BANCO DE ESPAÑA
Eurosistema

28TH EUROFILING WORKSHOP

PRESENT AND FUTURE XBRL FINANCIAL REPORTING AT BDE

INFORMATION SYSTEMS DEPARTMENT

June 2023

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*"Data Point Modelling is a **methodology** which intends to create a **bridge** between the functional design of a reporting framework – 'the reporting templates' – and the technical design of an **XBRL taxonomy**".*

*"Data Point Models are formally **represented by XBRL taxonomy files** that are built following certain conventions to warrant an accurate and univocal representation of the data model."*

Link

Data "centric"

- DPM is template independent (data centric) -all information about data point is explicit (easy to communicate)

Extensible

- NCA additional reporting requirements and validation rules: Adaptability and reusability features.

Implemented with a technical standard: XBRL

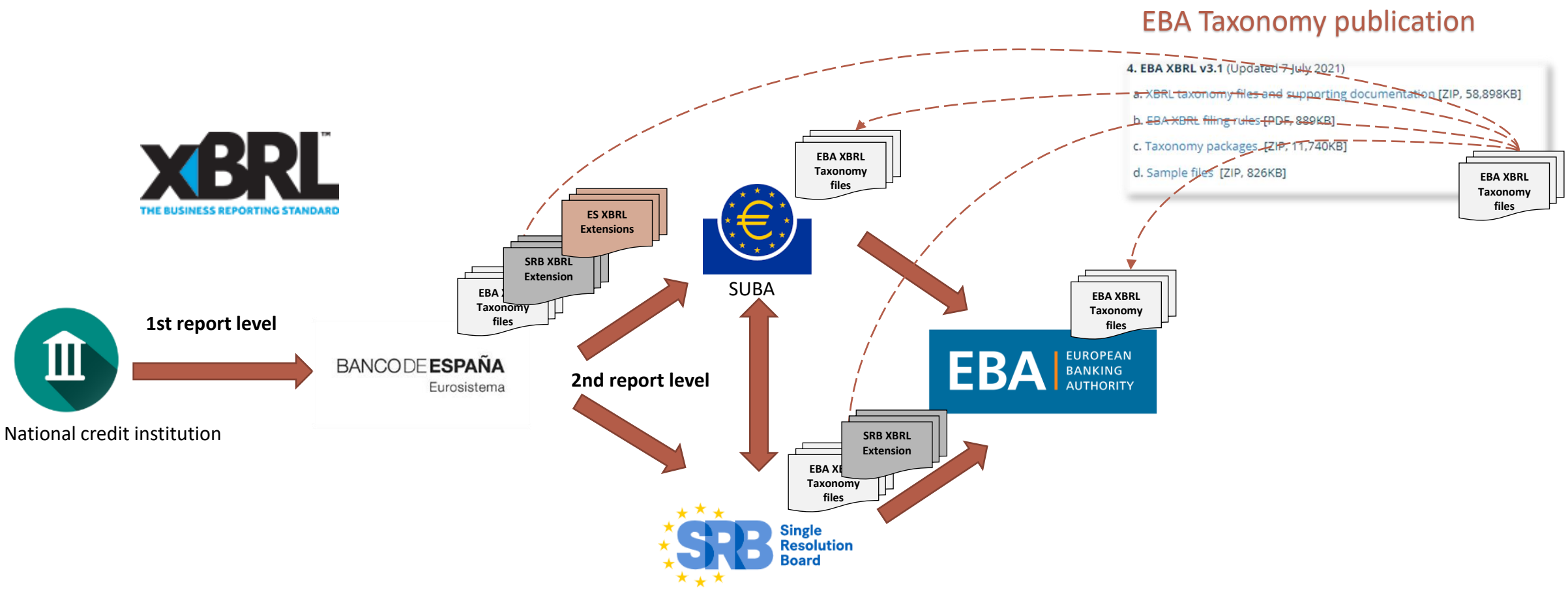
- This standard guarantees QA thought the entire reporting chain as defined in the Sequential Approach

Harmonized

- DPM methodology aligned with the XBRL standard enables the same level of understanding of the data transmitted across the reporting chain.

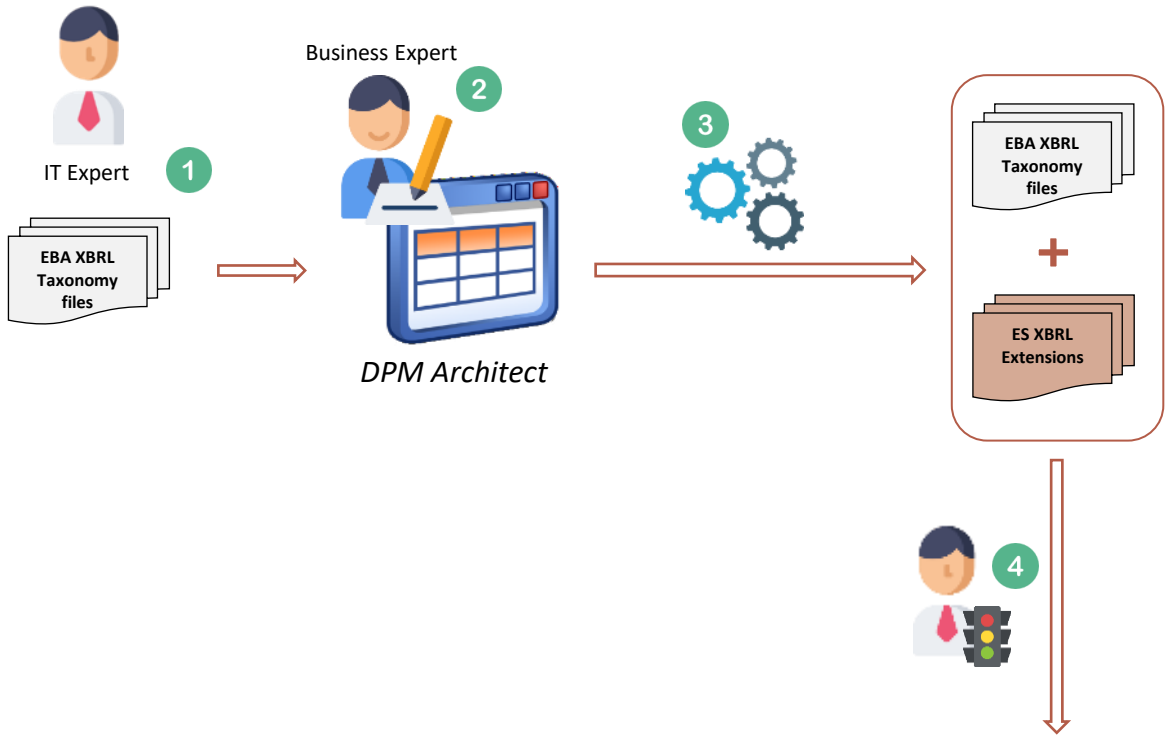
1. DATA POINT MODEL METHODOLOGY: BANCO DE ESPAÑA EXPERIENCE

Benefits of DPM



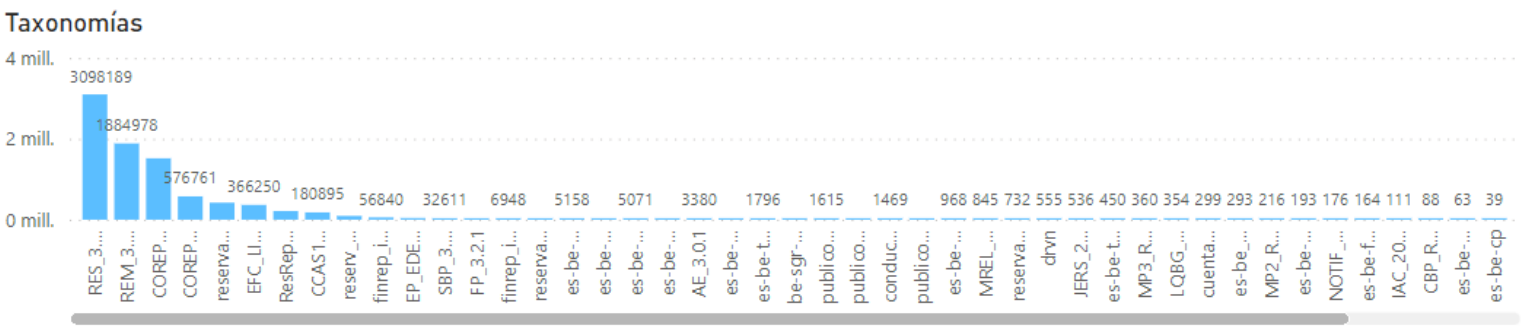
1. DATA POINT MODEL METHODOLOGY: BANCO DE ESPAÑA EXPERIENCE

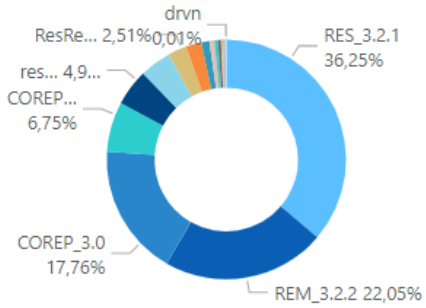
Extension process in Banco de España



1. IT Expert load EBA XBRL Files on DPM Architect
2. Business experts works extending the taxonomy in NATURAL LANGUAGE
3. Generate XBRL Files (EBA + ES files) based on the business model
4. Load XBRL Files in Data Collection System
5. System ready to receive and validate XBRL files

Nº DATA POINTS 8.160.059



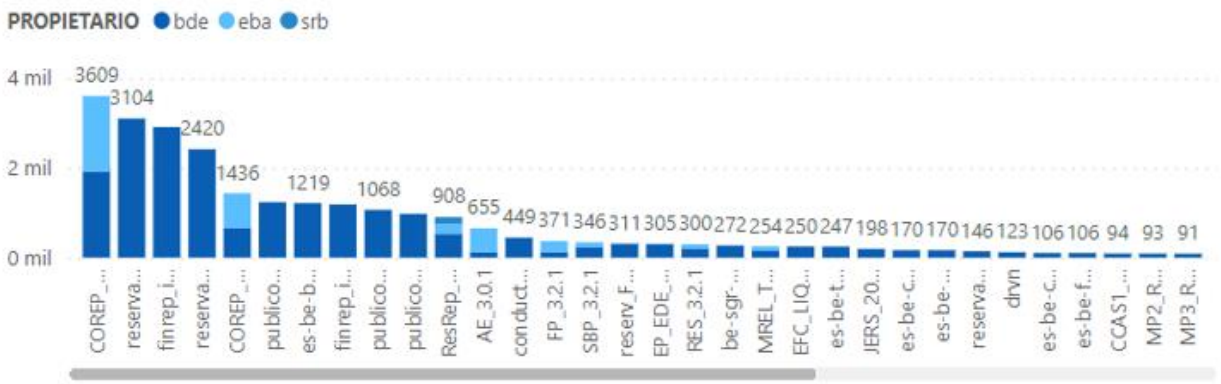


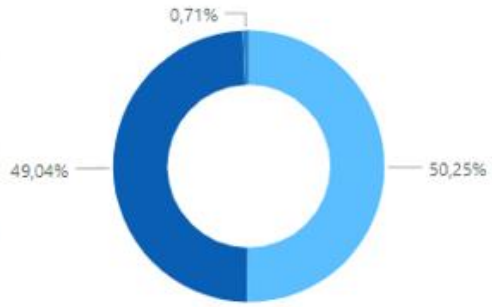
VALIDATION RULES

86.301

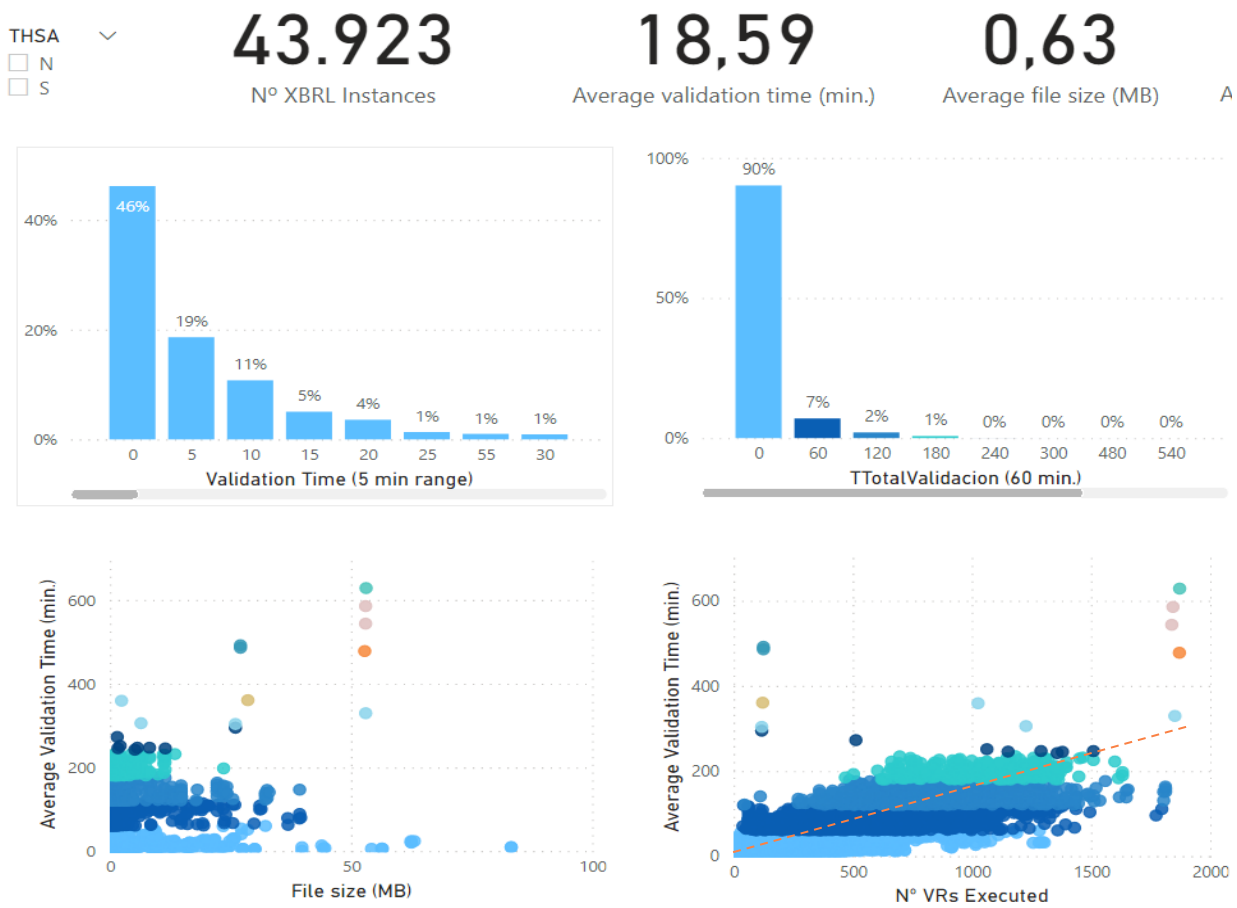
Nº Cuadres

SEV.	bde	eba	srb	Total
ERROR	15069	30555	398	**46022**
INF. PRIVADA	1365			**1365**
INF. PÚBLICA	1641	6		**1647**
WARNING	24248	12801	218	**37267**
Total	**42323**	**43362**	**616**	**86301**



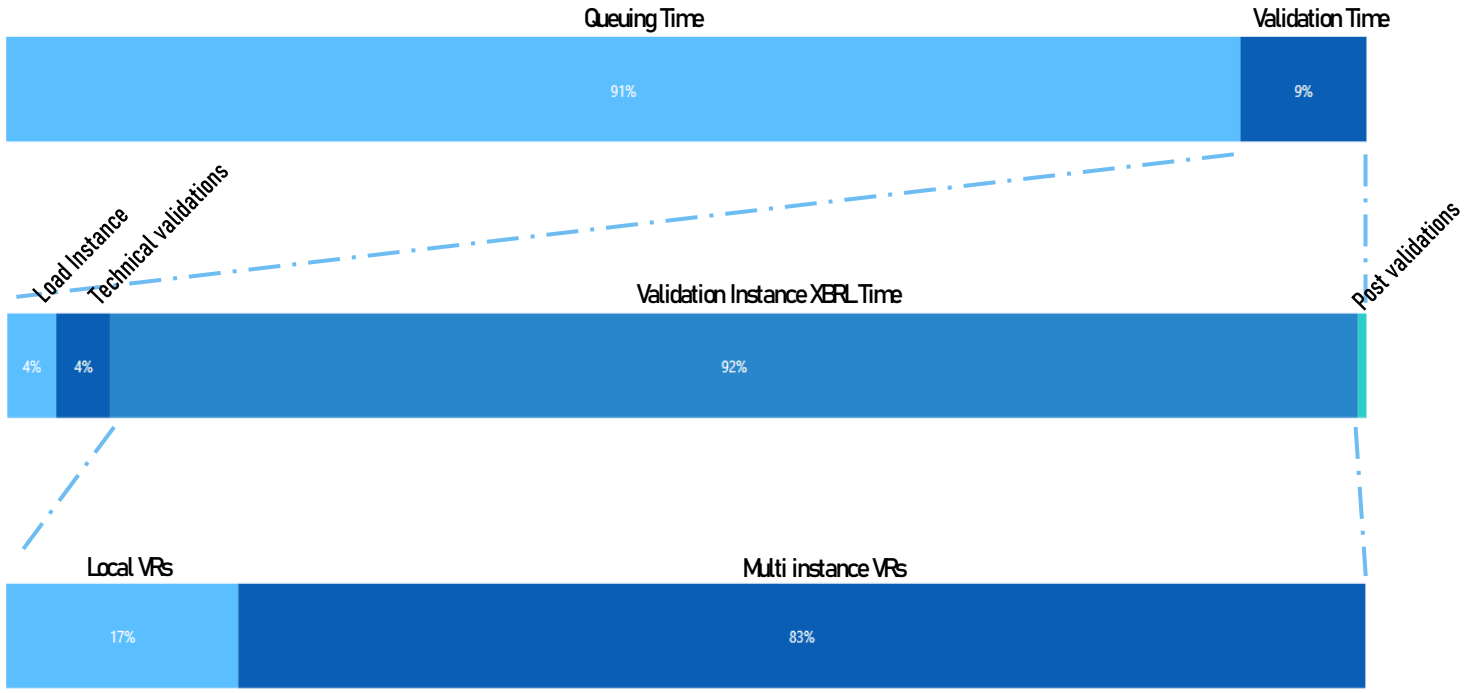


How efficient were the validations of the XBRL instances?



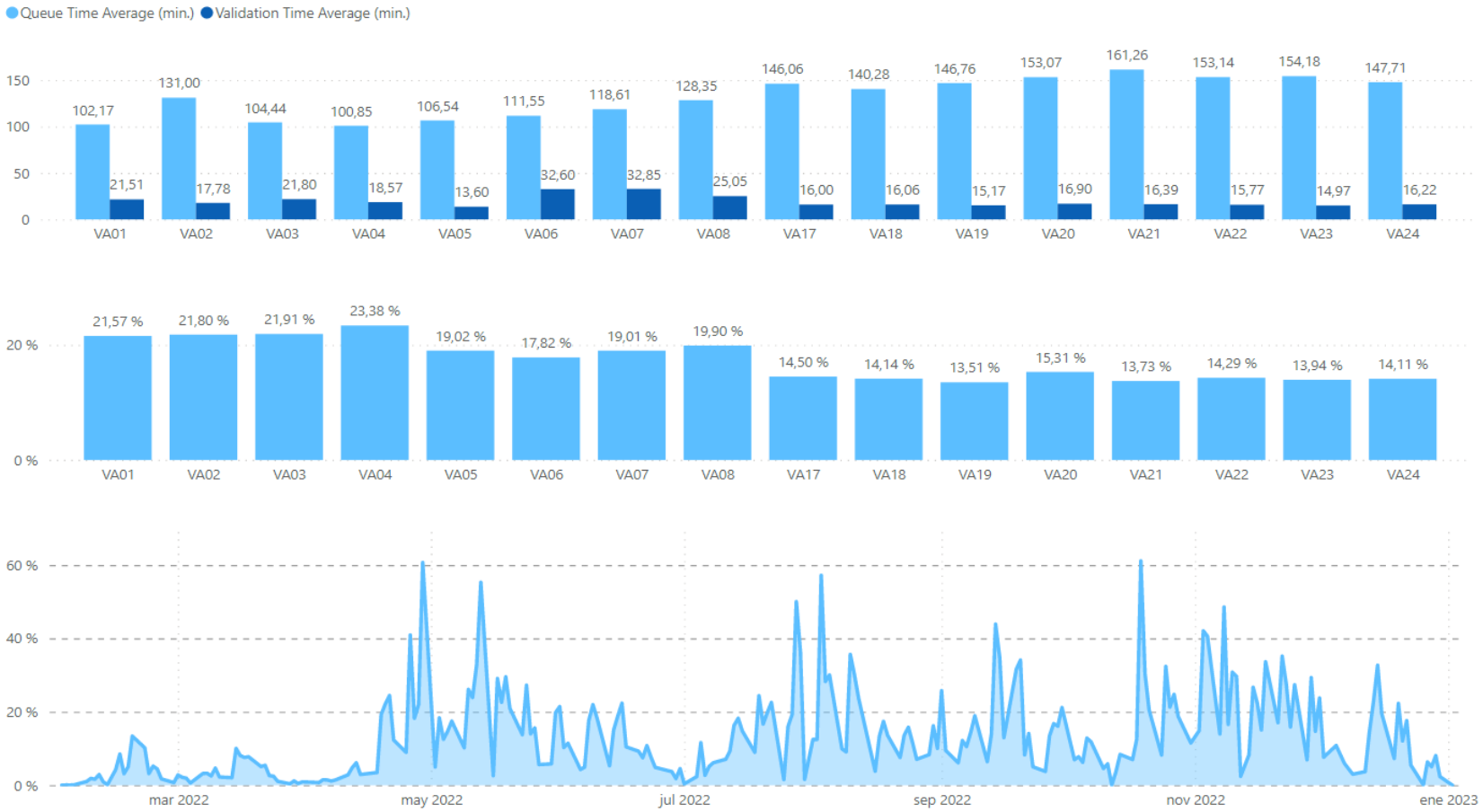
- 90% less than 1 hour
- 46% less than 1 minute
- Number and type of VRs seems determinate the execution time
  - Not size

How long on average it takes for a declaration to be validated from the time it is received?



- Only 9% of the total is referred to the validation of the declaration.
- Of that 9%, more than 80% are multi-instance validation rules
  - These have dependencies with other modules, can cause reprocessing, etc...

How busy were our queues? 16 queues



- Although the average queue occupancy does not exceed 24% on average, the non-linear nature of the receipt of instances causes the waiting time per queue to be high.

- The validation times obtained by our XBRL engine are **good enough for our requirements**.
- Although the increase in file size may have an impact on file transmission, we do **not consider it a critical problem at present**.
- Improved **queue management** for receiving XBRL instances has room for improvement
  - **Dynamic queues** that are created and destroyed on demand.
  - **Intelligent routing** of XBRL instances to cause as few interdependencies as possible.

Relevant changes that impact us

EBA Taxonomy Architecture 2.0

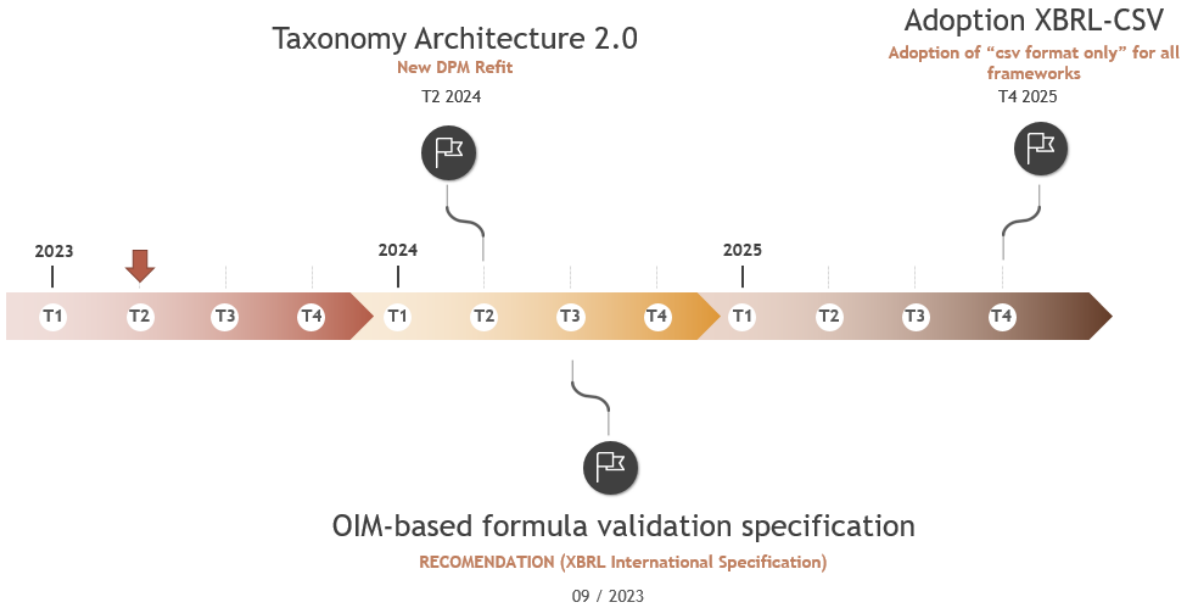
- Versioning of dictionary elements and new compound type
- The concept "taxonomy" disappears
- VRs are divided by evaluations
- Disappearance of the affected table concept

CSV format

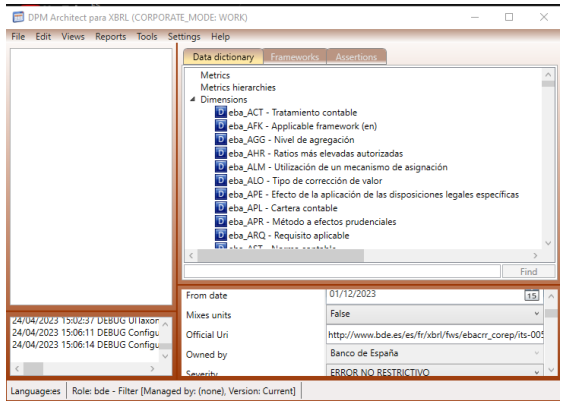
- EBA will **ONLY** accept csv format from the 2025 reference date

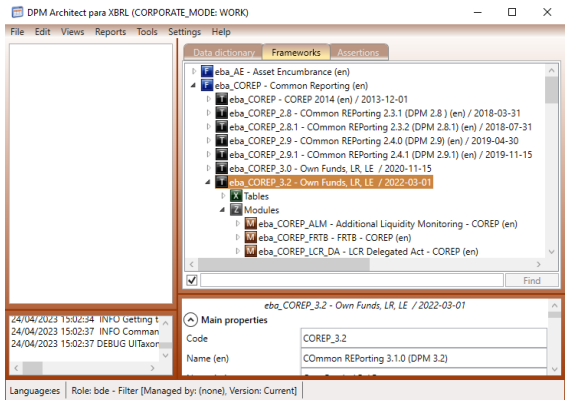
New VRs Language

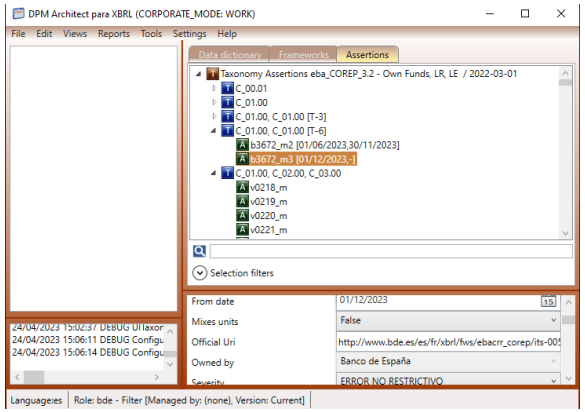
- According to EBA new CVE Processor
- New formula Specification (?)



The future of DPM Architect as a public free tool for Data Point Modelling







EBA Architecture 2.0 has a big impact in its design, specially:

- The concept "taxonomy" disappears
- VRs are divided by evaluations
- Disappearance of the affected table concept

We cannot guarantee a public version of DPM that supports the new architecture.

…at least, for the time being.

Impact of implementing the new CSV format

- More than **300 national entities** reported us in XBRL in 2022, but we expect **more than 700** for this year
- We **must keep both formats** at least, for resubmissions
- Our time validation have **enough performance for our requirements** with XBRL-XML format.
- For now, CSV format offers lighter files, but **a better performance in the execution of validation rules cannot be assured**.
- The new formula specification (XBRL International) **does not cover all types of VRs** (XPath).

REMARK

Although we think CSV format is the future and open new possibilities for reception of granular data with a much better performance, we also think the stop supporting current XML format is an error.

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THANK YOU FOR YOUR ATTENTION