NCD Recommendation for the National Standard for Describing Digitized Heritage in Serbia

Zoran Ognjanović[1]   Tamara Butigan-Vučaj[2]   Bojan Marinković[1]

Mathematical Institute, Serbian Academy of Sciences and Arts [1]
{zorano,bojanm}@mi.sanu.ac.yu

Digital Library Department, National Library of Serbia [2]
tamara@nbs.bg.ac.yu

SEEDI
Cetinje
13-15/09/2007

Overview

Introduction

- "Recommendations for coordination of digitization of cultural heritage in South-Eastern Europe" accepted at the South-Eastern Europe regional meeting on digitization of cultural heritage (Ohrid, Macedonia, 17-20 March 2005)

"It is recognized that knowledge of the cultural and scientific heritage is essential for taking decisions concerning its digitization and for interpreting the digitized resources. For this reason, inventorying and cataloging should precede or accompany the digitization of cultural and scientific assets."

Introduction

- "Recommendations for coordination of digitization of cultural heritage in South-Eastern Europe" accepted at the South-Eastern Europe regional meeting on digitization of cultural heritage (Ohrid, Macedonia, 17-20 March 2005)
- "Metadata problem"

The standard should guarantee interoperability among resources available by different providers and compatibility with the most popular existing international standards.

Introduction

- "Recommendations for coordination of digitization of cultural heritage in South-Eastern Europe" accepted at the South-Eastern Europe regional meeting on digitization of cultural heritage (Ohrid, Macedonia, 17-20 March 2005)
- "Metadata problem"
- About NCD

Introduction

- "Recommendations for coordination of digitization of cultural heritage in South-Eastern Europe" accepted at the South-Eastern Europe regional meeting on digitization of cultural heritage (Ohrid, Macedonia, 17-20 March 2005)
- "Metadata problem"
- About NCD
- The proposal is accepted by the Committee for digitization of the UNESCO commission of Serbia

State-of-the-art in Serbia

- No wide spread metadata standard
  for describing digitized heritage in Serbia
- No metadata standard formally accepted at the state level
- Standards appropriate for specific fields or
  Ad-hock methods or Old procedures
- Some providers are waiting for some solution do not do anything

International metadata standards

- Dublin Core
- EAD
- MARC
- TEL AP
- FRBR
- TEI etc.

Dublin Core - developed and maintained by the Dublin Core Metadata Initiative (DCMI) The goal - to promote interoperable metadata standards and develop specialized metadata vocabularies for describing resources Problem - DC Element Set (**Simple DC**) is **rather restricted** - different information have to be grouped into one element. Recently, DCMI has allowed some refinements **Qualified DC** - possible to develop DC Application Profiles for specific applications and domains. Important - it is **possible to lose** some information in the process of reducing **Qualified DC to Simple DC values**.

International metadata standards

- Dublin Core
- EAD
- MARC
- TEL AP
- FRBR
- TEI etc.

Encoded Archival Description (EAD) is focused on the archival resources with the goal to allow describing them and to make them accessible to users.

International metadata standards

- Dublin Core
- EAD
- MARC
- TEL AP
- FRBR
- TEI etc.

MARC standards - mostly for the representation and communication of bibliographic and related information in machine-readable form

The European Library Application Profile (TEL AP) - based on the proposal of DCMI - Libraries Working Group from 2002. National Library of Serbia - full partner of The European Library in 2005 The TEL Metadata Registry of terms - under development

Functional requirements for bibliographic records (FRBR) Object-oriented model for metadata records Model is based on three groups of entities

International metadata standards

- Dublin Core
- EAD
- MARC
- TEL AP
- FRBR
- TEI etc.

Methodology

Definition should:

- Be rich enough
- Be flexible enough
- Allow multilingual description
- Use of some pre-defined dictionaries

Description of the standard
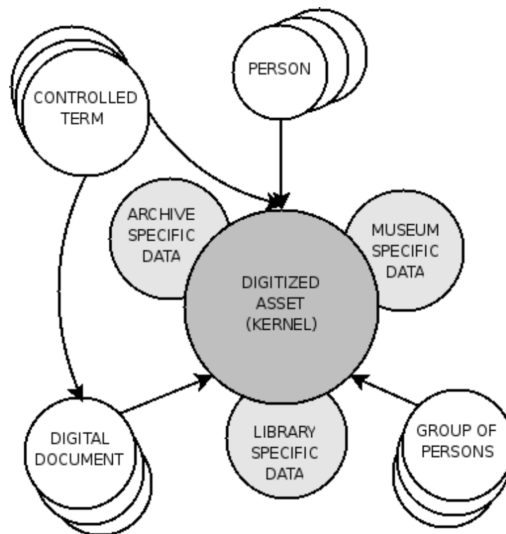
Five basic objects were distinguished:

- *Person*, and *Group-of-persons*
- *Digital-document*
- *Digitized-asset*
- *Controlled-term*

All elements contains:

- descriptive part
- administrative part

Structure of the standard

The object Person

Descriptive:

- Name
    - First name
    - Middle name
    - Family name
- Version of name . . .
    - First name
    - Middle name
    - Family name
- Nickname . . .
- Day of birth
- Day of death
- Sex

- Biography
    - Biography in Serbian . . .
    - Biography in other languages . . .
- Resources related to the person . . .
- Picture(s) . . .
- Note
    - Note in Serbian
    - Note in other languages . . .

Administrative:

- Record creation date
- Record creator(s)
- Record owner

The object Group-of-persons

Descriptive:

- Name
- Version of name . . .
- Foundation date
- Dismissing day
- History
- Provenance
- Activity . . .
- Type
- Identifier . . .
- Description
    - Description in Serbian . . .
    - Description in other languages . . .

- Resources related to the group of persons . . .
- Picture(s) . . .
- Member . . .
    - Identifier
    - Role
- Note
    - Note in Serbian
    - Note in other languages . . .

Administrative:

- Record creation date
- Record creator(s)
- Record owner

The object Digital-document

Descriptive:

- Title
    - Title in Serbian
    - Title in other languages . . .
- Creator . . .
    - Identifier
    - Role
- Location of digital document . . .
- Related asset of heritage . . .
- Note
    - Note in Serbian
    - Note in other languages . . .

Administrative:

- Archive date
- Digital document format(s)
- Size
- Digital document MIME format(s)
- Capture device(s)
- Rights
- Access rights
- URL
- Digital object owner
- Record creation date
- Record creator(s)
- Record owner

The object Digitized-asset 1/3

Descriptive:

- Title
    - Original name
    - Name in Serbian
    - Name in other languages . . .
- Creator . . .
    - Identifier
    - Role
- Contributor . . .
    - Identifier
    - Role
- Classification . . .
    - Classification scheme
    - Classification identifier

- Description
    - Description in Serbian
    - Description in other languages
      . . .
- Resources related to the object
- Category
    - Date of proclamation
    - Decision identifier for the proclamation
    - The proclamation decision made by
    - National category
    - Date of national categorization

The object Digitized-asset 2/3

- Category (continuing)
    - Decision identifier for the national categorization
    - The national categorization made by
    - International category . . .
        - Category
        - Date
        - Decision identifier for the international categorization
        - The international categorization made by
- Material . . .
- Type

- Date and provenance
    - Date of origin
    - Provenance of origin
    - Version
        - Description of the version in Serbian
        - Description of the version in other languages . . .
        - Date of the version
        - Provenance of the version
- Dimension(s) . . .
    - Dimesion type
    - Physical dimension

The object Digitized-asset 3/3

- Acquisition
    - Date
    - Type
- Broader object . . .
- Related object . . .
    - Type of relation
    - Related object ID
- History
    - Object's history in Serbian
    - Object's history in other languages . . .
- Owner

- Source object ID
- Bibliography . . .
- Note
    - Note in Serbian
    - Note in other languages . . .

Administrative:

- Rights
- Access rights
- Record creation date
- Record creator(s)
- Record owner

The object Controlled-term

Descriptive:

- Accepted form of the term
- Explanation of the accepted form of the term
- Synonym
- Translation to other schemas/languages
- Description in Serbian
- Broader term
- Related term
- Note
    - Note in Serbian
    - Note in other languages . . .

Administrative:

- Record creation date
- Record creator(s)
- Record owner

Example of description

Descriptive	
Title	
* Title in Serbian	Digitalizovana dečja knjiga Autobiografija, Branislava Nušića
* Title in English	Digitized children's book: Autobiography written by Branislav Nusic
Creator	
* Identifier	ID (Nikola Pavlović)
* Role	programmer
Location of digital document	http://www.digital.nbs.bg.ac.yu/decije/ jpg/nusauto/
Administrative	
Archive date	2004
Digital document format	jpg
Size	17.9MB
Digital document MIME format	image
Capture device	Epson GT 15000
Rights	NBS gained rights from the publishing house
Access rights	Unlimited
Digital object owner	NBS
Record creation date	30/3/2007
Record creator	T. Butigan
Record owner	NBS

Table: Digital_document

NCD	DC	ISAD(G)	EAD	TEL AP	Library of Congress
Description	description	3.3.1	scopecontent	description	description summary
Type	type	3.1.5	genreform	type	original content type
Material	medium	3.1.5	physdesc	format.medium	
Rights	rights	3.4.2	userestrict	rigths	access rights
Access rights	accessRights	3.4.1	accessrestrict	rights	access category
Note		3.6.1	note, odd		
Capture device(s)			daodesc		capture device ID
MIME format(s)	Format		daodesc	format	internet media type

Table: Mappings to/from international standards

Conclusion

- Full desctription (in Serbian):

  http://www.ncd.matf.bg.ac.yu/?page=news
  &lang=sr&file=predlogStandardaMetadata.htm

Conclusion

- Full desctription (in Serbian):

    http://www.ncd.matf.bg.ac.yu/?page=news
    &lang=sr&file=predlogStandardaMetadata.htm

- The main objectives - *interoperability, compatibility*

Conclusion

- Full desctription (in Serbian):

  http://www.ncd.matf.bg.ac.yu/?page=news
  &lang=sr&file=predlogStandardaMetadata.htm

- The main objectives - *interoperability, compatibility*
- Will be submitted to the Serbian Ministry of culture

Conclusion

- Full desctription (in Serbian):

    http://www.ncd.matf.bg.ac.yu/?page=news
    &lang=sr&file=predlogStandardaMetadata.htm

- The main objectives - *interoperability, compatibility*
- Will be submitted to the Serbian Ministry of culture
- Technical benefits of an object-oriented approach - *modularity, reusability*

Conclusion

- Full desctription (in Serbian):

    http://www.ncd.matf.bg.ac.yu/?page=news
    &lang=sr&file=predlogStandardaMetadata.htm

- The main objectives - *interoperability, compatibility*
- Will be submitted to the Serbian Ministry of culture
- Technical benefits of an object-oriented approach - *modularity, reusability*
- This is not the final version

Conclusion

- Full desctription (in Serbian):

  http://www.ncd.matf.bg.ac.yu/?page=news
  &lang=sr&file=predlogStandardaMetadata.htm

- The main objectives - *interoperability, compatibility*
- Will be submitted to the Serbian Ministry of culture
- Technical benefits of an object-oriented approach - *modularity, reusability*
- This is not the final version
- Further development with more aspects of the FRBR-model

Conclusion

- Full desctription (in Serbian):

    http://www.ncd.matf.bg.ac.yu/?page=news
    &lang=sr&file=predlogStandardaMetadata.htm

- The main objectives - *interoperability, compatibility*
- Will be submitted to the Serbian Ministry of culture
- Technical benefits of an object-oriented approach - *modularity, reusability*
- This is not the final version
- Further development with more aspects of the FRBR-model
- Plans for future

Thank you for attention
Any questions?