Global Standards for System Interoperability: CERIF

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System interoperability: the key concept

- Lots of different institutional systems should feed higher-level aggregations (regional, national, European)
- 'Internal' vs 'external' interoperability (from an institutional viewpoint)
- We have persistent identifiers like DOIs, handles, DataCite and ORCID iDs, we have metadata standards like CERIF, DC, MODS, etc
- Controlled vocabularies: if systems are to talk to each other, they should speak the same language
Common European Research Information Format

Requirements for a Common Metadata Format

- Complete coverage of research information
- Interlinked – providing the context
- Allow for many perspectives on research information
- Accommodate multilinguality & support translations
- Accept the world keeps changing: record history
- Declared semantics: definitions rather than terms
- Formal syntax – machine processable & understandable

(Source: Jan Dvorak, CERIF Task Group Leader)
Common European Research Information Format (simplified version)
**CERIF Model Structure**

**CERIF Entity Types**
- Base Entities
- Result Entities
- Infrastructure Entities
- 2nd Level Entities
- Geographic Bounding Box
- Link Entities

**CERIF Features**
- Multiple Language
- Semantics
- Measures & Indicators
Increasing CERIF implementation in CRIS systems across Europe:

**CERIF CRIS use in UK HE**

- Lots of CERIF CRIS procurement in last year - some are in early stages of implementation
- Pure (Atira) - 17
  - St Andrews, Aberdeen, York, Royal Holloway, Strathclyde, Hertfordshire, Lancaster, Aston, Institute of Education, London, Dundee, Heriot-Watt, Glasgow Caledonian, King's College London, Edinburgh, University of the Highlands and Islands, Bath, Queen's University Belfast
- CONVERIS (AVEDAS) - 5
  - Cranfield, Hull, Stirling, MRC Oxfordshire Regional Centre, Brighton
- Symplectic Elements (Symplectic)
  - eg Brunel, Imperial, Queen Mary, Leeds...

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A centre of expertise in digital information management
Increasing CERIF implementation in CRIS systems across Europe: institutional, commercial and national CRISs
CERIF-compliance in Spain?

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CERIFying CVN (FECYT) provides some harmonisation level

It would be useful to provide CERIF wrapping to running CRIS systems at institutions.
Some applications for CERIF in the system interoperability domain: OpenAIRE

OpenAIRE Guidelines for CRIS Managers based on CERIF XML

March 2014
DRAFT for public review

Contents

Introduction
Aim
CERIF-CRIS
Acknowledgements
CRIS information elements relevant for OpenAIRE
Data representation in CERIF XML
CERIF Semantic Layer link entities Implementation in OpenAIRE
OAI-PMH for Harvesting
  Metadata Format
  OpenAIRE OAI-PMH Sets
  Transmission of CERIF XML as OAI-PMH payload
License
Version
Appendix
Some applications for CERIF in the system interoperability domain: PT-CRIS

Survey Eco – Critical analysis (PT)

- Portugal has a long way to go:
  - Authoritative organizations database
  - Call, grants and project services are obsolete
  - Research portal to be considered
  - Evaluation and stats to be further analyzed
  - CRISs needed
- Swedish logical architecture seams to be the most comprehensive
- CERIF seems to be imperative

(Slide João Moreira, FCT, euroCRIS membership meeting Porto, Nov 2013)
Some applications for CERIF in the system interoperability domain: PRC

- Simplified data model
- CRIS/DSpace-CRIS interoperability (OpenAIRE-like)
- Opportunities for CERIF wrapping of institutional CRISs
Thanks

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