



EUROPEAN CENTRAL BANK

EUROSYSTEM

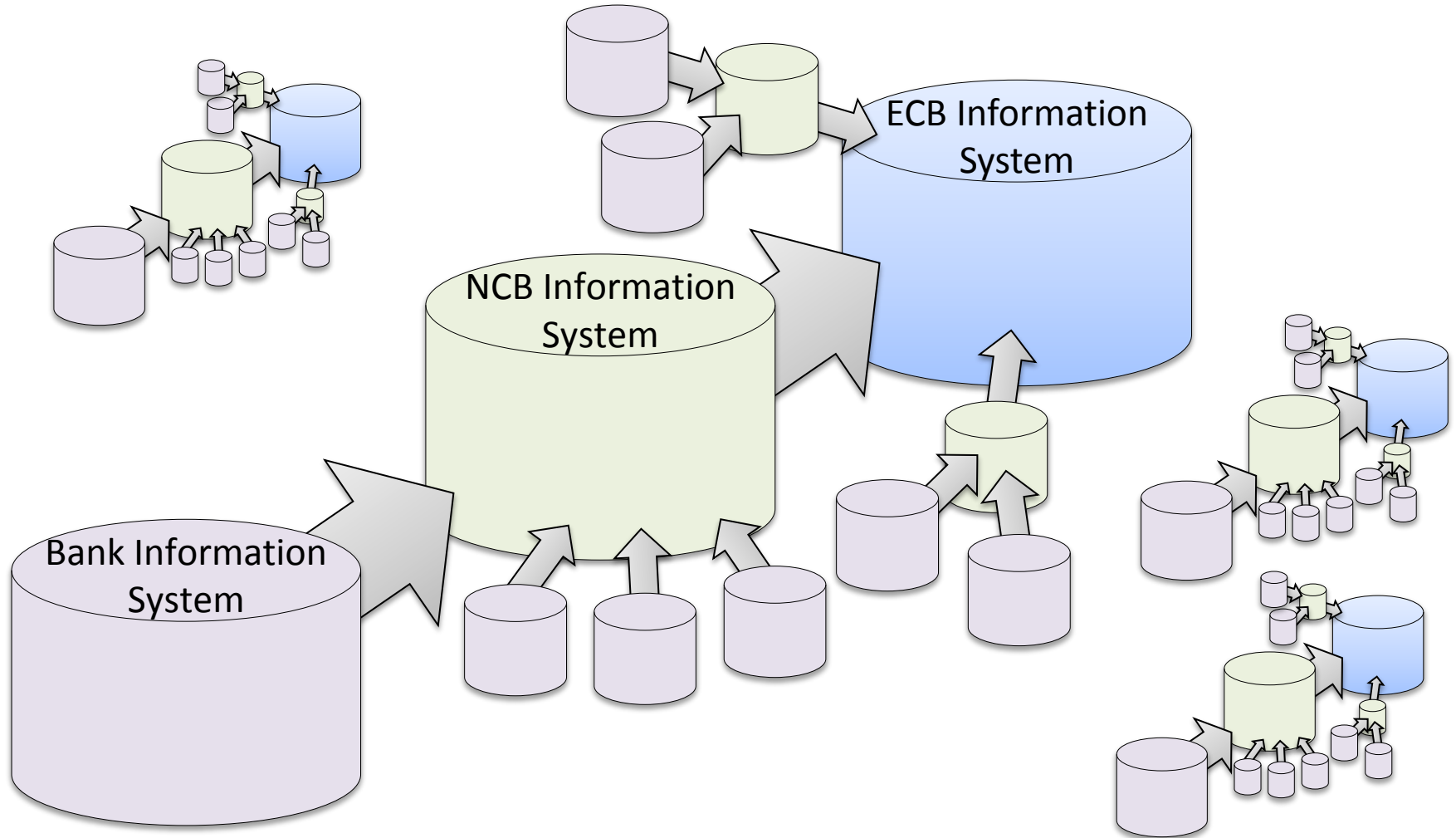
Antonio Olleros
ECB – DG Statistics

The Single Data Dictionary

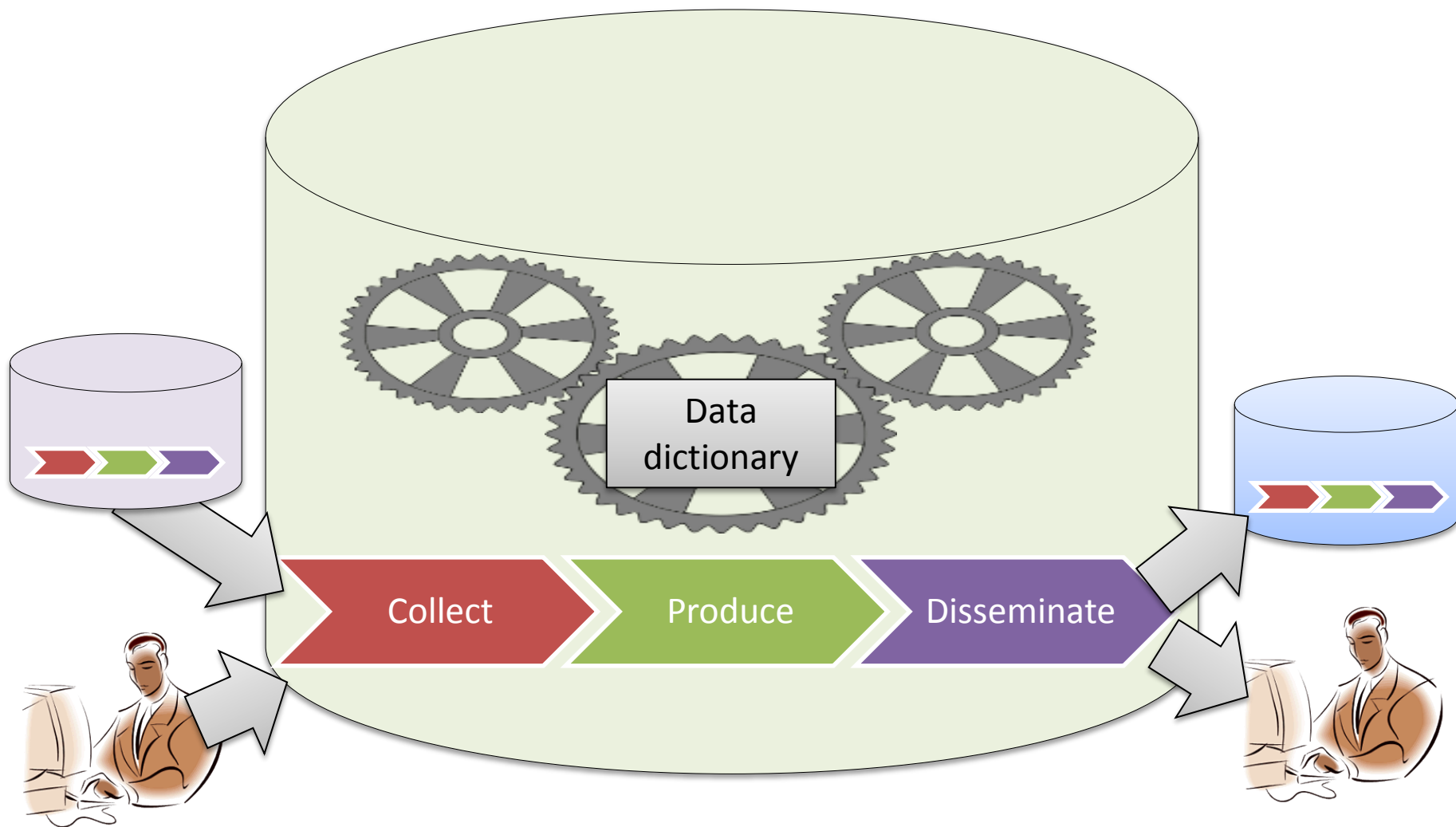
Eurofiling workshop

08/06/2017

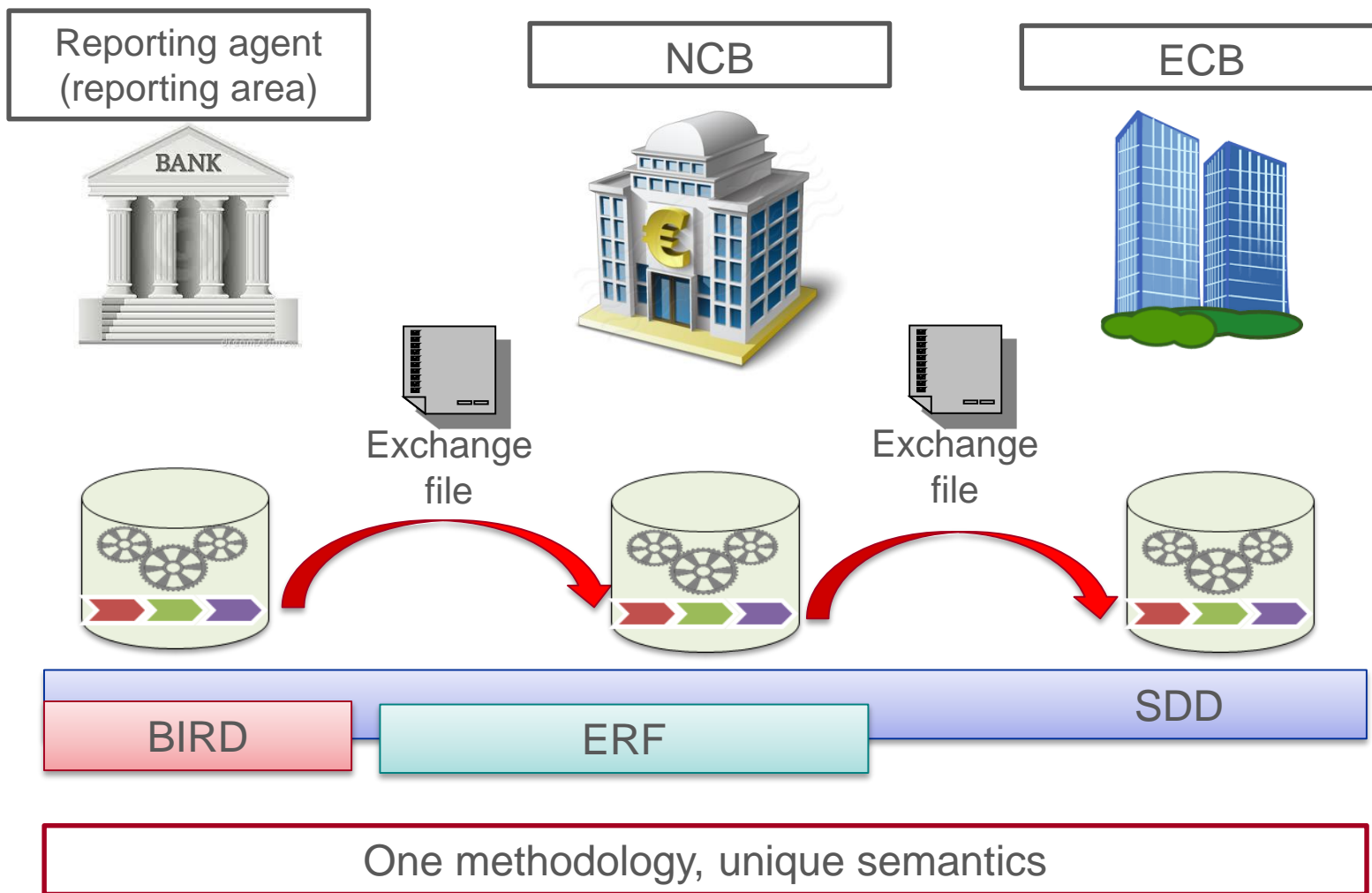
Complexity of the data process



Role of (active) data dictionaries in a system



Integration initiatives overall view



Goal of SDD

Integration of ECB data dictionaries

Methodological integration

Common syntax for the dictionaries

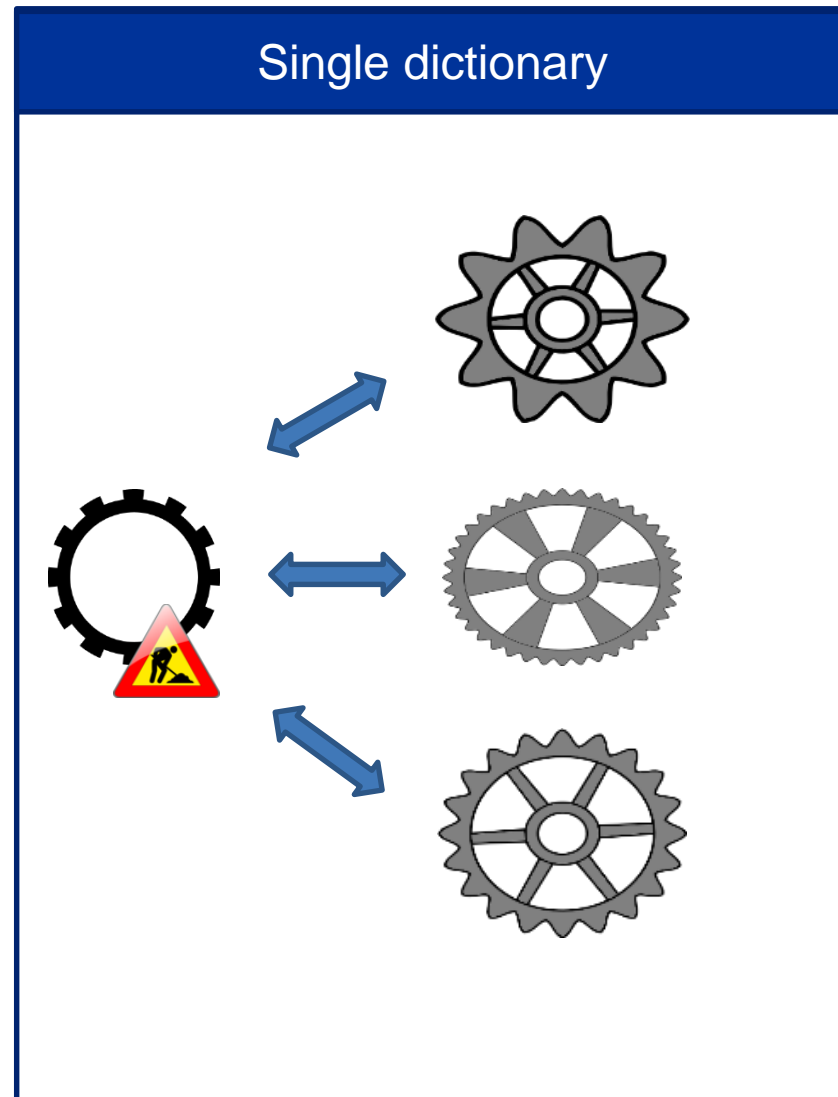
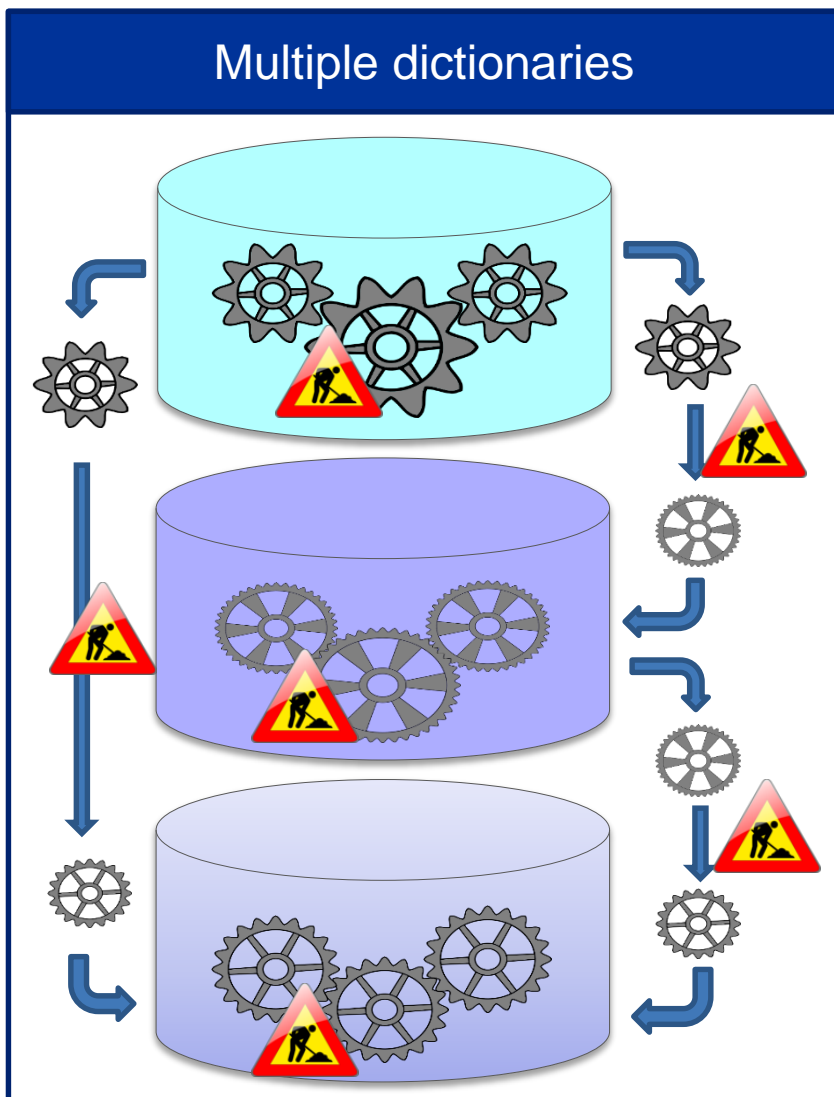
- Set up a methodology (SMCube) compatible with those already existing
- Map other methodologies to SMCube

Semantic integration

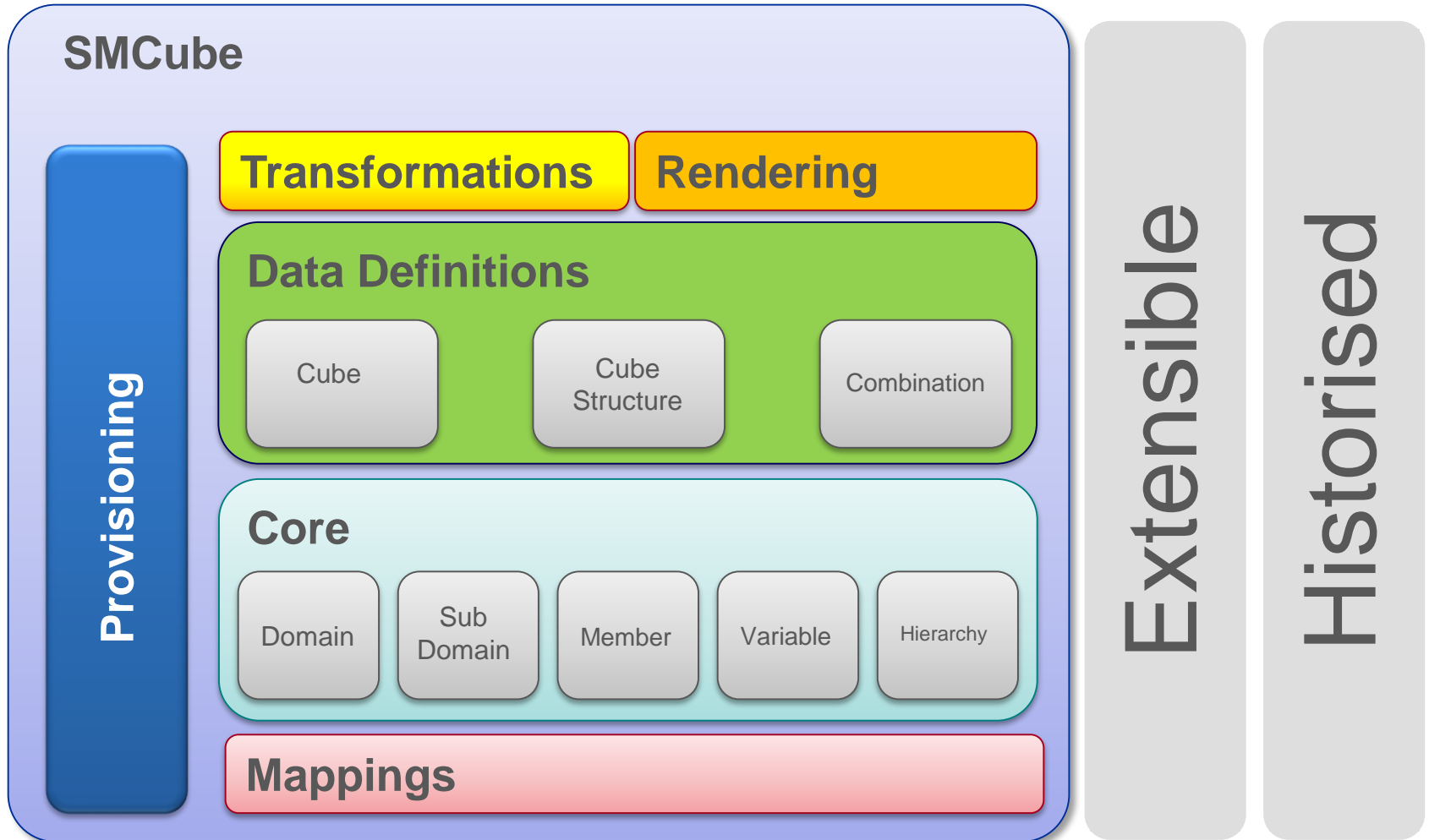
Is “Central banks” the same as “Central bank”?

- Import existing concepts
- Create unique/reference concepts
- Map existing to reference concepts

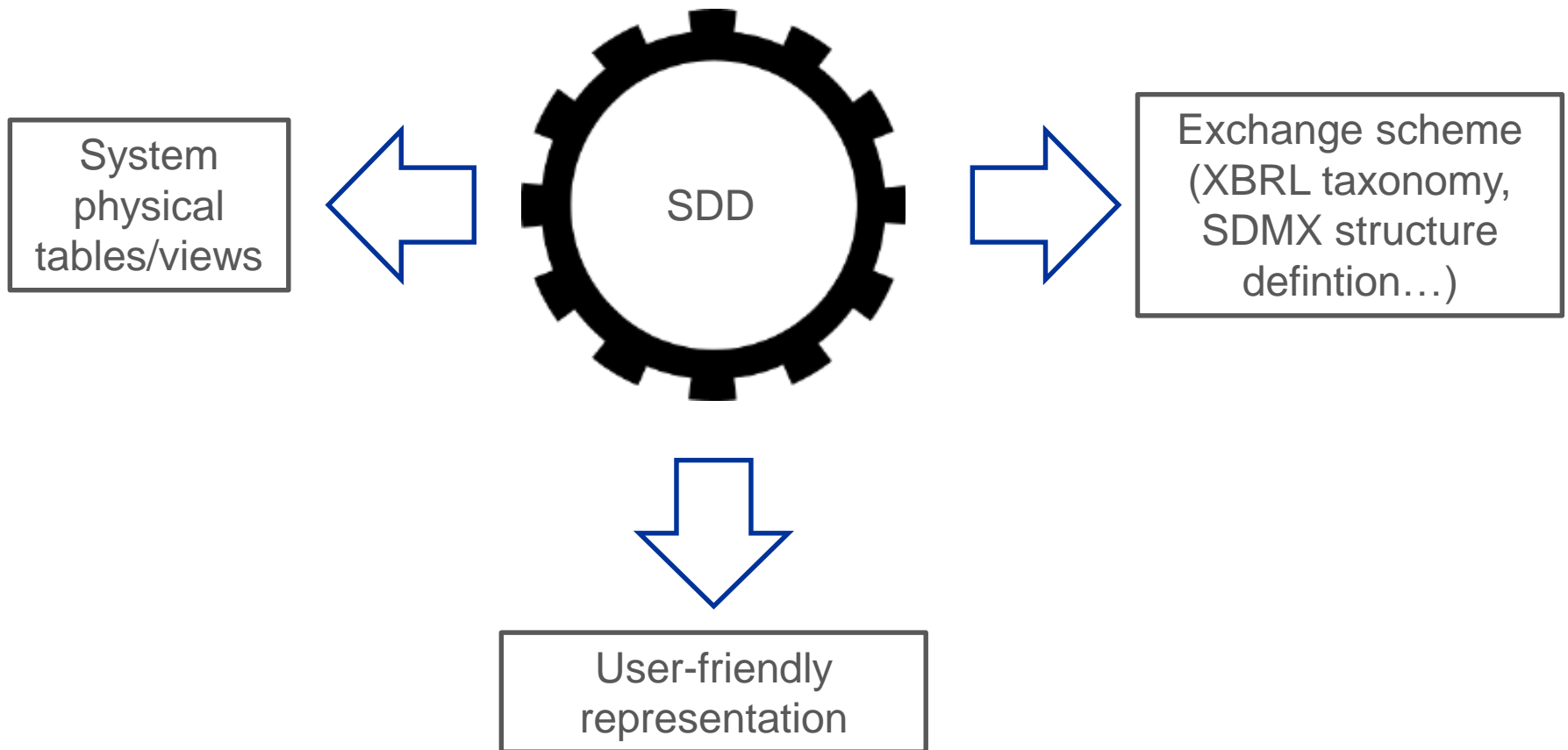
Interoperability: The SDD proposed solution



SMCube packages



SDD as active dictionary



The multiple codes problem

SHS

ISSUER_SECTOR Issuer ESA 2010 sector
S_13 - General government
S_121 - The central bank
S_122 - Deposit-taking corporations except the central bank

FINREP

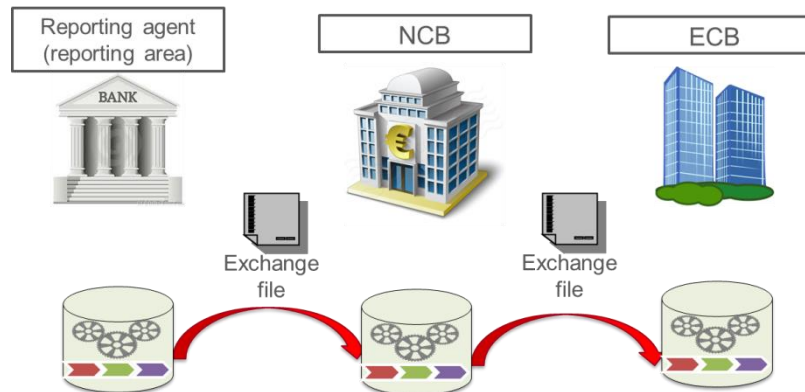
CPS Counterparty sector
x1 - General governments
x10 - Central banks
x12 - Credit institutions

BSI

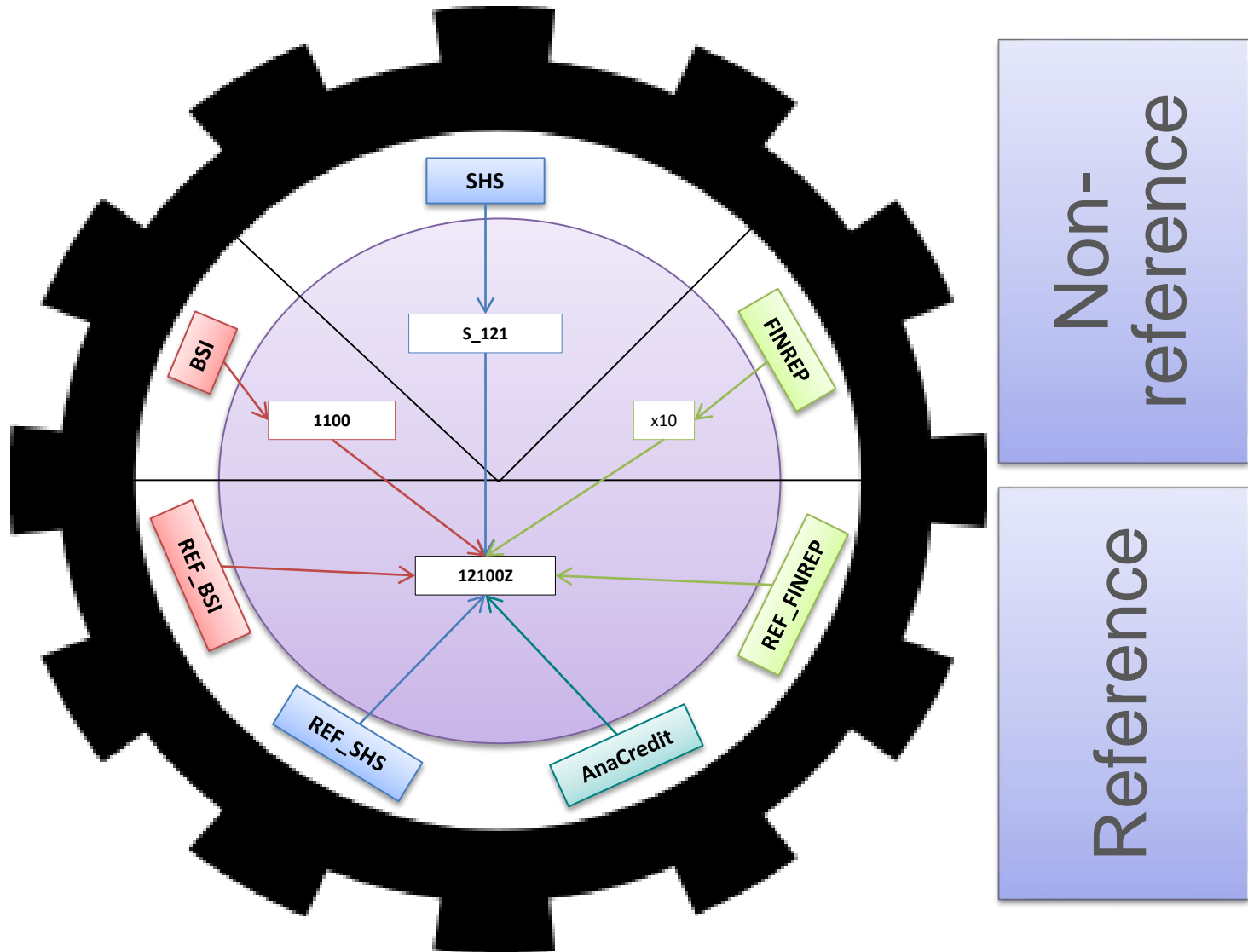
BS_COUNT_SECTOR BS counterpart sector
2100 - General Government
1100 - Central Bank (S.121)
00BK - Non-resident banks

AnaCredit

INSTNL_SCTR Institutional sector
13110Z - Central government (excluding social security funds)
12100Z - Central banks
12200A - Credit institutions



SDD reference dictionary integration

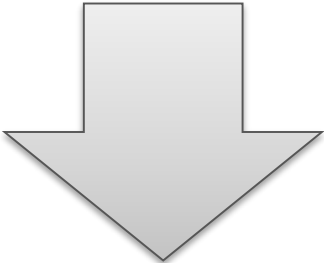


A more complex (and realistic) example

ITEM	F1 - Short term debt security F2 - Long term debt security
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FREQ	M - Monthly
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FREQ	ISIN CODE	ITEM	FINAL MATURITY
M	AB123456789	F1	2016_10_05
M	CD123456789	F1	2052_01_31
M	EF123456789	F2	2019_02_29



ISIN	TYP INSTRMNT	ORGNL MTRTY	DT MTRTY
AB123456789	1	1	05/10/2016
CD123456789	1	1	31/01/2052
EF123456789	1	2	29/02/2019

TYP_INSTRMNT	1 - Debt security	ORGNL_MTRTY	1 - Short term 2 - Long term
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Thank you for your attention!

Questions?

Methodological compatibility challenge

	SDMX IM	DPM	
Core artefacts for describing reality	<ul style="list-style-type: none"> • Representations (codelists and facets) • Concepts • Codes • Hierarchical codelists 	<ul style="list-style-type: none"> • Domains • Dimensions • Members • Hierarchies 	Very similar
Core artefacts for defining datasets	<ul style="list-style-type: none"> • Data Structures Definitions: Concepts and representations are attached to a multidimensional structure • Makes explicit additional information 	<ul style="list-style-type: none"> • Tables: Pairs dimension-member attached to tables axes • Only business information is made explicit 	More challenging
Definition of other aspects relevant for statistical systems	<ul style="list-style-type: none"> • Validation and transformation language • Structure sets and mappings • Data provisioning • ... 	<ul style="list-style-type: none"> • Validation rules • Rendering • Concepts properties 	Take the maximum