xBRL-CSV for supervision on banks

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DeNederlandscheBank

EUROSYSTEEM

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Speaker



Paul Hulst

- ICT Architect for the process of collecting, validating, disclosing and dissemination structured data at De Nederlandsche Bank (DNB)
- Member of XII BPB Taxonomy Architecture Guidance Task Force
- Member of XII XSB Open Information Model Working Group
- Board member XBRL Netherlands & Eurofiling foundation

Note:

This presentation contains the views and opinions of the speaker and is not an official position of De Nederlandsche Bank or of the European Banking Authority.



Introduction: European data flows

Supervision on Eurozone banks Forward data to FBA banks EUROPEAN CENTRAL BANK EUROSYSTEM Banks and **EUROPEAN** EB Investment firms **Investment Firms DeNederlandsche**Bank BANKING AUTHORITY in Netherlands EUROSYSTEEM

Prepare data in format required by DNB (currently xBRL-XML) Collect data Validate data Forward data in format required by EBA / ECB European Single Rulebook Collect data based on XBRL Taxonomies

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Why use xBRL-CSV?

EBA taskforce for evolving the regulatory reporting format (TFERF):

"Due to the complicated structure and large file size of the xBRL-XML report instances, the efficiency of the supervisory data collection process is low, and typically very time consuming and resource intensive."

Example:

Largest report DNB received contains 1,5 million facts, is 2GB in size and takes 3 hours to validate on a 64GB server.

The trend towards more granular data sets makes this an issue to address now.



How does xBRL-CSV address the issues mentioned

EBA taskforce for evolving the regulatory reporting format (TFERF):

"Due to the complicated structure and large file size of the xBRL-XML report instances, the efficiency of the supervisory data collection process is low, and typically very time consuming and resource intensive."

CSV file: 1 fact per row, each row: fact identifier, fact value, values for any open dimensions, unit when not base.

Tests have shown that the file size of a large SBP-IMV report in CSV is about 3% of the XML equivalent.

No hard facts are available yet, general expectation is that memory requirements are substantially lower. Impact on validation time is limited (small).

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How EBA uses xBRL-CSV

CSV structure fully defined by EBA:

- 1 file (json formatted) describing the report content.
- 1 file (csv formatted) listing the general aspects (e.g. reporter id, reference period).
- 1 file (csv formatted) listing the filing indicators.
- 1 file (csv formatted) for each table in the module.

Facts identified by the datapoint id as defined by EBA.

Example – SBP IMV

	А	В	С	D	Е		
1	http://www.eba.europa.eu/xbrl/crr/fws/sbp/cir-2070-2016/2020-06-30/mod/SBPIMV_Con						
2							
3	Default As	pect					
4	category	value					
5	Ref Period	2021-09-30					
6	Identifier	DUMMYLEI123456789012					
7	Scheme	http://standards.i					
8	Currency	EUR					
9	Language	en					
10							
11	Table of C	ontents					
12	No.	table	description	required			
13	1	<u>S 00.01</u>	S 00.01 Nature of Report (SBP)	positive			
14	2	<u>C 106.00</u>	C 106.00 Initial Market Valuation	positive			
15							

	А	В	С	D	E	F	G	
1	TOC	C 106.00 Initial Market Valuation						
2								
		Portfolio Modelled	Portfolio Modelled	Portfolio Modelled	Rationale for	Free text box	Initial Market Valuation	
3		for Var + SVaR (YES/NO)	for IRC (YES/NO)	for Correlation Trading (YES/NO)	Exclusion			
	Reference portfolio/instrument for the	020	030	040	050	060	070	
4	Benchmarking exercise							
5	abcdef	TRUE	TRUE	FALSE	Model not authori:	some text	USD 1.234.567	
6	хуzхуz	FALSE	FALSE	TRUE		some other text	EUR 987.654,00	
7								

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Example – C 106.00 Initial Market valuation

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Open dimension (PBE) In original currency.

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Example: C 106.00 xBRL-CSV data file

	А	В	С	D	E	F	G	н
1	TOC	C 106.00 Initial I	Market Valuation					
2								
		Portfolio Modelled for Var + SVaR	Portfolio Modelled for IRC (YES/NO)	Portfolio Modelled for Correlation	Rationale for Exclusion	Free text box	Initial Market Valuation	
3		(YES/NO)		Trading (YES/NO)				
	Reference portfolio/instrument	020	030	040	050	060	070	
4	for the Benchmarking exercise	439580	439581	439582	439583	439579	439584	
5	abcdef	TRUE	TRUE	FALSE	Model not authori	some text	USD 1.234.567	_
6	хуzхуz	FALSE	FALSE	TRUE		some other text	EUR 987.654,00	d
7								

latapoint,factValue,PBE,unit dp439580,true,abcdef dp439581,true,abcdef dp439582,false,abcdef dp439583,eba ZZ:x33,abcdef dp439579, "some text", abcdef dp439584,1234567,abcdef,iso4217:USD dp439580, false, xyzxyz dp439581, false, xyzxyz dp439582,true,xyzxyz dp439579, "some other text", xyzxyz dp439584,987654.00,xyzxyz,iso4217:EUR

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Impact of EBA xBRL-CSV

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Next steps

- EBA to consult with NCA's on date xBRL-CSV becomes mandatory format.
- DNB to engage reporters on new format.
- Reporters should follow this topic closely.
- Software vendors should look into the new format and adapt their software for it.
- EBA and XBRL Int. to continue work on improving the standard regarding validation on large datasets.

Summary

My view on xBRL-CSV for supervisory data collected by EBA:

- 1. Is a useful step now and an essential step for efficient data collection in the future,
- 2. Requires significant changes to all data processes for all parties involved,
- 3. Thereby has a significant impact on those parties,
- 4. Thorough discussions needed on timeline for implementation,
- 5. Excellent basis for further improvements on processing structured data.

