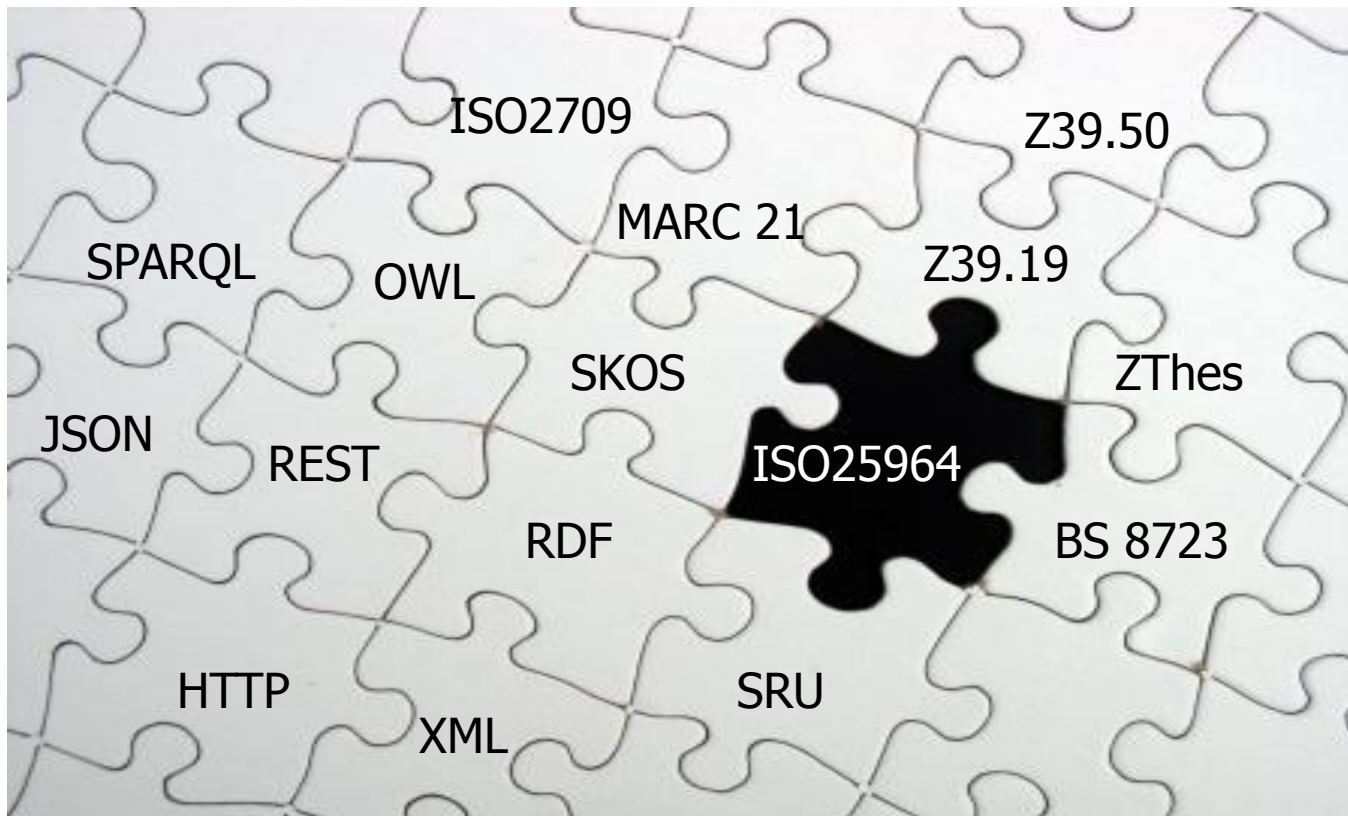




Applying ISO25964 to thesaurus mapping and other forms of linkage

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In a networked world, standards underpin everything





Introducing ISO 25964

ISO 25964: Thesauri and interoperability with other vocabularies

- Part 1: Thesauri for information retrieval
- Part 2: Interoperability with other vocabularies
- It updates ISO 2788 and ISO 5964
- Shares common ground with ANSI/NISO Z39.19
- Part 1, **published in 2011**, covers monolingual and multilingual thesauri
- Part 2, **published in 2013**, covers mapping between thesauri and other types of vocabulary
- information retrieval seen as main application; mapping applies to index terms or to search terms
- See more at <<http://www.niso.org/schemas/iso25964/>>



How to enable/encourage vocabulary linkage

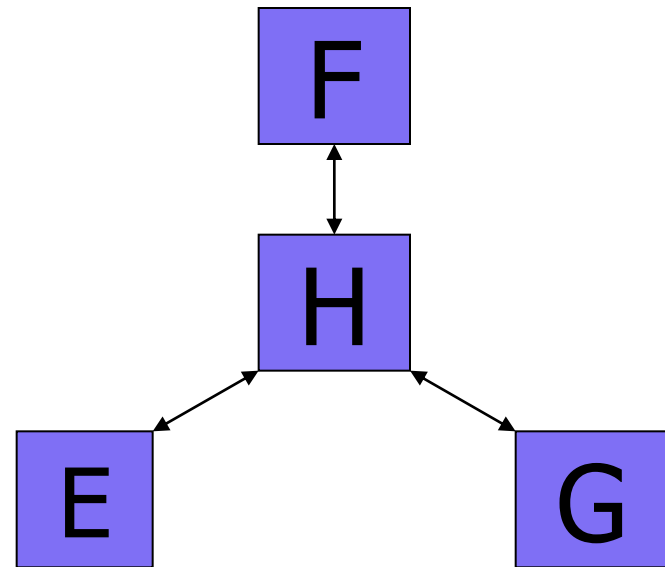
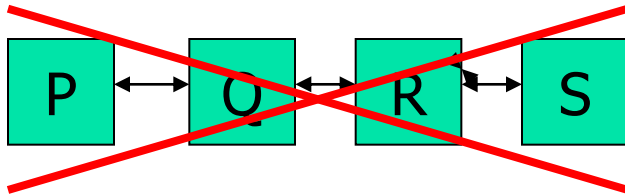
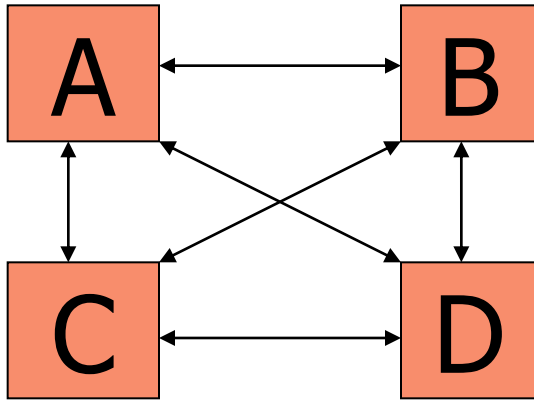
1. Present data in a standard way to enable import and use in other systems (ISO 25964 Part 1)
2. Work multilingually (ISO 25964 Part 1)
3. Conform to a standard data model (ISO 25964 Part 1)
4. Strike the right balance between tailoring to your own market and embracing the outside world
5. For Web publishing, export in SKOS format
6. To enable linked data, give each concept a URI
7. Construct mappings between the terms/concepts of one KOS and those of another (ISO 25964 Part 2)



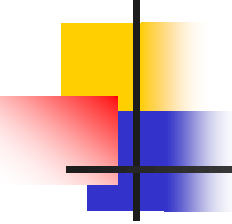
How to map (content of Part 2)

- Models for mapping
- Guidelines for mapping
 - Recommendations on mapping types
 - How to handle pre-coordination
 - Mapping (linking) to/from various vocabulary types:
 - other thesauri
 - classification schemes
 - file plans (Classification schemes used for records management)
 - taxonomies
 - subject heading schemes
 - ontologies
 - terminologies
 - name authority lists
 - synonym rings
- Brief guidance on handling mappings data

Recommended "Models for mapping"



Full range of ISO 25964-2 mapping types



- Basic mapping types:

 - Equivalence

 - Simple

 - Compound

 - Intersecting compound equivalence

 - Cumulative compound equivalence

 - Hierarchical

 - Broader

 - Narrower

 - Associative

- Simple equivalence can be marked as "Exact" or "Inexact"

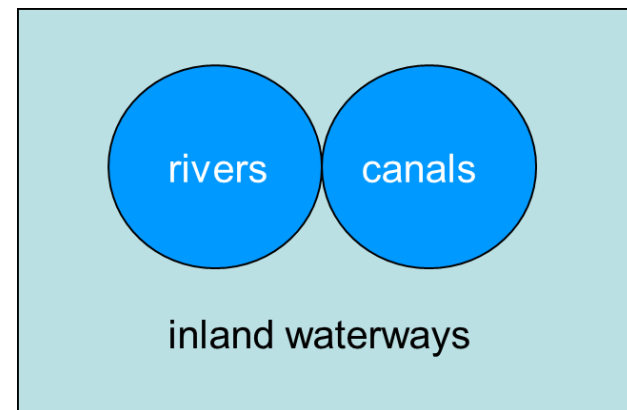
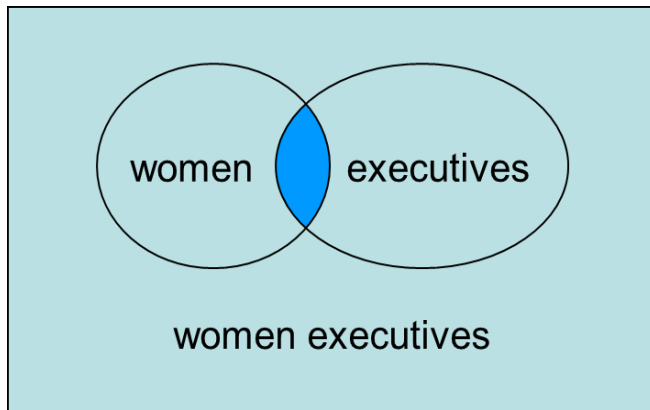


Full range of ISO 25964-2 mapping types with examples

- Basic mapping types:
 - Equivalence
 - Simple: Laptop computers EQ Notebook computers
 - Compound
 - Intersecting compound equivalence: Women executives EQ Women + Executives
 - Cumulative compound equivalence: Inland waterways EQ Rivers | Canals
 - Hierarchical
 - Broader: Streets BM Roads
 - Narrower: Roads NM Streets
 - Associative: e-Learning RM Distance education
- Exact equivalence: Aubergines =EQ Egg-plants
- Inexact equivalence: Horticulture ~EQ Gardening

Intersecting versus cumulative equivalence

Women executives EQ Women + Executives
Inland waterways EQ rivers | canals





SKOS mapping types similar but not identical

Basic mapping “properties” (skos:mappingRelation):

- skos:closeMatch (symmetric)
 - skos:exactMatch (symmetric, transitive)
- skos:relatedMatch (symmetric)
- skos:broadMatch (inverse of narrowmatch)
- skos:narrowMatch (inverse of broadmatch)
- No provision for compound mappings



Linking ISO 25964 data model with SKOS

- The ISO 25964 data model is broadly compatible with SKOS, especially when the SKOS-XL extension is used. See correspondence table at http://www.niso.org/apps/group_public/download.php/12351/Correspondence%20ISO25964-SKOSXL-MADS-2013-12-11.pdf
- An RDF schema encapsulating the mappings between models is at <http://purl.org/iso25964/skos-thes>



Want a copy of ISO 25964 ?

- Download it from ISO at
http://www.iso.org/iso/home/store/catalogue_detail.htm?csnumber=53657
http://www.iso.org/iso/home/store/catalogue_detail.htm?csnumber=53658
- Order it from your national standards body (e.g. BSI, DIN, ANSI, AFNOR)
- Some public/academic reference libraries may stock it
- It is not cheap to purchase ☹
- However, the **XML schema** for exchange of thesaurus data is in an Annex which is available online **without charge or password control**. Go to <http://www.niso.org/schemas/iso25964/>