



EUROPEAN CENTRAL BANK

BANKING SUPERVISION

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Sequential approach and data quality

* The views expressed here are those of the presenters
and do not necessarily reflect those of the ECB.

XBRL Week

Madrid, 3 June 2015

Overview

1 Sequential Approach & data quality

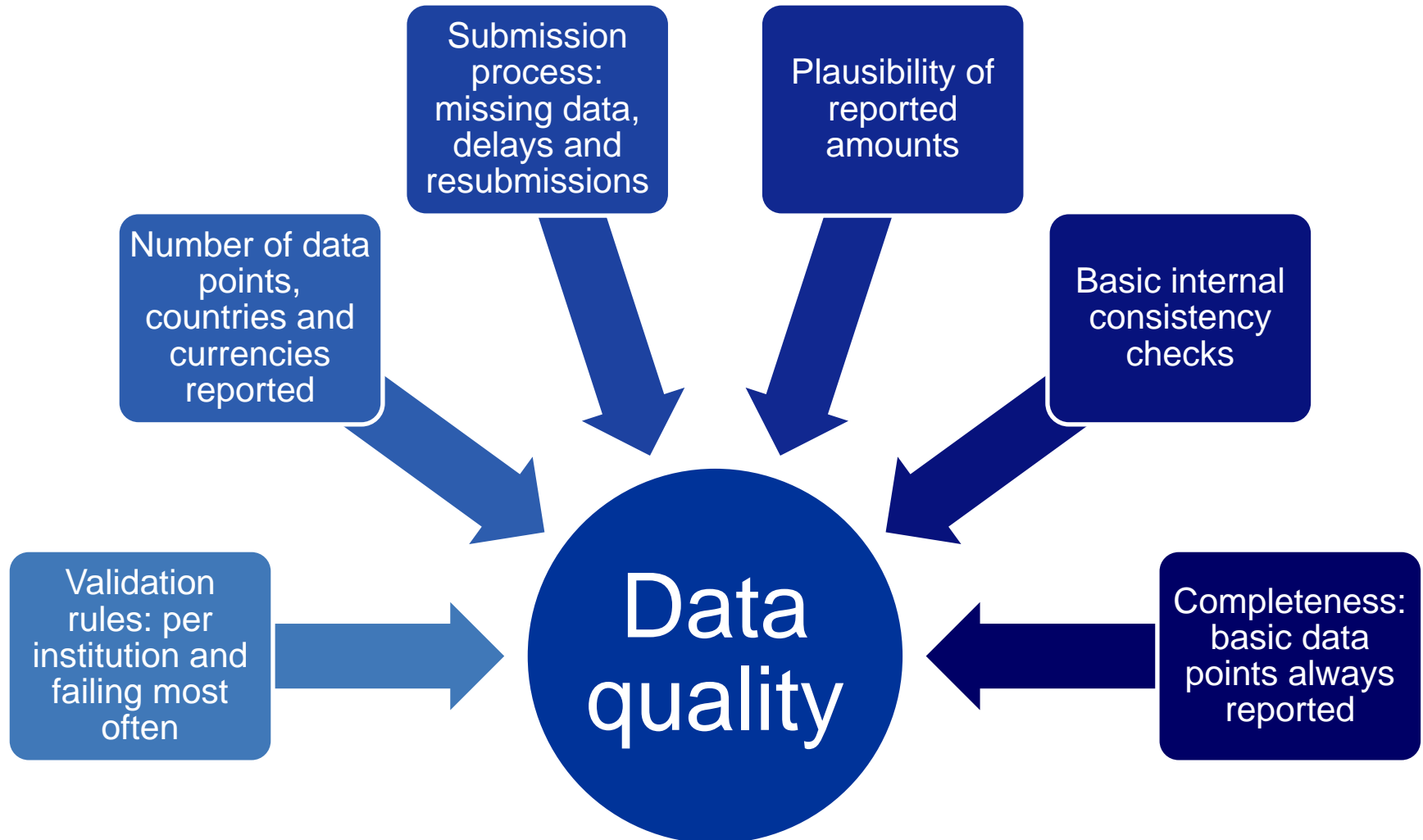
2 XBRL and Data Quality

3 FINREP solo

4 Way forward

Comprehensive approach to data quality

- Several approaches are taken to assess data quality in SUBA.



Deliverables in terms of data quality

In production

Set of tables on data quality

- Produced three times per reference period

In process

Individual dashboard per institution

- With a rating of that institution

In process

Traffic light system for a selection of data points

- Based on failed validation rules

In production

Data Quality Assessment Report

- Produced for each reference period

In process

Immediate data quality scores

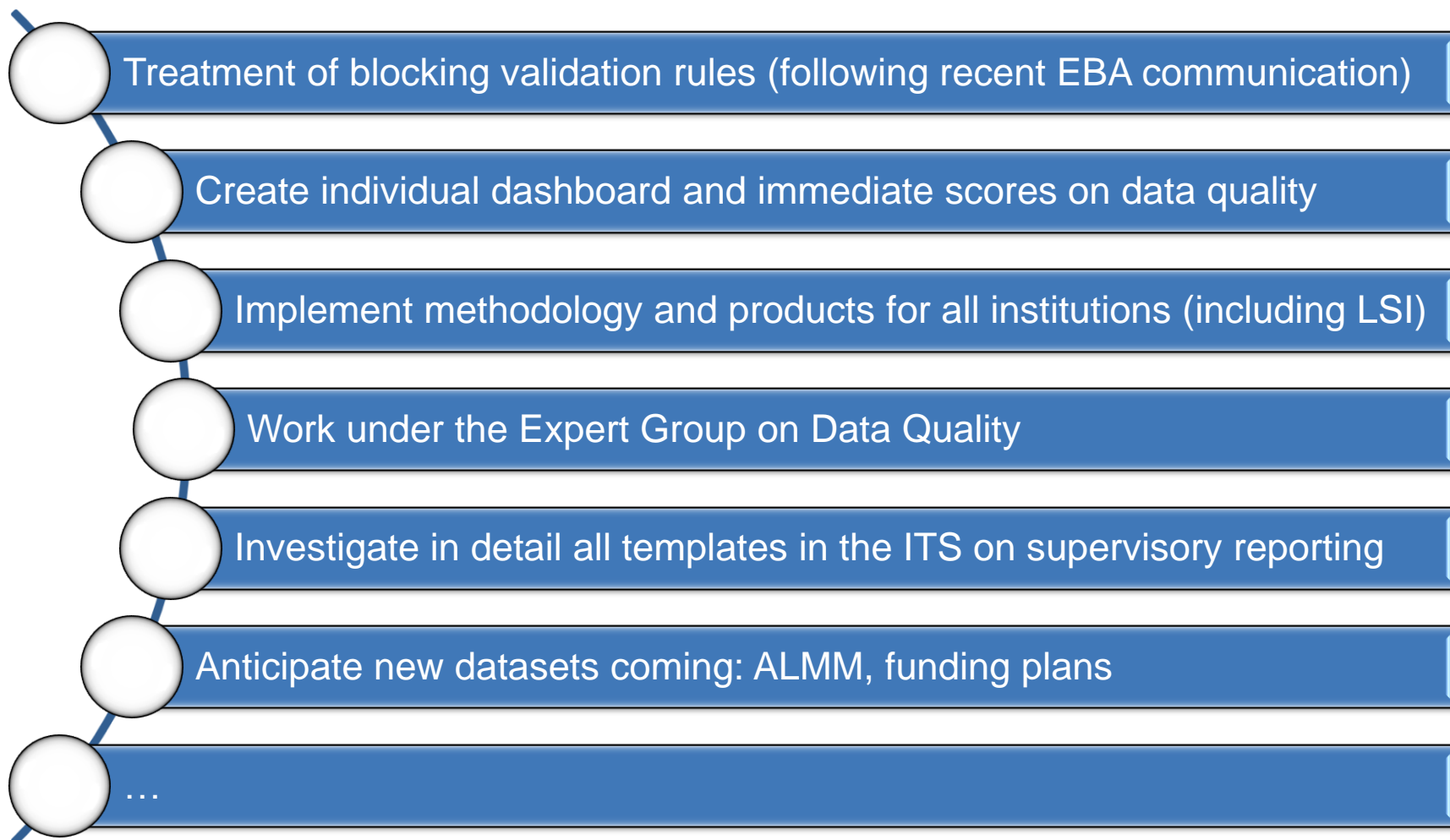
- Based on internal consistency of data

In production

Thematic analysis of certain areas of the ITS

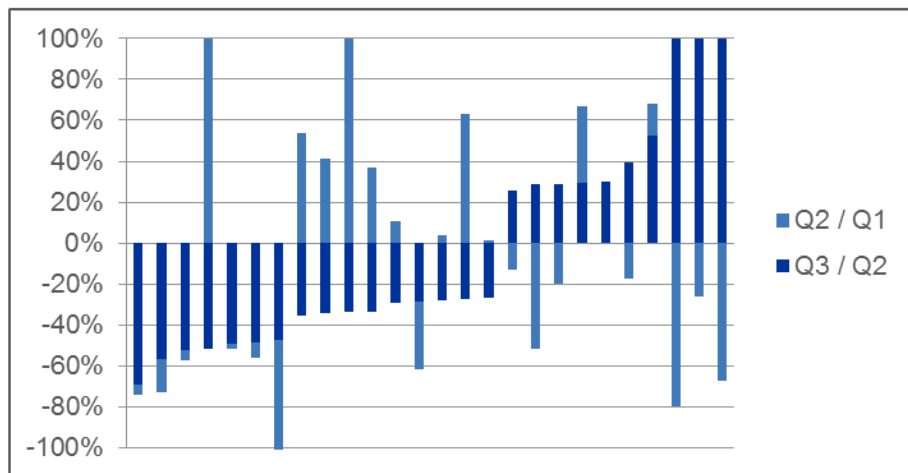
- Together with volunteers from EGDQ

- **2015 will be the year of data quality in DG-SUP: many actions will take place in the coming weeks and months.**

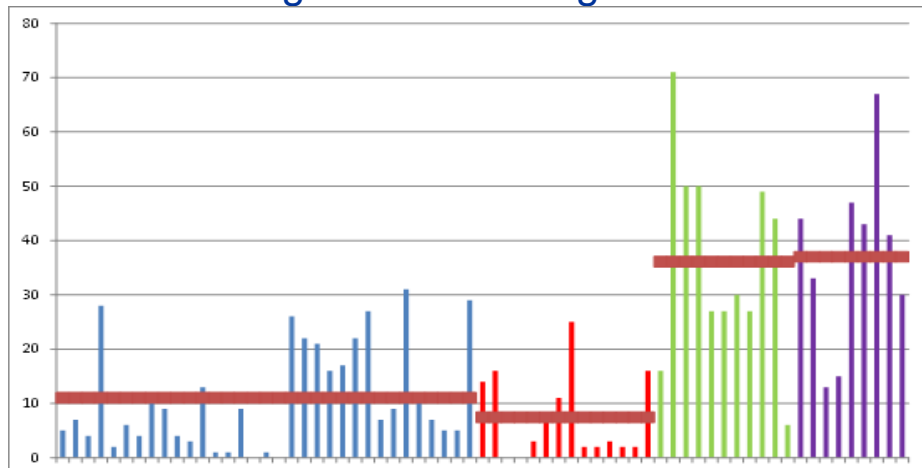


Example – Output/Findings

Growth rates of amounts due from retail customers



Number of growth rates larger than +25%



Individual dashboard per institution

Period:
Name:

LEI:
Country:
Accounting framework:
Significance:
Scope:

SA/IRB (IM)
Credit risk
Securitisation
Market risk

SA / IRB
SA / IRB
SA / IM

1. SUBMISSION OF THE ITS DATA

Status of data submissions

Delay in the submission
Cumulated number of delays
Days of delay
Number of resubmissions before final
Number of failed validation rules
% over total number of VR
Percentile in total sample

COREP	LE	LCR	NSFR	FINREP	AE
Accepted	Accepted	Manually	Pending	Rejected	Accepted
Manually	Accepted	Manually	Accepted	Manually	Accepted
Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No

2. COMPLETENESS AND ACCURACY OF THE DATA

Number of data points
Change from last period
Number of countries reported
Change from last period
Number of currencies reported
Change from last period
Number of group institutions reported
Change from last period
% of missed data points (1)
Percentile in total sample

COREP	LE	LCR	NSFR	FINREP	AE

(1) DG-SUP has identified a number of data points which should be reported in all cases by all institutions, regardless of their characteristics (size, business model,...).

Chart 1. Failed validation rules by module

Chart 2. Dispersion of failed validation rules across SUBA

Chart 3. % of missed data points

3. INTERNAL CONSISTENCY OF THE DATA (to be discussed with DG-IV)

Example: Leverage ratio is lower than the capital ratio
Example: Capital ratio including Pillar 2 adjustments is not equal (larger) to capital ratio without them
Example: SA/IRB templates are reported according to metadata available
Example: Tier 1 and 2 capital in COREP and NSFR is reported with the same amounts

Check 5
Check 6
Check 7
Check 8
Check 9
Check 10

Total number of failed internal consistency checks
Average number of failed internal consistency checks in SUBA for the period

DATA QUALITY RATING OF THE INSTITUTION

1. Submission process
2. Completeness and accuracy
3. Internal consistency

TOTAL

Yes/No
Yes/No
Yes/No
Yes/No
Yes/No
Yes/No
Yes/No
Yes/No
Yes/No

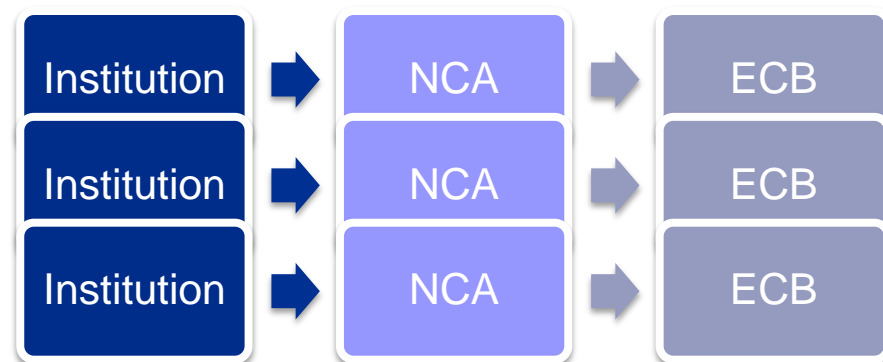
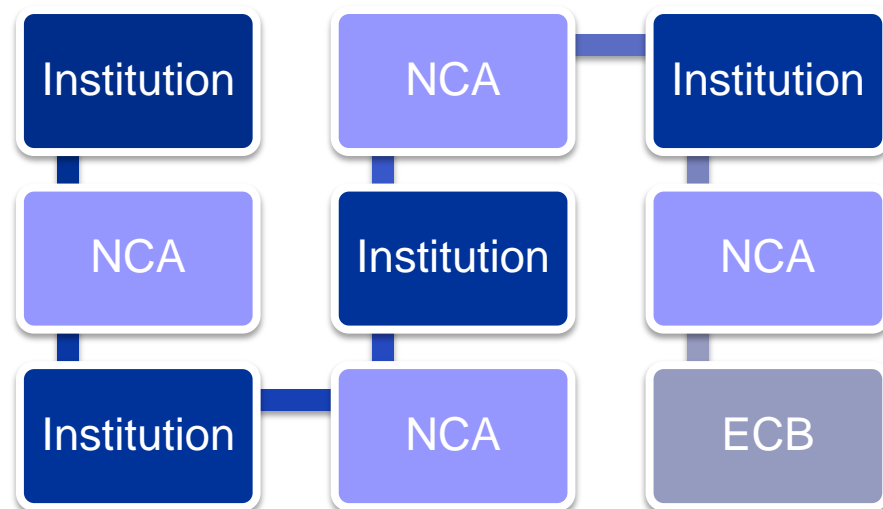
Impact of the Sequential Approach in the assessment of data quality (1)



- **There are different approaches to data quality among NCAs, which impact the assessment of data quality.**
- Some NCAs do not forward a given module to the ECB until it meets all the validation rules, while other NCAs always send the module before the deadline, even if with errors.
 - Therefore, institutions from the first NCA would have more delays than institutions from the second.
 - Institutions from the first NCA would show better numbers in terms of failed validation rules than institutions from the second.
- When looking at the delays in the submission of the information, it is also the timeliness of NCAs to be considered, not only whether reporting institutions are submitting the modules on time.

Impact of the Sequential Approach in the assessment of data quality (2)

- Concerning resubmissions, two patterns have been found.
- Some NCAs interact with their institutions to solve some data quality issues before submitting the module to the ECB.
 - How many of these interactions occur? The ECB does not know anything about these resubmissions.
- On the other hand, other NCAs automatically forward every incoming module to the ECB.
 - Which quality control is performed over these files automatically forwarded?
- Do we need a common ground?



Blocking validation rules in the Sequential Approach

- Since May 11th, 2015, certain validation rules are given a blocking power by the EBA. That means that modules which fail one of them will be automatically rejected by the EBA.



- In the first reference period (Q1 2015) and following the brief impact assessment shared with the EGDQ, it is expected that many modules will be rejected, that would have an impact in the SSM daily tasks.
- Rejecting files containing failed blocking VRs at the ECB would mean that supervisors at the SSM will not have access to the supervisory information.

Blocking validation rules in the Sequential Approach

- **Requirement from ECB Supervisors - Access to supervisory data asap** (even if they contain failed EBA blocking VRs)
 - Blocking VR assessment and close follow-up is needed.
 - The ECB will inform immediately NCAs about reports containing failed blocking VRs. Urgent resubmission is needed
 - In such case, the report will **NOT** be considered as valid and accepted
 - Same approach will **apply to SI and LSIs** at all the levels of consolidation.
 - For SIs ECB will work on a data point basis, rather than on report basis.
 - The ECB will control that **SI reports received containing failed EBA blocking VRs are not sent to the EBA**
 - Exception done for the first received file per each bank-module that according to the agreement contained in the sequential approach has to be sent in any case.

Blocking validation rules in the Sequential Approach

- **Ideally NCAs should forward reports containing failed blocking VRs to the ECB**
 - **Harmonised treatment** of reports across SSM-NCAs.
 - JSTs will have **access** to the reports with the proper **data quality flags**.
 - In any case NCAs (and banks) will have to react to reports that include failed blocking VRs with the **same speed** as if the report would have not been received at the ECB.
 - ECB would provide, where necessary, NCAs with **flags to identify reports containing failed blocking VRs**
 - At the beginning in a best effort basis → excel reports
 - Later, in an automated way → Acknowledgement messages? (to be assessed and discussed)

Overview

1 Sequential Approach and EBA blocking validation rules

2 **XBRL and Data Quality**

3 FINREP solo

4 Way forward

XBRL and data quality

- **XBRL include validation rules – Basic Data Quality Assessment**
- **What XBRL does not include**
 - **Delays**
 - **Resubmissions**
 - **Completeness**
 - **Templates – Filing indicators**
 - **Data Points**
 - **Validation rules outside of the taxonomy**
 - **Plausibility checks**
 - **Evolution of Data Quality**
 - **Compare Data Quality between peers**
 - **And of course “Expert judgement”**

Principles for data quality assessment at DG-S SUP

- The ITS on supervisory reporting is a comprehensive and detailed package, so the assessment of data quality within must be:

Gradual

- Starting from the basics and progressively getting into further detail
- First set of data quality checks already incorporated

Comprehensive

- Covering different approaches to data quality
- Covering all areas reported in the templates

Cooperative

- Involving colleagues working in this field in other institutions
- Maintaining all stakeholders (EBA, SSM) in the loop

Deliverables in terms of data quality

In production

1. Set of tables on data quality

- Produced three times per reference period

In production

2. Data Quality Assessment Report

- Expert Judgement

Advanced draft

3. Traffic light system for a selection of data points

- Based on failed validation rules and plausibility checks

Advanced draft

4. Thematic analysis of certain areas of the ITS

- In deep analysis

First stages

5. Individual dashboard per institution

- With a rating of that institution

First stages

6. Immediate data quality scores

- Based on data quality metrics

1. Data quality tables – Main deliverable

- **Tables 1 and 2: Overview of the submission process**

They provide a **high-level view on the submission process of the ITS modules** for each SI Highest reporting institution.

- *Number of failed validation rules*
- *Delays in submission*

- **Table 3: Analysis of data points and dimensions**

It looks at the **data points and dimensions** of the ITS data.

- *Number of currencies in LCR equal to number in NSFR*
- *Change in number of institutions of the group, number of countries*

- **Table 4: completeness by module and KRIs data points**

It provides an overview of the **completeness of the data** for each reporting institution, by assessing missing values from a set of 130 data points.

- **Table 5: Plausibility of selected data points**

A more detailed analysis of the **plausibility of the reported values of ratios** (currently, only capital and leverage ratios) is provided in table 5.

→ **Three versions**, based on cut-off dates: deadline for submission to ECB, 10 days after deadline, one month after deadline.

2. Data quality assessment report (Expert judgement)

- This report, to be prepared on a quarterly basis, shall describe the main findings of the data quality assessment.
- It identifies areas of concern recognised in the set of tables.
- It contains also a detailed analysis of some issues of special importance in the ITS on supervisory reporting:
 - Threshold for country-by-country reporting.
 - Consistency in reporting of Deferred Tax Assets.

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Q3 2014

3. Traffic light system for selected data points

- For a selection of data points, it is defined a traffic light system (Green-Amber-Red) reflecting the number of failed validation rules.
- Data points are those used in the RAS scores by colleagues in the SSM
 - Including the SPE4.
- This deliverable provides a very quick view on data quality of indicators included in the RAS.
- A first prototype has just been produced.

[illegible]

4. Thematic analysis

- The time window between production dates will be used to in-depth assess specific areas of the ITS on supervisory reporting, together with volunteers from the Expert Group on Data Quality.
- Such thematic analysis should focus on those areas which the regular assessment of data quality cannot reach during the production round.
- It must be conducted in detail and holistically, looking at many aspects on data quality.
- The need of **new validation rules** will arise from the analysis

*Large
Exposures*

DTAs and
other
deductions

Non-
performing and
forbearance

- ## Sequential approach and data quality

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Overview

- 1 Sequential Approach
- 2 XBRL and Data Quality
- 3 FINREP solo**
- 4 Way forward

- **(Draft) ECB Regulation on supervisory financial information** extends financial reporting to
 - Consolidated reports of banks under ‘National GAAPs’ (or nGAAPs)
 - Reports on solo level (i.e. including single legal entities)
- The Design of reporting requirements is shaped by the **principle of proportionality** (see Article 5 of the Treaty of the EU)
 - Reduced data content and more time for implementation for less significant supervised institutions

Full financial reporting	Simplified supervisory financial reporting	Over-simplified supervisory financial reporting	Supervisory financial reporting data points
All the templates	Entire templates	Entire templates	Not entire templates
	<ul style="list-style-type: none"> - Balance sheet (prudential and accounting scope) and income statement - Financial instruments by instrument / product and counterparty sector - Accumulated impairment and collateral / guarantees received - Fair value hierarchy - Income and expenses by instrument and counterparty sector - Non-performing and forborne exposures - Geographical breakdown of financial instruments - Group structure 	<ul style="list-style-type: none"> - Balance sheet (prudential scope) and income statement - Financial instruments by instrument / product and counterparty sector - Accumulated impairment - Non-performing and forborne exposures 	<ul style="list-style-type: none"> - Balance sheet (prudential scope) and income statement - Financial instruments by instrument / product and counterparty sector - Non-performing and forborne exposures

Full FINREP	Simplified FINREP	Over Simplified FINREP	FINREP data points
65 templates IFRS 71 templates GAAP	33 templates IFRS 38 templates nGAAP	19 templates IFRS 24 templates nGAAP	Data points coming from 10 different templates

Implementation of FINREP – Taxonomies (current working assumption)

	Full FINREP	Simplified FINREP	Over Simplified FINREP	FINREP data points
CONS	EBA Taxonomy	EBA Taxonomy + Reporting requirements	NA	Modified EBA Taxonomy + same DPM + new templates + Deactivation/Amendment of VRs ?
SOLO	Modified EBA taxonomy	Modified EBA taxonomy + Reporting requirements	Modified EBA Taxonomy + Reporting requirements	Modified EBA Taxonomy + same DPM + new templates + Deactivation/Amendment of VRs ?

Where:

Reporting Requirements = Which templates are expected per institution

Modified EBA taxonomy = Small modification to allow the reception of FINREP SOLO

One additional challenge!!!

From the (draft) regulation ***“NCAs shall submit to the ECB any additional template specified in Annex III of Regulation (EU) No 680/2014 that the NCA collects. NCAs shall notify the ECB in advance of any such additional template that they intend to transmit.”***

Overview

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Development of taxonomies for supervisory reporting

- **EBA Taxonomies** widely used through Europe.
 - XBRL taxonomy
 - Access DPM database
 - Annotated templates - Table layout
- **ECB extensions** of taxonomy for FINREP solo and different FINREP “reduced” packages.
- **National extensions** of EBA taxonomy
- Only the **taxonomy is an standard**
- **Problems** to include the **DPM database** or the **annotated templates** in the **extensions**
 - Standard ?
 - Documentation ?
 - EBA commitment on stability / compatibility ?

Taxonomies a “Public European Good”

- Governance and evolution established by a inter-agency **group of experts**
 - Committed with the **development and evolution of taxonomies**.
- **Priorities** established by the **supervisory authorities**.
- Maintenance of :
 - Taxonomy
 - DPM database
 - Annotated templates - Table layout
- Supported by sponsors
 - EBA ?
 - ECB ?
 - Other Supervisory Authorities ?
- That could contribute with:
 - People ?
 - Money ?

**Many
thanks for
your
attention!!!**

