HunCRIS the Hungarian National Research Information System

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HunCRIS in General

- HunCRIS is a Hungarian National Research and Development Registry and Information Service, established in 2001
- Research projects receiving public money have to be registered
  (NOT all research activities in Hungary!)
- HunCRIS is based on the EEC/91/337 Recommendation, and uses CERIF_2000
- HunCRIS is bilingual – the information is available in Hungarian and in English
  - (there are still some Hungarian expressions in the English version)

Data in HunCRIS

- Projects 4500
- Organizations 1050
  - Additionally 2000 units of these organizations
- Researchers 11000
- Funds
  - Public HUF 78 million (>EUR 300 thousand)
  - Own resources HUF 28 million (>EUR 100 thousand)
- Key expressions 9000

Thesauri in HunCRIS

- Hungarian official <u>classification</u> of fields and branches in sciences and arts
  - two level classification system
  - 8 fields, 60 branches
- <u>EPSS thesaurus</u>
  - Thesaurus in Annex 2 of EEC/91/337 Recommendation (1991) cca. 280 expressions in two level structure
  - Ortelius thesaurus (multilingual thesaurus prepared as an FP4 project) cca. 1300 expressions in an inhomogeneous structure
  - EPSS thesaurus (the classification system of FP 6) cca. 2300 expressions
- **Limitation**: both systems are disciplinary ones
- **Problem**: the two systems are not compatible with each other

Evolving taxonomy

- Project mnagers are asked to provide key expressions (as free text) describing their projects
- Our task is
  - to transform the expressions to standard format and keep them unique
  - to insert these expressions to the best fitting branches (mark the closest broader term)
  - to create middle level expresions, if a group of expressions is too large
- As a result we nearly got EPSS thesaurus from Ortelius thesaurus – but fields that are not „cultivated" in Hungary

Outputs from HunCRIS - access to the system

- Information homepage: http://www.info.omikk.bme.hu/nkr1/

- Free online service: https://nkr.info.omikk.bme.hu without any registration

  - Registered users are served better
  - Users with different rights

Outputs from HunCRIS
- thematic compilations

– <u>Current projects in Physics</u> in Hungarian and in English

– Transplantation in English

– Vehicle industry in Hungarian

– Transport in Hungarian

– IST project (in Hungarian, in progress)

– Global change in Hungarian and in English

– Biodiversity in Hungarian and in English

Outputs from HunCRIS - organizational compilations

- Current projects of 13 Hungarian universities
  - in 2508 pages, during 3 days
  - with financial information
  - with indexes
    - Partners
    - Participating departments
    - Participating researchers
    - Keywords (Hungarian system, EPSS thesaurus and free expressions)

Users

- Experts of different disciplines
- Research managers of organizations
- Research managers of funding agencies
- Researchers – for partner search
- Mediators for partner search and for take-up new technologies
  - IRCs
  - Science and technology representatives of Hungary
- Industrial managers (mainly SMESs) for expert search
- Concurrent reaearchers
- European Researchers' Mobility Portal (Hungarian Node)

EPSS thesaurus in HunCRIS

- For the compatibility with the database of European R&D projects we adopted EPSS thesaurus

  – Kept the English key expressions and the tree structure, and translated them to Hungarian

- Sometimes revision is needed in the original Project-to-Keyword_ID relations during conversion of keyword tree

  – Research methodology in not part of Education sciemces

Plans to deal with interdisciplinary and multidisciplinary concepts

- We are about adding secondary „parents" to the tree
  - But we have to prevent circular references („Esher staircase", which always goes up, but never reaches the top)

New high level concepts

- We are about adding secondary „high level, non-disciplinary keywords"
  - Like „Nanotechnology", „IST"
  - Among new High level keywords
    - we try to install CISTRANA taxonomy on technological areas
    - we try to integrate EPSS thesaurus and the official Hungarian national classification system

Problems in cooperation with CISTRANA

- HunCRIS is purely disciplinary
  - describes technological areas only
- Hard to migrate data according to „Sectors of implementation"

Integration of thesauri

- Using secondary parents, we can insert keywords (branches) into high level concepts of different disciplinary structures, like:
  - „Veterinary sciences"
    - Part of „Health sciences" in EPSS thesaurus
    - Part of „Agricultural sciences" in the national system

Estimation for CISTRANA project

- The taxonomy (as it is proposed) seems too rigid
    - Hard to classify projects
    - Does not help transdisciplinary migration of concepts
    - Loss of dispersed projects (projects in other classes but relevance in the given topic)
    - →Use taxonomy as thesaurus!
- Estimation on the amount of data
    - 500 projects with IST relevance in Hungary!
    - Ten thousands of projects in Europe

Comments on the proposed CISTRANA taxonomies

- Consists of
  - 53 technological areas
  - 37 sectors of implementation
    - that is 53x37 „classes"
    - the classes are not uniform

- The amount of projects in any single class must be below 100 for usability

  $\rightarrow$CISTRANA will need more than two levels (in technological areas)