Deploying CRIS systems in reporting on public research funding

Sadia Vancauwenbergh, EuroCRIS MM Helsinki 2019-05-29
Flemish Research Information Space (FRIS) Roadmap

FRIS 1.0 (2008-2014):
- Metadata
- All Flemish universities (5)
- Collect & display

Diagram:
- Project
- Organization
- Publication
- Researcher
Flemish Research Information Space (FRIS) Roadmap

FRIS 1.0 (…-2014):
• Metadata
• All Flemish universities (5)
• Collect & display

FRIS 2.0 (2014-2018)
• Metadata: extension of existing objects
• Qualitative data, information exchange and retrieval (open data)
Project title, abstract
Keywords
Budget (back-end)
Start & End date
Researcher(s)/organization(s)
Discipline & Funding codes
Development of industrially viable nanotechnology for thin film solar cells (R-9430)

Development of industrially relevant nanolithography techniques, especially nano-imprint lithography (NIL), for the integration of nanostructures in thin film solar cells. These nanostructures will be used for passivation and texturing the rear and front of these solar cells. The grantee will have the possibility to collaborate with a NIL tool manufacturer via an Horizon 2020 Project, i.e. ARCIGS-M.

**Date:** 1 Jan 2019 → Today

**Keywords:** zonnecellen

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**RESEARCHERS**

- **Bart VERMANG** (Promoter)
  
  Engineering Materials and Applications
  
  **Duration:** 1 Jan 2019 → Today

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**PROJECT PARTNERS**

- Engineering Materials and Applications
  
  Project Owner
  
  **From:** 1 Jan 2019 → Today
  
  Hasselt University

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**FUNDING**

- **Funding:** BOF - Bilateral scientific cooperation (Principal funding)
  
  **Funding party:** Flemish Government
  
  **Policy level funding:** Flemish
FRIS 3.0

- Reporting on public research funding

  - Legal framework
    - BOF (art.68) - approved on May 3, 2019
    - IOF (art. 20/1) - approved on May 24, 2019

  - Information objects/metadata to be included in FRIS
  - Reporting on public research funding
  - Indicators & conditions

  - Deadline: December 31, 2021

  - Cave: Data should comply as of January 1, 2019
FRIS 3.0 (2019-2021)

- Metadata: linking and extending existing objects, new information objects
- All universities (5), strategic research centres (4), Flem. higher education colleges, other RIs
FRIS 3.0 – Example: international scientific cooperation

- Information model, data governance (semantics, roles & responsibilities)
- Revision of existing information objects:
  - Projects: funding codes
  - Researcher: nationality? MSc certificate?
  - Organization: legal address? Physical partner address?
  - Associated publications, data, patents, research infrastructure
- Reporting via FRIS
  - Year: grant start year, budget year, year of approval?
  - Budget: awarded, budgeted (which procedure), spent (which end date)
- Conditions

<table>
<thead>
<tr>
<th>Artikel</th>
<th>Bedrag</th>
<th>% van instelling</th>
<th>Referentiebedrag (via formules gebaseerd op BOF-besluit)</th>
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<th>Status (OK/NOK)</th>
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<td>tbd</td>
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FRIS 3.0

- FRIS Meeting Group – Financial Reporting
  - Clarification of concepts
  - Alignment with Processes
- Data quality
  - Dimensions
  - Framework and indicators
  - Validation
Data quality

- Data fit to serve a purpose in a given context
  - Expressed in data quality dimensions (Wang et al. (1996))

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<th>Category</th>
<th>Intrinsic</th>
<th>Contextual</th>
<th>Representational</th>
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</table>

- Data quality validation
  - Rule-based checking
  - Data auditing
  - User perceptions
Data quality

- Data quality framework with indicators
  - **Rule-based checking**
    - Business rules translated into validation rules
    - Pro’s: automation of validation procedures
    - Con’s: anticipated errors, control outliers manually, correction is labor-intensive
  - **Data auditing**
    - Validation of data via actual data
    - Pro’s: only way for measuring some DQ dimensions (accuracy, completeness, ...), allows for finding unexpected errors
    - Con’s: time-consuming, experts required, accessibility rights?
  - **User perceptions**
    - External data quality attributes
FRIS 3.0

- FRIS Meeting Group – Financial Reporting
  - Clarification of concepts
  - Alignment with Processes

- Institutional FRIS Roadmap – July 1, 2019
  - Work and timeline of institutions

- Alignment with ECOOM

- Implementation in FRIS, deadline: Dec. 31, 2021
Questions

Flemish Government, Dept. Economy, Science and Innovation (EWI)

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