Semantics, a key concept in interoperability of research information - the Flanders research funding semantics case

Sadia Vancauwenbergh

ECOOM-UHasselt, Hasselt University, Belgium

ECOOM
Centre for R&D Monitoring

universiteit ►►hasselt
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Flanders Research Information Space (FRIS)
www.researchportal.be

Information on public financed scientific research in Flanders *directly* provided from organizations via CERIF.xml exchange

But limitations in communication to end-users, in terms of semantics

Content

➢ 29.700 research projects
➢ 2.350 research organizations
➢ 29.200 researchers

Past

Research funding information is provided to the FRIS portal via research institutions using a Flemish funding classification code scheme

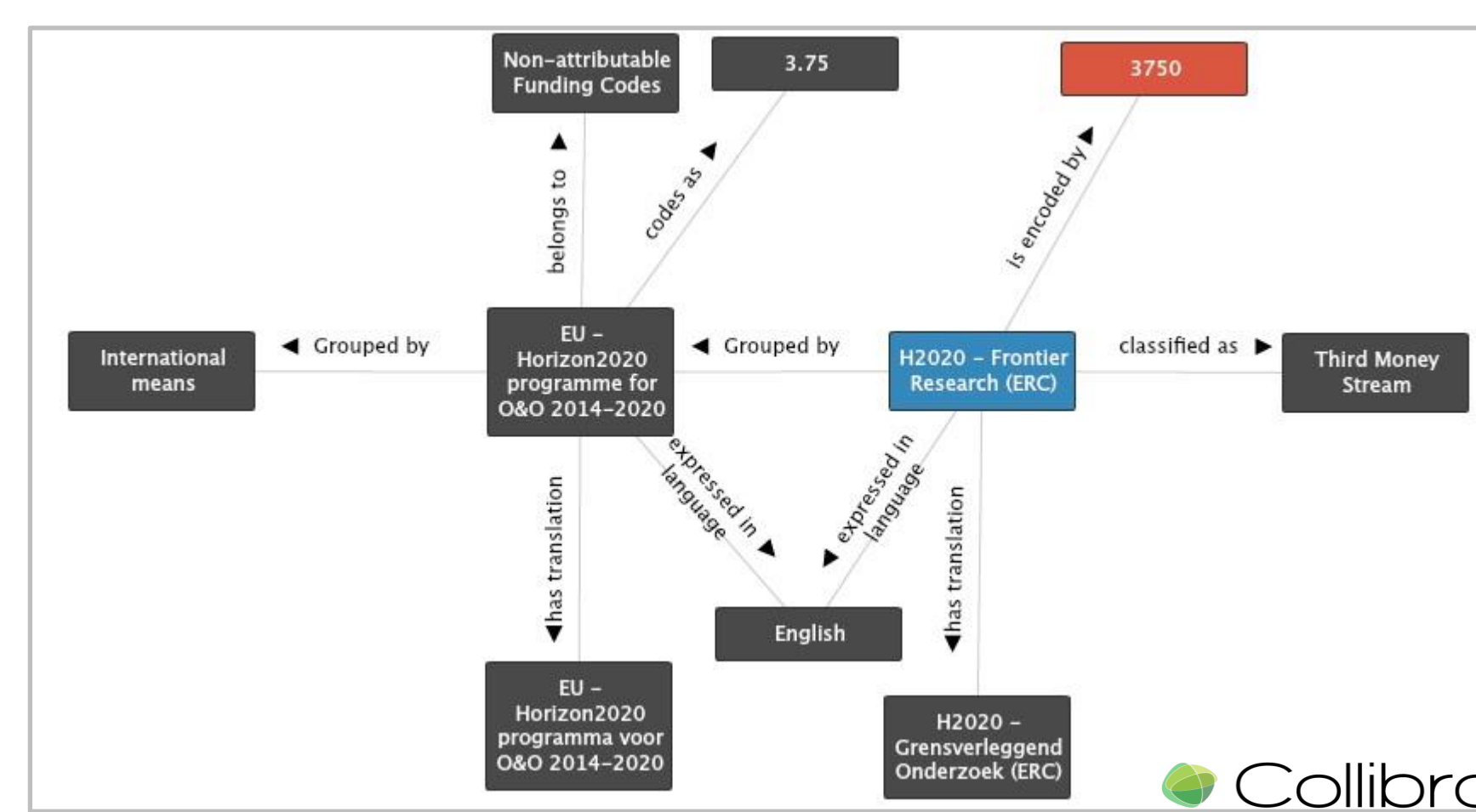| Characteristics	Limitations	Issues
Hierarchical classification 3 levels deep 4-digit code sets decentral maintenance in Excel	Fixed viewpoints # Funding sources /level	No well-defined semantics of related data concepts No formal and central data management

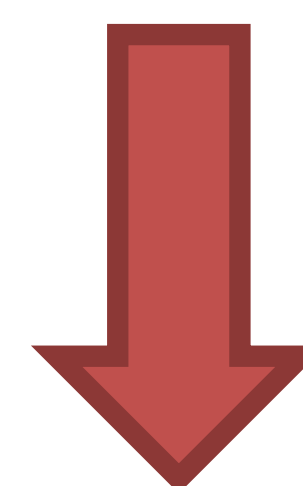| Hierarchy E (non-attributable codes)	FINcode	Funding Program	Start Date	End Date	Money Stream
1. Own means					
2. Institutional subsidies (of the governmental authorities)					
3. International means					
3.7 EU – FP7 Programme for O&O 2007-2013					
	3701	Health	01/01/2007	31/12/9999	G3
3.75 EU - H2020 Programme for O&O 2014-2020					
	3750	H2020 - Frontier Research (ERC)	01/01/2014	31/12/9999	G3
	3752	H2020 - Skills and Career Development (MC) actions	01/01/2014	31/12/9999	G3
3.8 EU - Programmes and initiatives outside FP					
3.9 Multilateral International Collaboration outside EU	3800	EU - out of framework - indefinite	01/01/1980	31/12/9999	G3
3.91 International European Institutions (outside EU)					
	3912	COST	01/01/1980	31/12/9999	G3
4. Public Funding by the Federal Government					
5. Public funding by the regions/communities					
6. Financing by decentralized governments					
7. Research Foundation Flanders					
8. Private national funding					
	8000	Private funding of national origin - undefined	01/01/1980	31/12/9999	G4
	8001	Industrial enterprises	01/01/1980	31/12/9999	G4
	8002	Financial enterprises (banks, insurances, holdings...)	01/01/1980	31/12/9999	G4
	8003	Nonprofit institution or equivalents	01/01/1980	31/12/9999	G4
	8004	Foundations, funds and other with scientific goal	01/01/1980	31/12/9999	G4

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Present

New funding classification scheme
that reflects the true nature of research funding used in a uniform manner by different stakeholders in Flanders in order to deliver research data to the FRIS portal

Funding Classification

➢ No hierarchy, autonumbering
➢ More granular & more dimensions in line with international reporting requirements
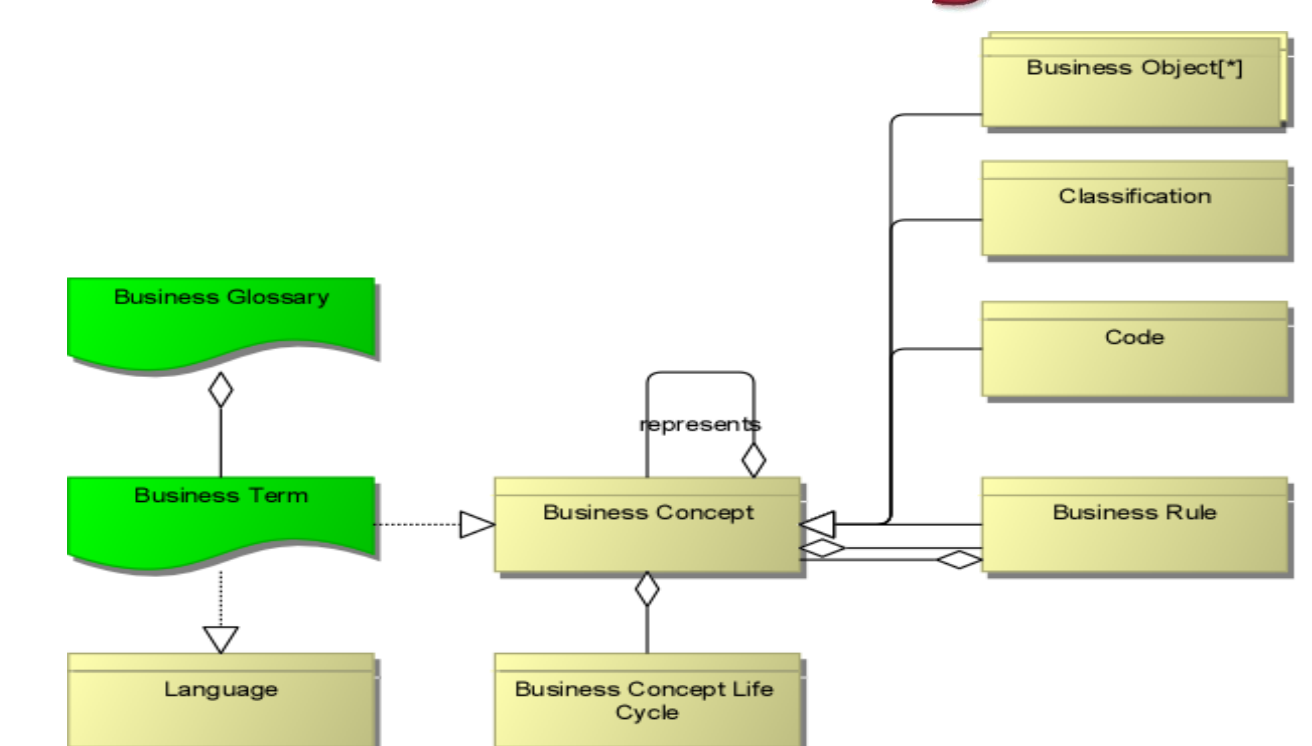➢ Concordance tables for existing international classifications

Classification & Data Governance

Research Funding model
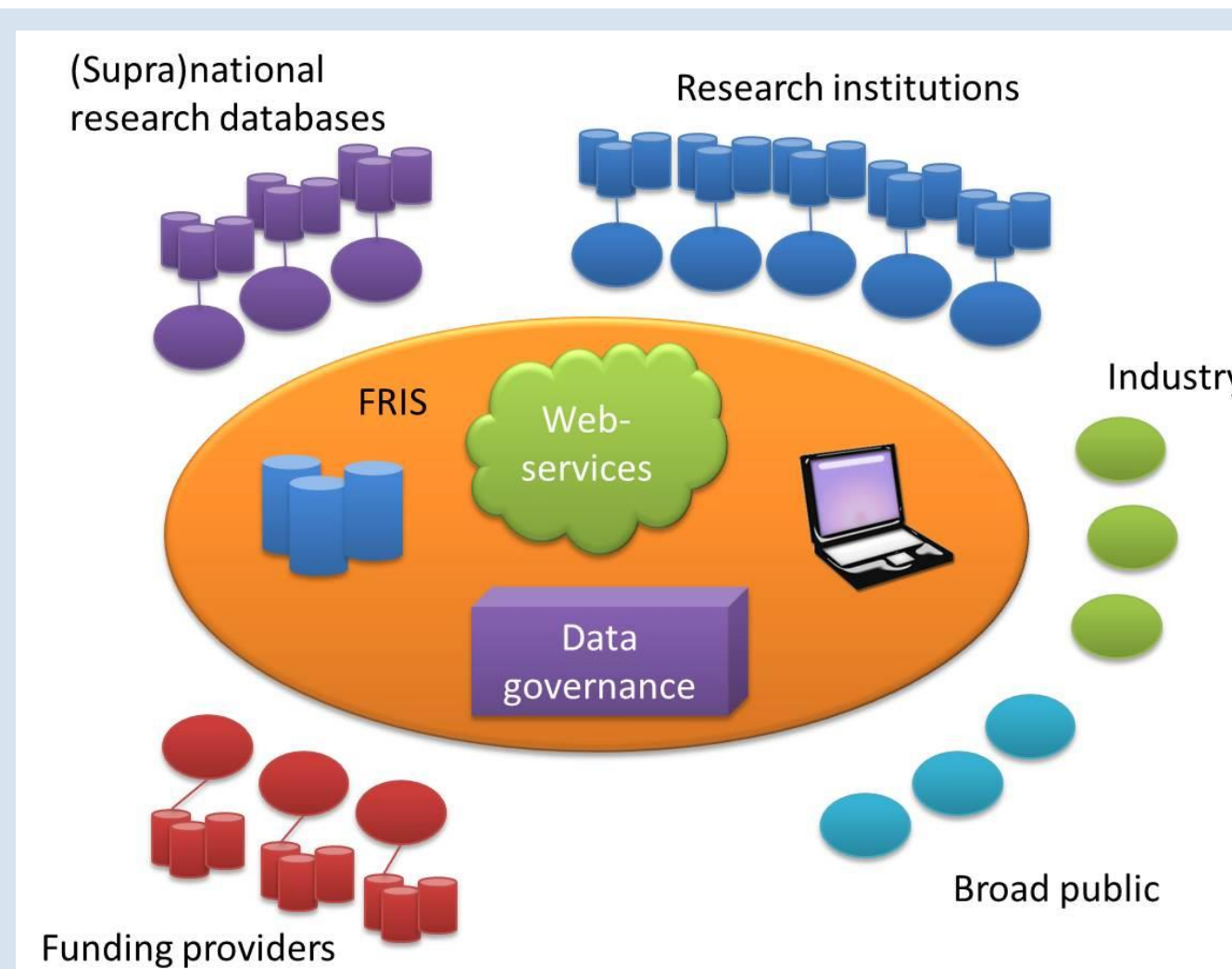

Semantics

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Data Governance Tool

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Reliable, accurate information

Future

Semantic interoperability of research information systems

At the benefit of policy formation, scientific discovery & open innovation