



EUROPEAN CENTRAL BANK

BANKING SUPERVISION

State of Play with the SUBA System

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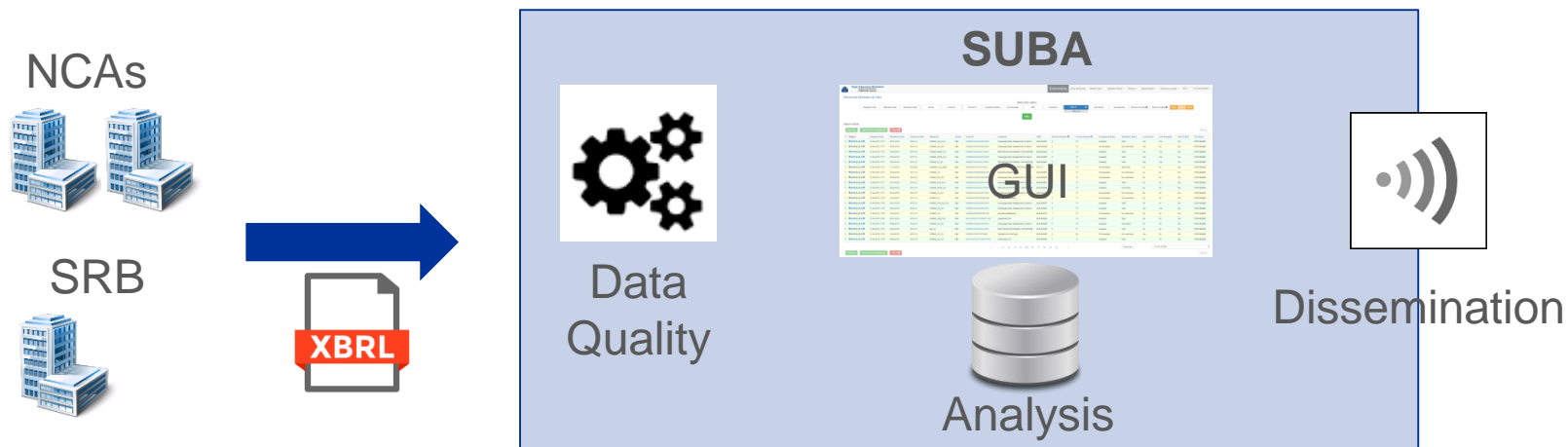
18 June 2019

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

Overview

- 1 What is SUBA
- 2 The SAND project
- 3 Non-XBRL Validation Rules
- 4 Automatic Currency Conversion
- 5 Taxonomy changes
- 6 Harmonisation of the Sequential Approach

Supervisory data collection



Features

- **Collection** of supervisory data
 - **Submission** monitoring
 - **Storing** the information in a database
- **Assessing the data quality**
 - **Error** Monitoring
- **Master Data** management
 - **RIAD** synchronisation
- **Communication** with NCAs

Supervisory data production & dissemination



Features

- **Dissemination** of supervisory data and metadata to
 - Supervisors in the SSM (IMAS, IDRA)
 - EBA & SRB (XBRL instances)
 - SDW, DISC
- **Analysis**
 - Flexibility to query the information
 - Ad-hoc reports and data extraction
- **Data production**

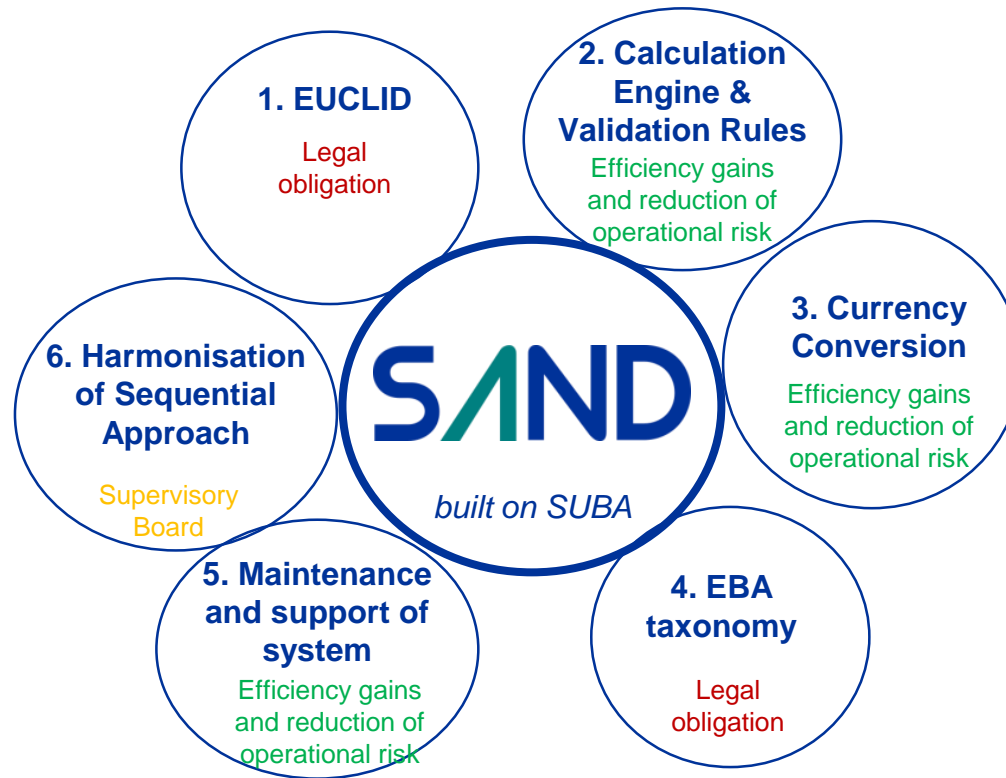
Some facts & figures

- Number of reporting entities:
~4,800 entities
- Number of reports received:
 - 196,701 reports received in 2018
 - More than 49,000 reports per quarter
- File size:
varies between 100KB and 150MB
- Maximal number of observations received in a submission:
~ 400.000
- Processing time:
varies between 20 seconds for small files and 2 hours for very big files
- Number of validation rules:
 - XBRL: ~ 3,500
 - Non-XBRL: ~ 100
- File dissemination:
 - All primary data directly to EBA (set of institutions)
 - Reports sent to IMAS: ~ 300 per day (average)
 - Sets of indicators sent to IMAS: ~ 800 per entity

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High level functionalities



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Current SUBA functionality

- All Validation Rules included in the XBRL taxonomy are triggered upon reception of the instance file
 - The result of the validation process is stored in the SUBA database
- Result of the validation included in the acknowledgement message sent to the NCAs
 - The NCAs gets the feedback soon (from minutes to a couple of hours) after sending the file
- High performance and high capacity
 - More than 20,000 instances processed in one day
 - Around 3500 validation rules

Limitations

- Only XBRL VRs can be triggered on reception
 - Other checks are executed by ad-hoc SAS programs
- Only intra-module VRs are accepted

New functionality

- All checks to be included in SUBA and triggered on reception of new files
 - Non-XBRL validation rules
 - Completeness checks
 - Plausibility checks
 - Data quality checks
- Feedback of all tests included in acknowledgement message and available to NCAs after reception
 - Additional severity levels
 - New attribute: VR Owner
- Cross-module validation
 - Cross-module (e.g. COREP-FINREP-AE)
 - Cross-time
 - Cross-entity
- SUBA Calculation Engine adapted to Validation Rules
 - More functions
 - Multiple checks in one formula
 - Processing of vectors and (multi-dimensional) matrices

Cross-module check difficulties

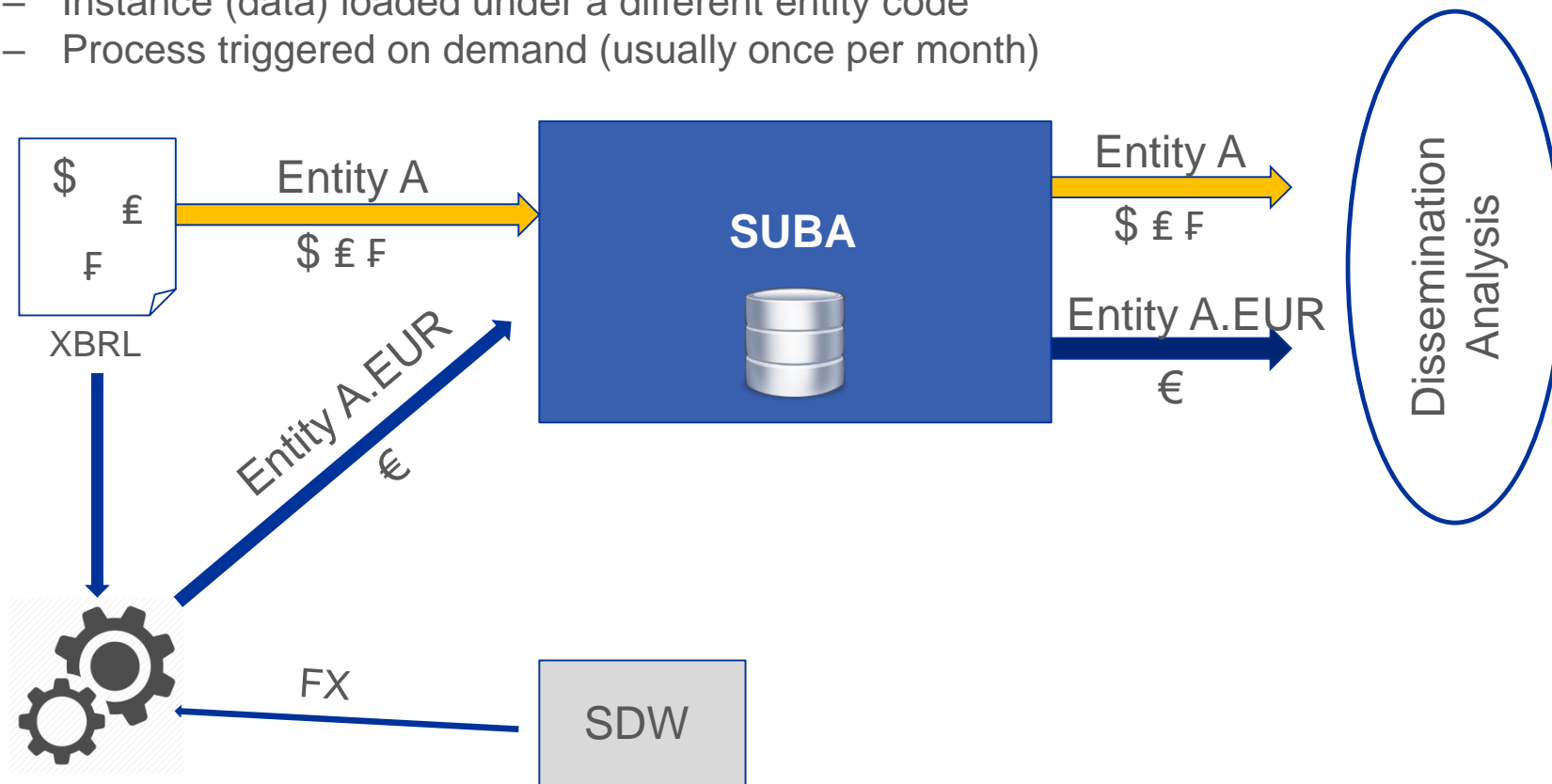
- **New concept of “Re-validation”**
 - When an instance involved in a cross-module rule is received, all affected modules are “revalidated” (only cross-module rules are evaluated)
 - Data is not loaded again in the database, only result of validation
- **A new acknowledgement message is sent for all affected modules**
- **New flag: “All rules triggered”**

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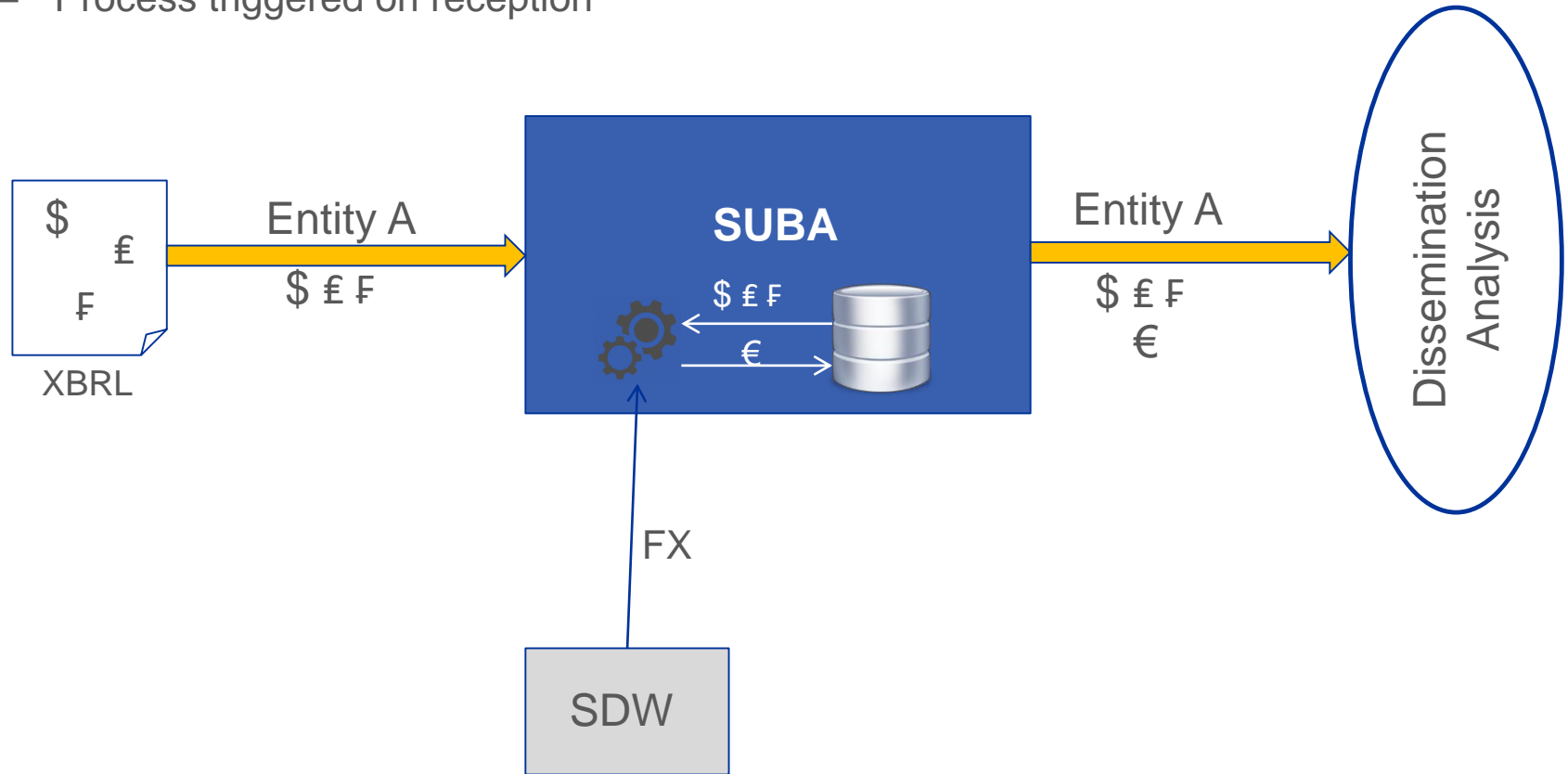
Current status

- Semi-manual process to convert values
 - External program to edit the XBRL instance
 - Instance (data) loaded under a different entity code
 - Process triggered on demand (usually once per month)



Current status

- Automatic conversion
 - Original and converted currency values loaded in the SUBA database
 - Process triggered on reception



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Taxonomy loading

- SUBA is ready to load a new XBRL taxonomy (following the EBA DPM)
 - No new implementation is needed
 - Several parameters are accepted in the loading process
 - DPM Architect used to generate the import files
- However, the experience says that there are often new XBRL features used by the EBA in the taxonomies
 - New unforeseen implementation is needed in the short term
- (Already known new) Features included in the requirements
 - Import VRs metadata from the taxonomy
 - Severity level
 - Enable status
 - Import of VR packages
 - Taxonomy updates with changes only in VRs (new or changed VRs, changes in severity levels, disable VRs)
 - Comments included in instances
 - On VRs, facts, templates, modules, ...
 - Multiple z-axes

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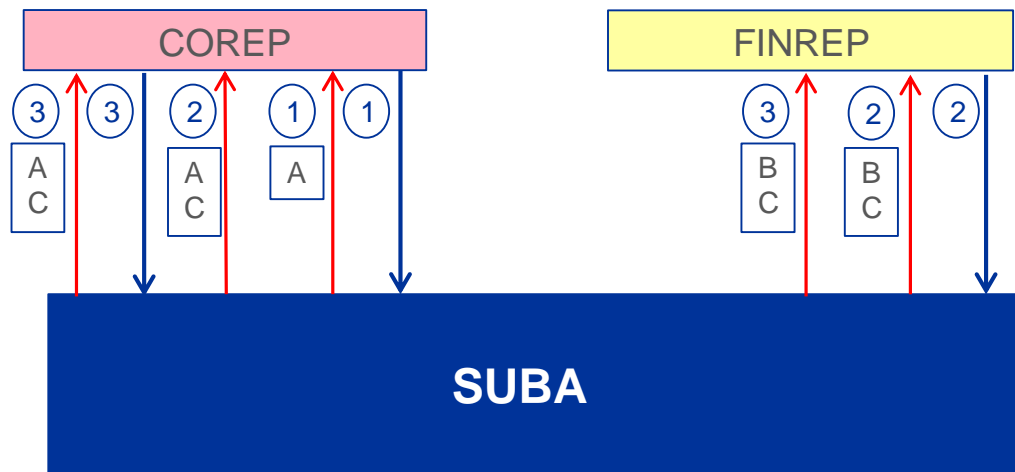
Requirements

- Collection of supervisory data to be harmonised across all institutions of the SSM
 - Many more files are expected to be received by SUBA
 - Changes in the ETL process are needed (no need to store all data)
 - Reprocessing logic to be redesigned
 - More header information
 - Reason of the resubmissions
 - Signature
 - Delivery timestamp
- Improve the communication with the NCAs
 - New SUBA functionality
 - Production reports available in SUBA
 - Automatic notifications to NCAs
 - Enhancement of the discussion functionality

Thank you for your attention

Cross-module check difficulties

- New concept of “Re-validation”
 - When an instance involved in a cross-module rule is received, all affected modules are “revalidated” (only cross-module rules are evaluated)
 - New flag: “All rules triggered”
 - A new acknowledgement message is sent for all affected modules
 - Data is not loaded again in the database, only result of validation



ART = ~~False~~ True

Rule A: COREP
Rule B: FINREP
Rule C: COREP+FINREP