

EDLproject: challenges of multilingual access to multilingual European content

Maja Žumer, University of Ljubljana, Slovenia

DELOS-MultiMatch workshop "Ontology-driven Interoperability"

Pisa, 15 February 2007







EDLproject

One more step towards the European digital library























Background

- □ A Targeted Project within the area of cultural and scientific/scholarly content of the econtentplus Programme
- □ A building block of The European Library and a continuation of TEL-ME-MOR
- ☐ Started in Sept 2006. Will last 18 months.
- □ Budget € 2.114 m, 1m contribution by the EC



Partners

- German National Library Co-ordinator
- National Library of Austria
- Royal Library of Belgium
- ☐ Eremo Srl, Italy
- National Library of Greece
- National and University Library of Iceland
- National Library of Ireland
- ☐ Liechtenstein National Library
- National Library of Luxembourg
- National Library of the Netherlands
- National Library of Norway
- National and University Library of Slovenia
- National Library of Spain
- ☐ Royal Library, National Library of Sweden
- National Library of Switzerland



Objectives

- ☐ To include remaining 9 EU and EFTA countries:
 Belgium, Greece, Iceland, Ireland, Liechtenstein,
 Luxembourg, Norway, Spain, Sweden.
- ☐ To **further enhance access** by continuing to develop the multi-lingual capacity of the portal
- ☐ To promote and increase the use and awareness of the extended The European Library service in the target countries and worldwide
- ☐ To leverage the influence of CENL as a key player in the content field to work towards a consensual resolution of issues raised by the "i2010: Digital Libraries" Communication



WP2 Extending the multilingual capacity of the network

☐ Task 1 Unicode compliance

Extending the Unicode compliance analysis carried out in TEL-ME-MOR to EDL partners.

□ Task 2 Subject access tools

Extending the initial analysis in TEL-ME-MOR, resulted in an overview of classification systems, subject headings and thesauri in NMS national libraries, to EDL partners

Task 3 Cross-language access to bibliographic subject data

Testing of a selection of cross-language approaches to subject data, including MACS, MSAC and CrissCross, building on results of task 2 and TEL-ME-MOR deliverables on cross-language options and Implementation proposal for multilingual access

■ Task 4 Cross-language access to full text

➤ Identifying one or more general (not subject specific) data dictionaries and test their applicability for cross-language access within the European Library (in cooperation with DELOS); identifying available automatic translation tools, stemmers etc.

☐ Task 5 Name authority control

Extending the work of TEL-ME-MOR and building on projects such as LEAF, VIAF and ONESAC, design and test the feasibility of a name authority control tool

■ Task 6 Interoperability with other communities

Exploring options of interoperability with museums; testing the use of new conceptual models of bibliographic information.





Outcomes of TEL-ME-MOR

- ☐ Reports on UNICODE requirements, cross language & authorities options
- □ Analysis of subject access tools
- ☐ Reports on Implementation proposal & scenario for multilingual access





Layers of multilinguality

- Language of the interface
- Language of bibliographic records/cataloguing language/language of metadata
- Language of the resources



The user should be able to:

- Use his/her own language when communicating with the system
 - solved
- Use his/her own language to formulate a query and, as the result, retrieve all relevant (digital) objects in any language
 - remains a problem: too many language combinations; all-to-all mapping may not be feasible



Investigation of smaller steps:

- ☐ Test a selection of cross-language approaches to subject data, including MACS, MSAC and CrissCross
- Test MACS system using existing links
- □ Test MACS with the Luxembourg subject headings (Laval English / French) and the Spanish subject headings
- □ Provide an updated overview of recent European projects and initiatives that may have relevance to crosslanguage access to various types of collections.
- Use the MACS Link Management system (replicated as required) central source (clearinghouse) of mapping results between subject headings used in European national libraries (classifications and subject headings)



Testing automated mapping

- □Investigate HILT, TermSciences and WebDewey as tools to speed up link creation
- □[In TELplus, plans to test Stitch]
- □ Contact OCLC to investigate their dynamic mapping between subject authority lists
- □ Multi-Lingual Information Retrieval (MULIR) project: maps from English Library of Congress Subject Headings (LCSH) to words and phrases in over 100 languages and vice versa



Improving interoperability across (name) authorities

- □Building on projects such as LEAF, VIAF and ONESAC:
 - automatic clustering of existing variant headings



Full-text searching

- □An overview of existing tools is necessary:
 - language recognition tools
 - -stemmers
 - -automated translation etc.



At this point we are not aiming at a fully functional cross-language IR for all languages, but at least a prototype of a limited application.

Therefore cooperation with any relevant research is needed.