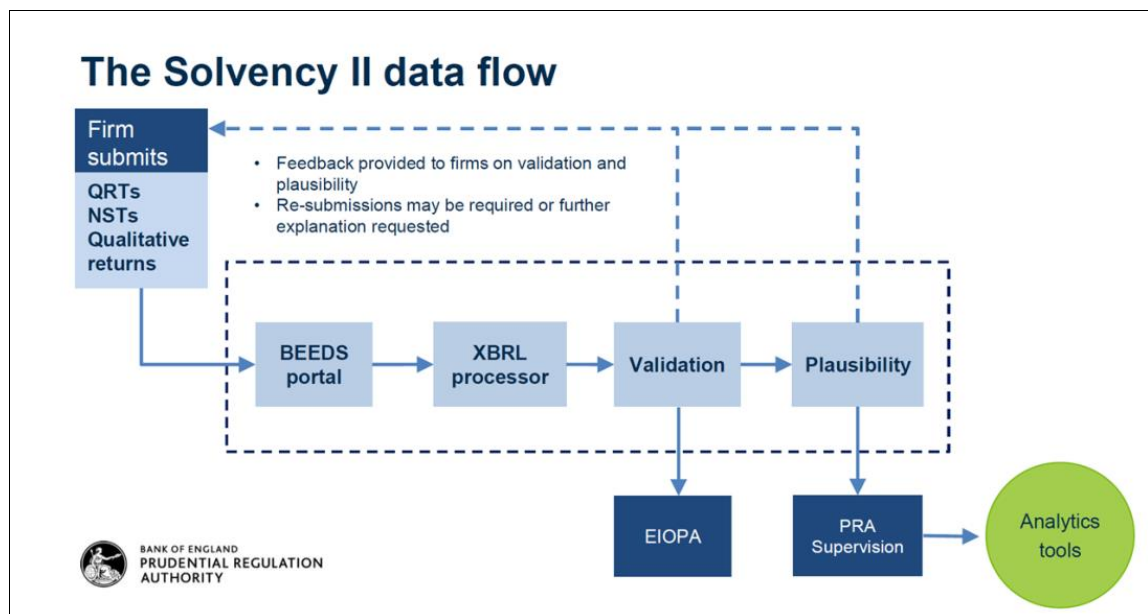
4.3 Plausibility checks

PRA uses four key metrics for assessing plausibility:

- **Threshold check (%)** – flags if the absolute value of QoQ or YoY movements are above a pre-determined value.
- **Standard deviation (SD) check** – flags if the data point falls outside of the interval where:

  CurrentValue < Mean – N*StandardDeviation (Lower bound); and
  CurrentValue > Mean + N*StandardDeviation (Upper bound).

- **Materiality check** – flags if the absolute value of QoQ or YoY movements are above a pre-determined contribution of total assets.

  Triage = 3 in 1 rule, which will flag if at least two of the above has failed

4.4 Median absolute deviation (MAD)

- Means and standard deviations are sometimes unreliable for short time series, especially with extreme outliers.
- The PRA uses the median as the measure of location and the median absolute deviation (MAD) from the median as the measure of scale.

$$|x_i - med(x)| > k \cdot MAD(x)$$

- The main test sets the threshold value k=3, flagging anything > 3 MADs or < -3 MADs.

4.5 Open Row Templates

- A separate plausibility tool is used for checking open-row data, such as S.06.02 (Assets) and S.08.01/02 (Derivatives)

60 rules are applied to the open row data, such as;

- Completeness checks
- Valuation checks
- Balance sheet comparisons
- Credit ratings

- CIC codes
- Maturity dates
- Derivatives notional amounts (currency)

4.6 Machine learning for plausibility checking

- The PRA is Experimenting with a supervised machine learning model.

Classification: machine is trained to classify data points into:
- plausible – no need to raise with firm; and
- implausible - raise with firm.

- Currently feeding the model training data (past Solvency II data with observed outcomes) consisting of a set of training examples.
- Model to be tested on live Solvency II data and model performance reviewed against other models.

4.7 Machine learning - pros & cons

Machine learning can bring a number of benefits to the plausibility review process:
1. increased accuracy – less false positives; and
2. increased efficiency – reduced time spent reviewing 'correct' data.

However, there are also some drawbacks:
1. machine learning methods can be opaque and seen as 'black box'; and
2. takes away human judgement and decision making process, eg machine learning model doesn't take into account market trends, policy decisions or events that could have plausible impacts on the data.

Q2: Why are firms receiving queries from the PRA in response to submissions relating to complementary identification code (CIC)?

A2: The PRA has a list of validated CICs, which submissions are checked against. This is a high-level automated response rather than a judgement-related response.

Q3: What was the process for 2017 Q4 data and why were there late queries, specifically those relating to templates S.04?

A3: EIOPA is gradually widening the checks they are carrying out on the data, and has recently included checks on templates S.04 prior to circulating data on cross-border business to all NCAs. The PRA is including the checks EIOPA carry out to their own checking process in the hope that EIOPA identifies fewer issues with UK data, and that we do not need to refer any queries on to firms. The PRA judges whether an issue is material. Data in templates S.04 are of particular interest at the moment due to Brexit.

Q4: Some firms did not receive plausibility or validation queries at 2017 YE, because of issues with BEEDS, are there likely to be stored up errors that need fixing before the next reporting cycle?

A4: No. The issue has been fixed and the PRA is not planning further investigation.

Q5: Is machine learning being developed any further given that it is being used in Germany for data mining?

A5: Not within insurance at this stage, however, the Banking team in RDG is experimenting with new methods. A future area to explore may include helping to review large text documents.

Q6: Were delays for 2018 Q2 data to do with machine learning experimentation with data plausibility?

A6: No, but the checking process is undergoing improvements and is expected to speed up in coming months.

5. **Taxonomy Update**

5.1 Taxonomy Update

- Solvency II 2.3.0 Business changes from 2.2.0 hotfix
    - small number of updates to templates and logs
    - ~300 new validations
    - correction of known issues (not corrected in the last Hotfix release and deactivated validations)
- Taxonomy 2.3.0 hotfix
    - the Bank will use the taxonomy hotfix 2.3.0 which was published by EIOPA on 5 November 2018
    - changes between taxonomy 2.3.0 and the 2.3.0 hotfix:
        - o validation and Filing rule corrections
        - o no structural changes

5.2 Taxonomy timeline
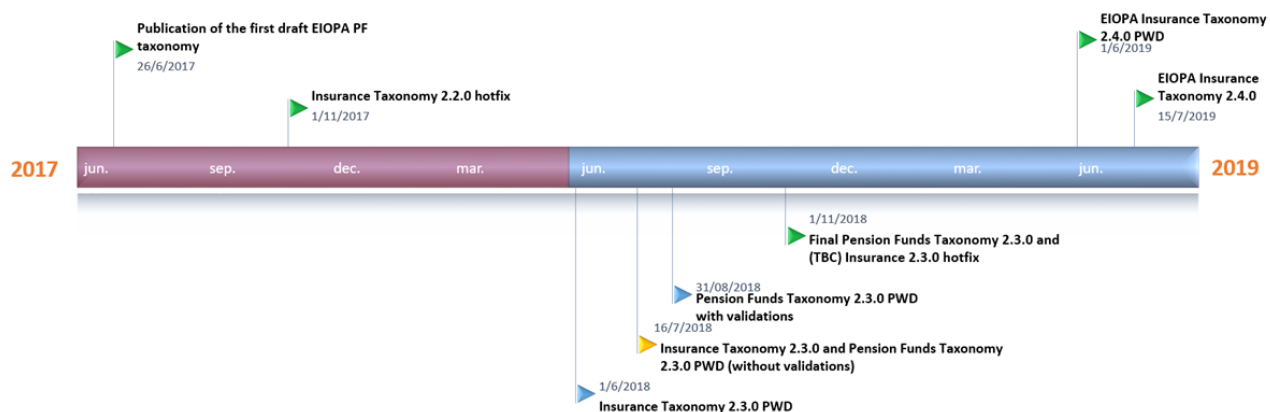
6.   BEEDS Technical Update

- BEEDS is not a strategic collection solution of the Bank
- BEEDS LIVE update including new user interface planned for December 2018
- BEEDS external firm testing window planned from December 2018 (Contingent on successful internal testing)
    - Solvency II 2.3.0 taxonomy available for testing
    - Extended window to take into account of the festive window

Q7: How long will the extension be for the testing window?

A7: This is in discussion, but is likely to be from 10 December to mid/late January.

Q8: Will the NSTs be included in the same testing window?

A8: The NSTs will have a separate testing window, but timing is not confirmed at this stage.

Q9: NS.13 for 2018 Q4 is due to be submitted 5 weeks after the year-end for the Society of Lloyd's. Will there be a testing window ahead of this?

A9: The PRA will confirm with Lloyd's directly.

7.   AOB

Q10: Does the PRA have feedback on the YE2017 RSRs and are there plans for future guidance?

A10: There are no plans for guidance on RSRs at present. Individual firms will receive feedback if necessary via their usual supervisory contact.

Q11: Does the PRA have a view on the 24 September Insurance Europe paper on reporting requirements?

A11: The PRA has not formally reviewed the publication.

Q12: Does the PRA query the validity of the LEI codes reported in asset QRTs?

A12: The PRA has raised a small number of issues on LEIs with firms following cross-checks with the does not check LEI codes.

Q13: Does the PRA propose a new reporting template showing the breakdown of insurer capital generation?

A13: The PRA does not propose a new reporting template, however, firms are encouraged to discuss capital generation within the SFCR, as per the discussion at roundtables hosted by David Rule in early 2018.

Q14: What is the feedback on the 2018 EIOPA stress test? What are the PRA's plans for stress tests in 2019?

A14: For the 2018 EIOPA stress tests, central validation has now been completed. An aggregate report has been drafted during October and November. Firms will have received a letter on what indicators they might consent to be published. The PRA is not expecting UK firms to want individual results published.