

# **DPM Architect for NCAs: extending / creating taxonomies and validation rules**

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Information Systems

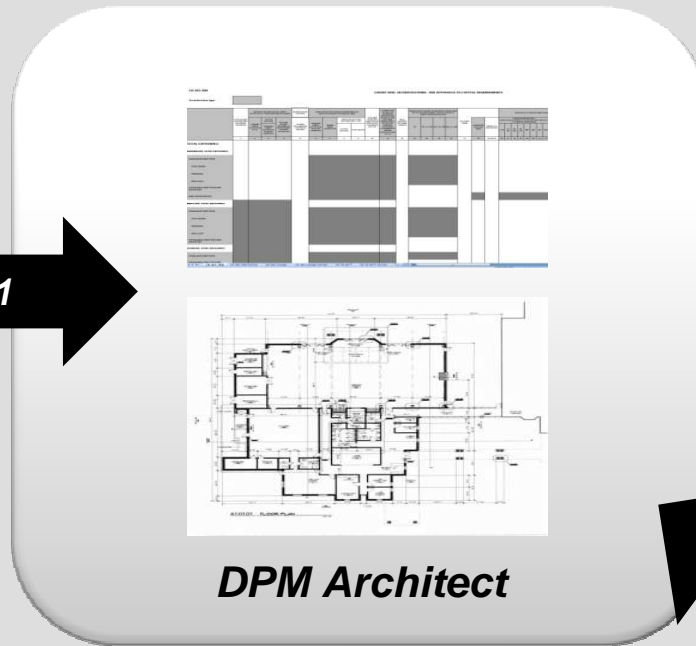
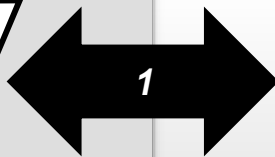
# 10 YEARS OF EUROFILING



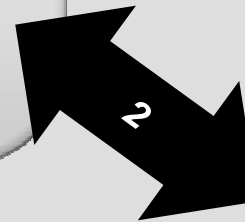
# COMPUTER AIDED DESIGN OF FINANCIAL MODELS



**Domain experts  
(data architect)**



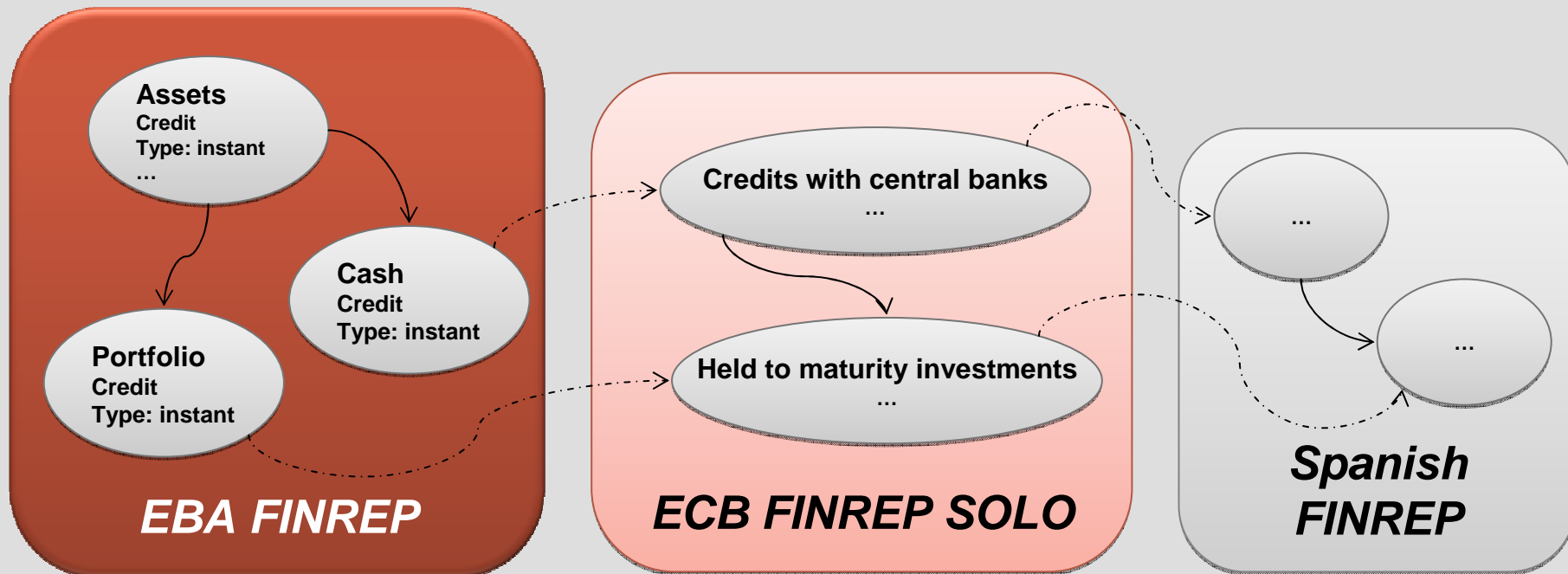
**DPM Architect**



1. Business experts work on the definition of templates and the model at the same time
2. Taxonomy files produced from the model according to a set of well defined rules (EBA Taxonomy Architecture Rules)
3. IT is not part of the modelling process. IT supports the process with tools.

## WHAT ARE XBRL EXTENSIONS?

- XBRL is a joint effort to create a global vocabulary of business concepts
- Those concepts are enhanced with relationships
- XBRL enables and encourages sharing and reusing those concepts



## WHY EXTENSIONS?



### *Business requirements*

### *Technical implementation*

#### **Documentation**

- Translations
- Additional guidance
- Codes for legacy systems
- Error messages

**Label linkbases**

#### **Quality control**

- Additional validation rules
- Additional constraints

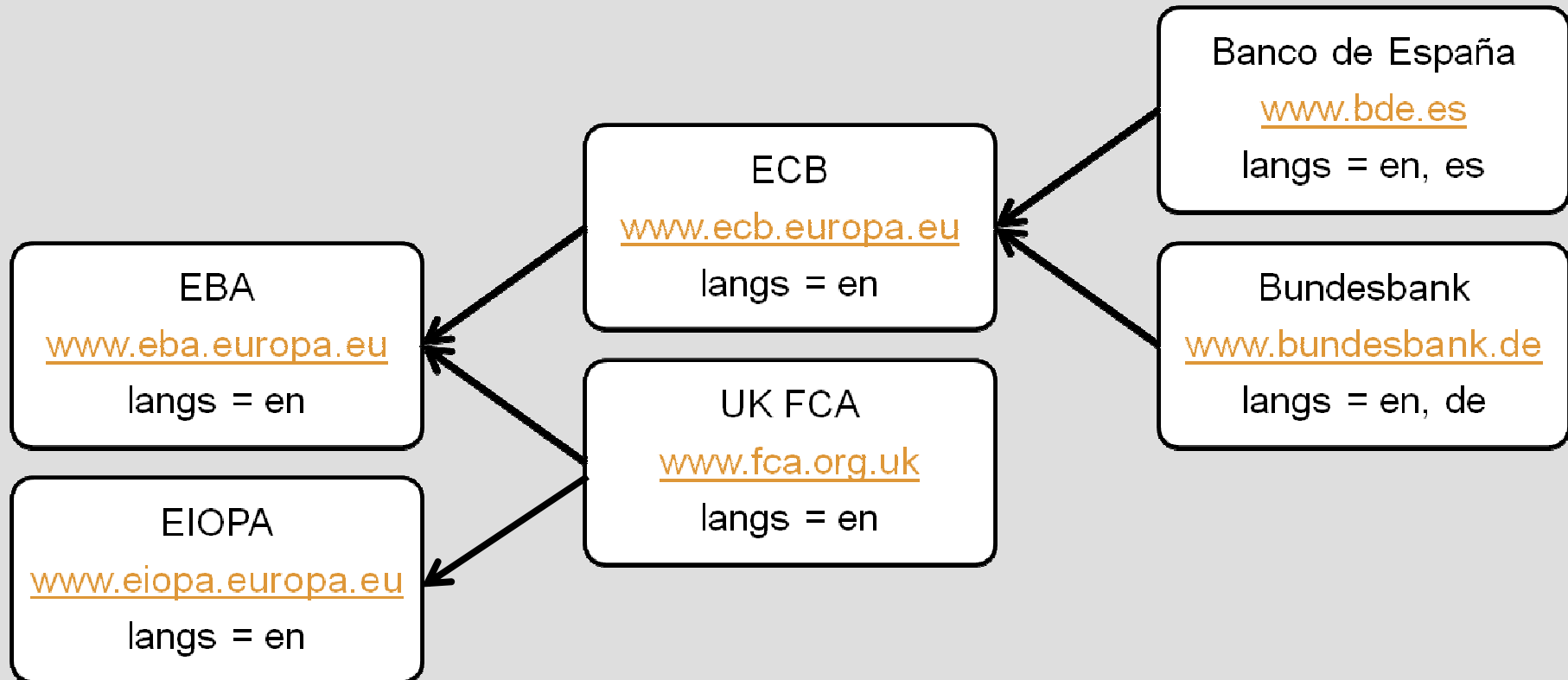
**Formulae linkbases**

#### **New reporting requirements**

- New tables
- New columns / rows
- ...

**Schemas Definition, label, presentation...**

## EXTENDING DOCUMENTATION (owners.xml file)



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```
<owner id="eba" namespace="http://www.eba.europa.eu/xbrl/crr"
  officialLocation="http://www.eba.europa.eu/eu/fr/xbrl/crr" prefix="eba"
  includeFilingIndicator="true">
  <copyright>(C) EBA</copyright>
  <names>
    <name xml:lang="es">Autoridad Bancaria Europea</name>
    <name xml:lang="en">European Banking Authority</name>
  </names>
  <supportedLangs>
    <supportedLang xml:lang="en"/>
  </supportedLangs>
  <externalApps>
    <externalApp codeRef="RC"/>
    <externalApp codeRef="DB"/>
    <externalApp codeRef="FI"/>
  </externalApps>
  <imports>
    <import codeRef="eurofiling"/>
  </imports>
</owner>
```

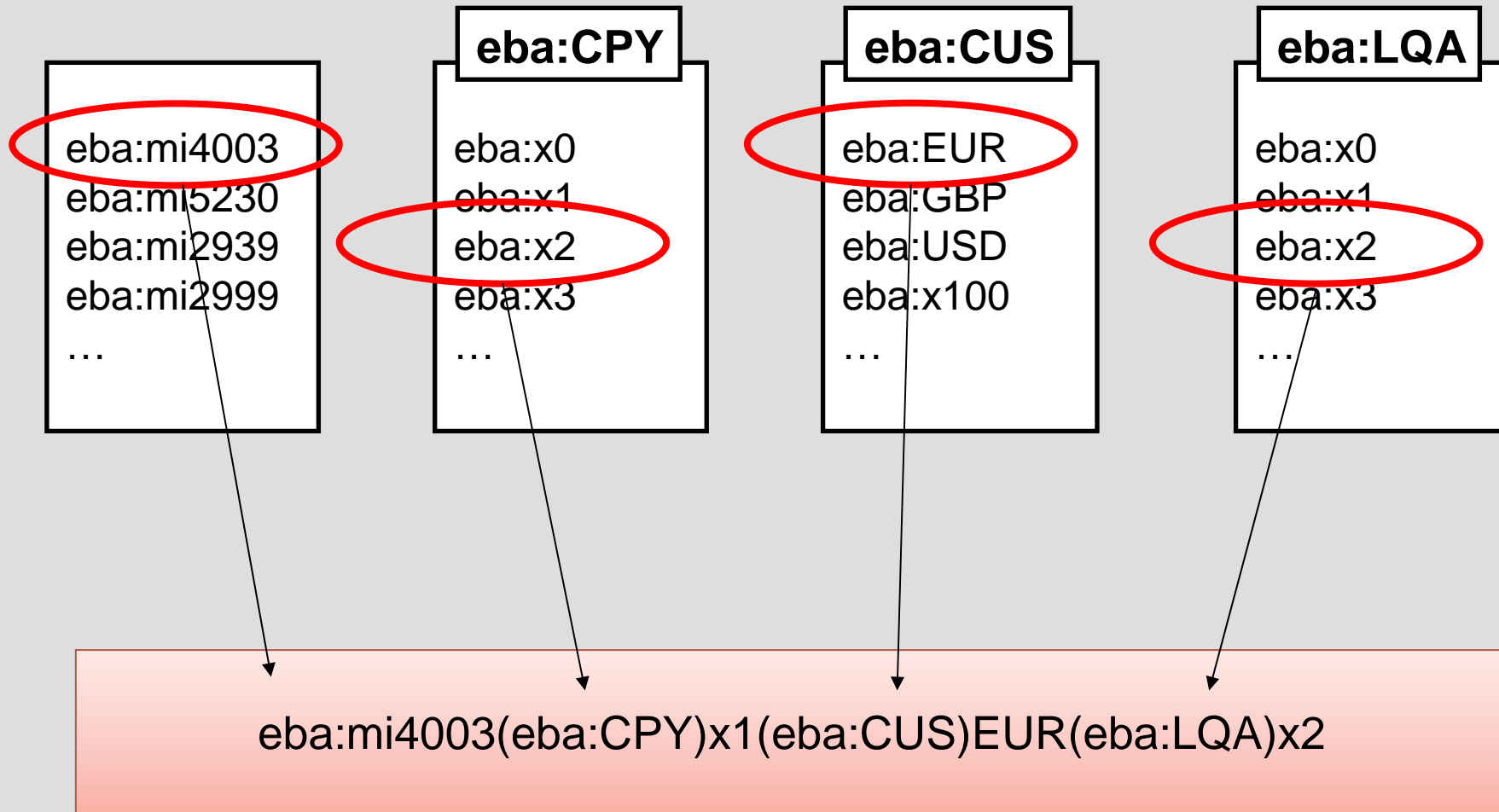
## EXTENDING VALIDATION RULES



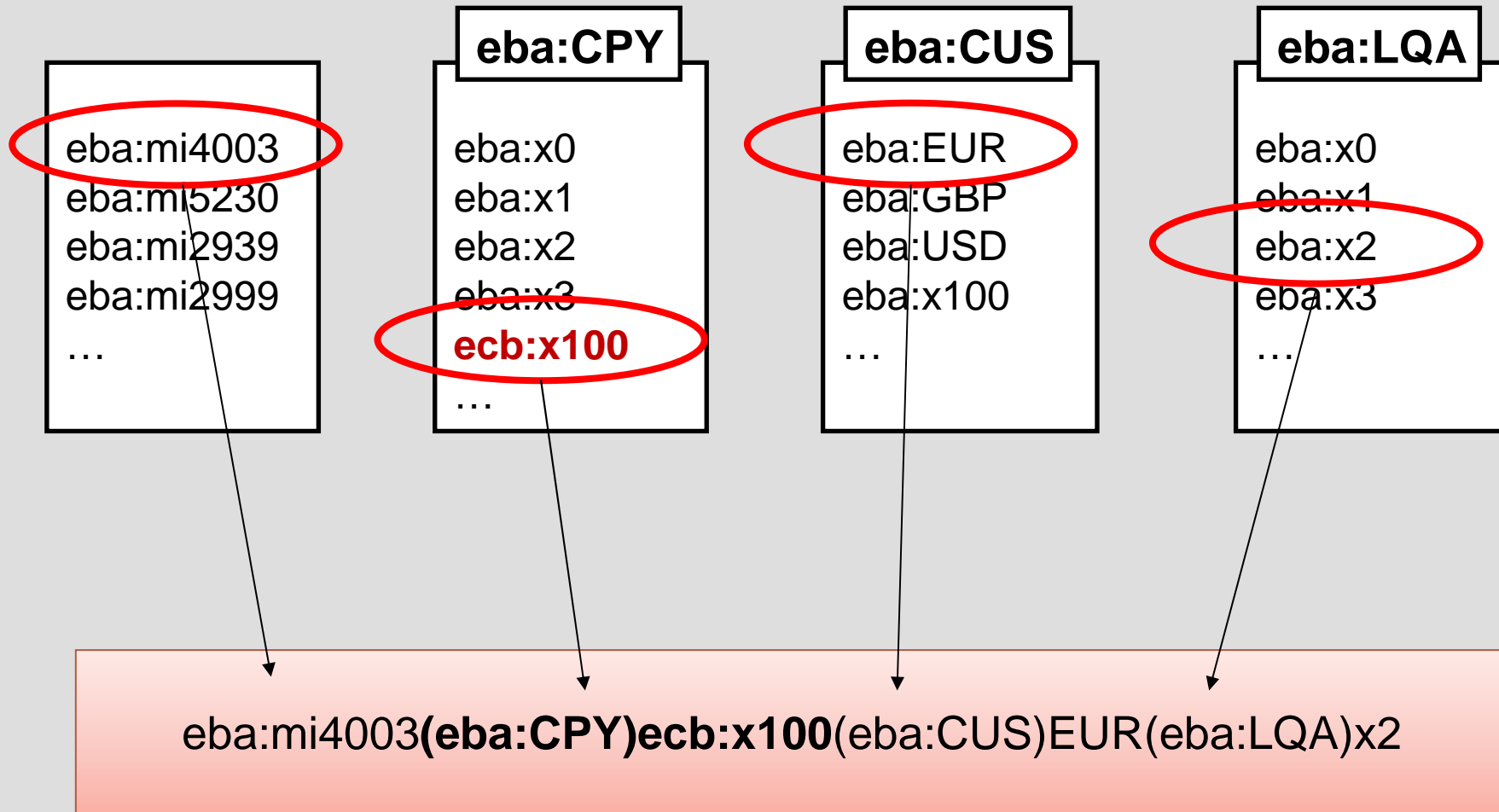
**DEMO**



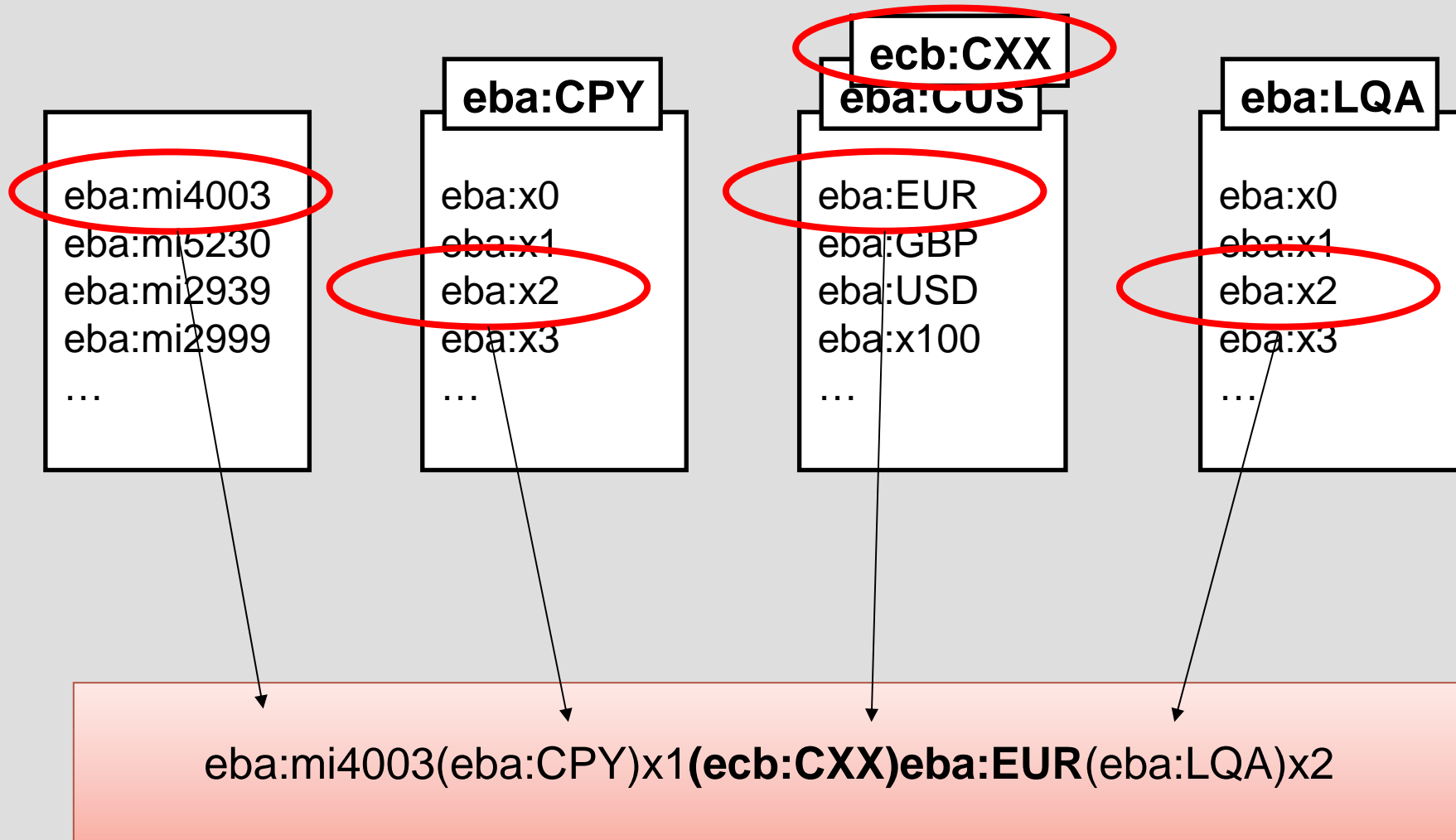
## EXTENDING REPORTING REQUIREMENTS: by combination of already available concepts



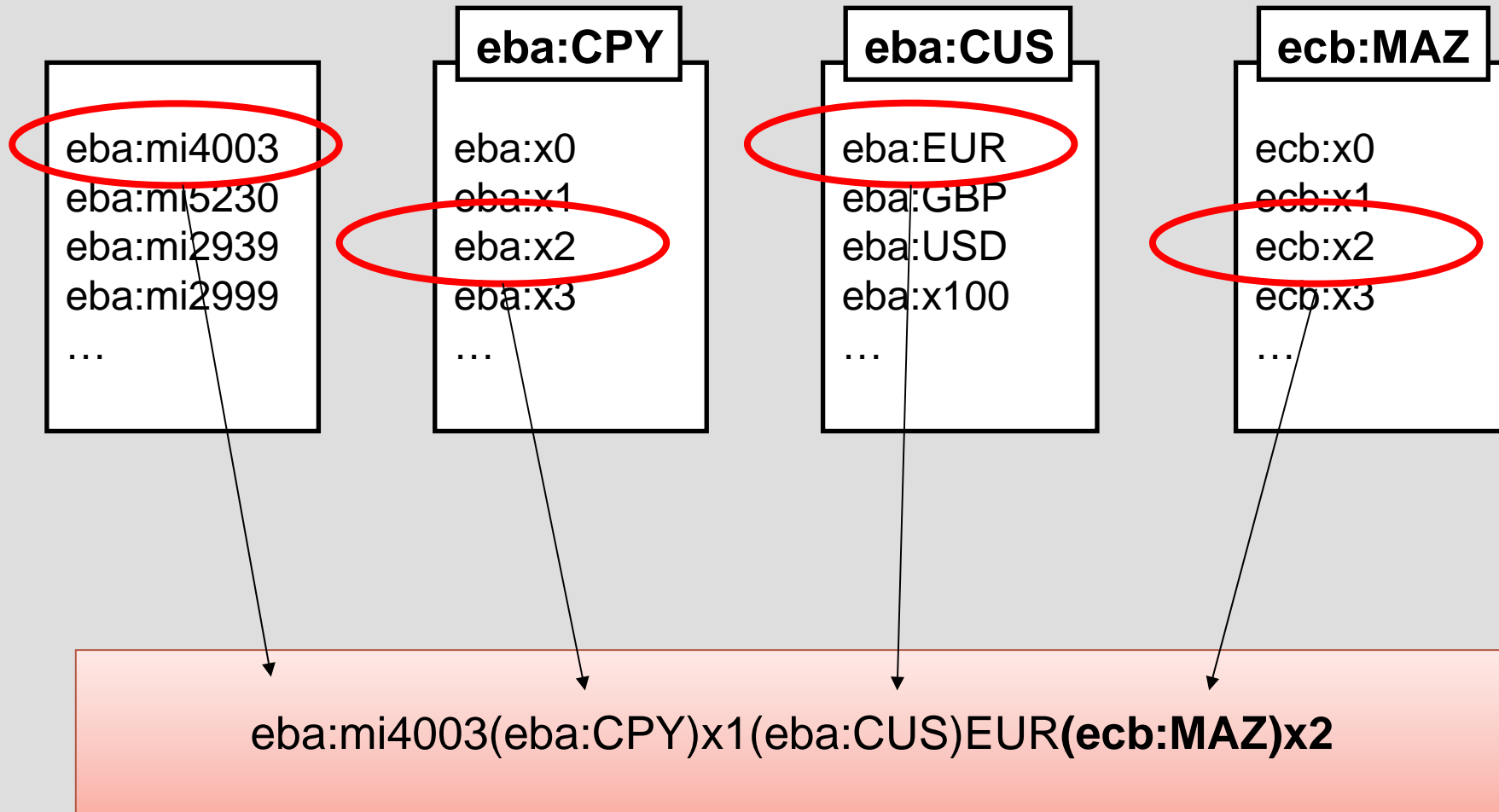
## EXTENDING REPORTING REQUIREMENTS: by combination of already available concepts



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## DPM ARCHITECT: CURRENT STATUS



### **Successfully used in Bank of Spain:**

- Business users with no knowledge of XBRL
- 25 taxonomies and EBA extensions already in production

### **Already in use by other institutions:**

- Final stage of EBA taxonomies
- ECB's FINREP solo
- Review of EBA taxonomies by most NCAs
- New taxonomies and extensions by some NCAs
- Database taxonomy loading process by some NCAs
- Used by EIOPA for its draft taxonomies
- Some international institutions

### **Available for free on request:**

- Distribution list with more than 100 users

### **Please, subscribe to:**

***<https://groups.google.com/d/forum/dpm-architect>***

# DPM ARCHITECT: THE COMING RELEASE

Integrated instance editor

Validation rules testing (XBRL processor required)

API details for plugins to be published soon

Regression tests for validation rules

Improved user interface of table grid

Validation rules references

ECB tailored reports



The screenshot displays the DPM Architect software interface. The main window shows a table with columns for 'FINALIDAD DEL ART. 2 a) (m)', 'METODOLOGÍA DE LA ORDEN ECO/95/2003, DE 27 DE MARZO(a)', and 'SIN VISTA AL INTERIOR(m)'. The table contains multiple rows of data with numerical values and some cells highlighted in red or green. On the right side, there is a 'Validation Rules' panel with a tree view of rules and a 'Main properties' section for a selected rule. The 'Main properties' section includes fields for Code, Depreciated, Force evaluation, From date, Mises units, Owned by, Test, To date, Visible, and Documentation.

	FINALIDAD DEL ART. 2 a) (m)						METODOLOGÍA DE LA ORDEN ECO/95/2003, DE 27 DE MARZO(a)						SIN VISTA AL INTERIOR(m)					
	Número de tasaciones (m)		Valor de tasación(m)		Superficie utilizable en m2(m)		Número de tasaciones (m)		Valor de tasación(m)		Superficie utilizable en m2(m)		Número de tasaciones (m)		Valor de tasación(m)		Superficie utilizable en m2(m)	
1 TASACIONES DE BIENES INMUEBLES(m)	0001	-3.000.000	0001	200	0001	32.132	0401	0001	40.000	0701	0001							
1 Terrenos, Totales(m)	0001	3.000.000	0001	0001	0001	32.132	0401	0001	40.000	0701	0001							
Dif que Terrenos de nivel urbanístico (m)	0006		0006	32.132	0006	32.131	0406	0006	34.375	0706	0006							
Dif que Frases urbanísticas(m)	0007		0007	54.354	0007		0407	0007		0707								
2 Edificios en proyecto (obra nueva o rehabilitación)(m)	0002	500.000	0010	543.343	0010	3.232	0410	0010	2.453.453	0710	0010							
Dif que Rehabilitación(m)	0002		0011	543.343	0011	3.232	0411	0011	2.453.453	0711	0011							
3 Edificios y elementos de edificios en construcción o en uso(m)	0003	3.000.000	0015	534.344	0015		0415	0015	2.000.000	0715	0015							
3.1 De uso residencial de primera residencia(m)	0004		0016	53.453	0016		0416	0016		0716	0016							
3.2 De uso residencial de segunda residencia(m)	0005		0017		0017		0417	0017		0717	0017							
3.3 De oficinas(m)	0006		0018		0018		0418	0018		0718	0018							
3.4 De uso comercial(m)	0007		0019		0019		0419	0019		0719	0019							
3.5 Industrial(m)	0008		0020		0020		0420	0020		0720	0020							
3.6 Otros(m)	0009		0021		0021		0421	0021		0721	0021							
4 Edificios terminados(m)	0002	-5.000.000	0025		0025		0425	0025	32.233	0725	0025							
4.1 De uso residencial de primera residencia(m)	0004		0026		0026		0426	0026		0726	0026							
4.2 De uso residencial de segunda residencia(m)	0005		0027		0027		0427	0027		0727	0027							
4.3 De oficinas(m)	0006		0028		0028		0428	0028		0728	0028							

## DRAFT LICENSE



### Tool provided for free:

- No restrictions on its usage
- No restrictions on taxonomies produced with the tool

### Source code to be provided for free to interested institutions

- Source code in English
- User manual in English (needs improvement!!!)
- Technical documentation in UML
- Except for some commercial components (runtime is free)

### Modifications on the source code are allowed, but:

- Source code modifications allowed for internal usage
- We want to avoid forks of the code of the tool:
  - *Redistribution of other changes or additions will NOT be allowed during the first stages of the tool, unless using the extension APIs*
- After a certain period, each version will be released under a GPL / MPL type (Ghostscript style license)



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# THANKS FOR YOUR ATTENTION

BANCO DE **ESPAÑA**



150 AÑOS DE HISTORIA  
1856 - 2006

Information Systems and Processes