# Language Resource and Terminology Standards

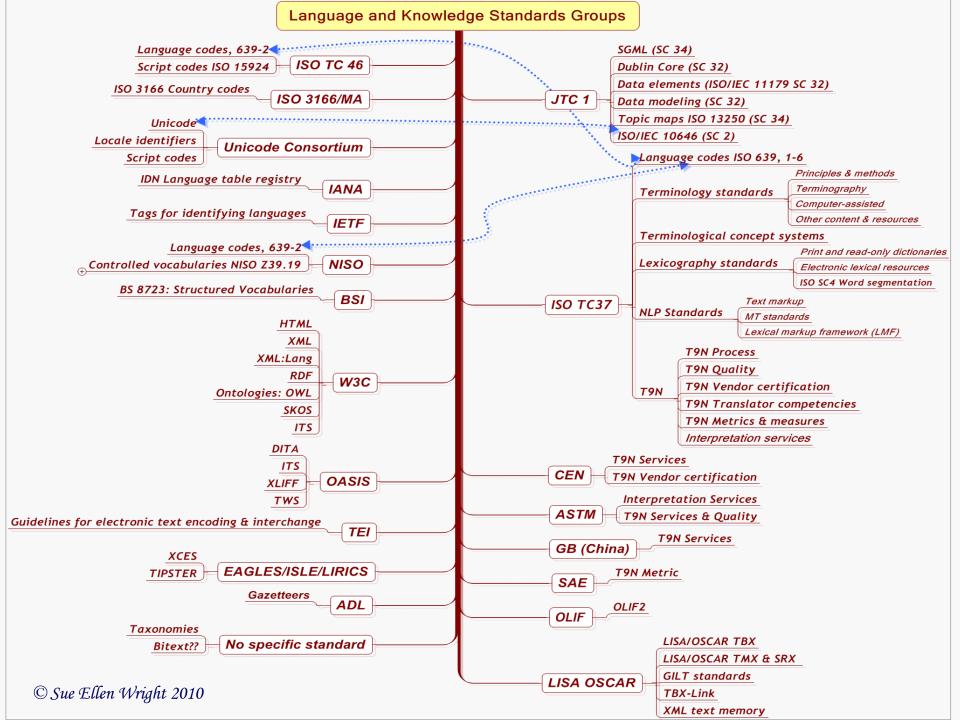
### TC 37 and Beyond

Gerhard Budin and Sue Ellen Wright, TSS 2011



# The Role of Standards

- Enabling Quality Management (products & services), as well as fulfilling safety requirements and consumer protection regulations
- Standards are the "nuts and bolts" of Interoperability: exchangeability, reusability
- Ideally, standards are implemented as (part of) technologies (functional standards), embedded in concrete applications and information ecosystems –> standards as databases, standards as web services, etc.



# **Standards Philosophies**

- ISO: authorship by committee consensus with strong national component; copyrighted docs
- W3C, IETF, TEI, OASIS, others: public docs & widespread community comment & public consensus
- ISO model: pay to play, pay to use
  - 2<sup>nd</sup> wave hardcopy publishing mentality
- IETF: the standardizers are us
  - 3<sup>rd</sup> wave free for downloading approach
- -> Ongoing trend of convergence and cooperation, innovative business models integrated approaches

### Language Standards in ISO/TC 37

- Different kinds of standards
  - By type of document
    - guide
    - standard
    - technical report
    - database
    - data model
    - software
  - By degree of normativity
    - bottom-up singular model
    - group agreement,
    - top down specification as a strong recommendation, or even as a law

### Language Standards in ISO/TC 37

- By type of content/type of purpose & application
  - technical specification standards
  - process standards
  - conformance standards
  - safety standards
  - quality standards
  - service standards
  - (meta-) (data) (model) standards
  - terminology standards, incl. graphical symbols, cultural diversity management standards
  - coding standards

#### ISO Technical Committee 37, Terminology: Other language and content resources

- SC 1: Principles and methods
- SC 2: Terminographical and lexicographical working methods
  - Layout, lexicography, pragmatic applications; language codes, and translation management
- SC 3: Systems to manage terminology, knowledge and content
  - Computer assisted terminology management
- SC 4: Language resource management
  - Natural language processing and other language resources

ISO No.	Name
ISO 704:2009	Terminology work – Principles and methods
ISO 860:2007	Terminology work – Harmonization of concepts and terms
ISO 1087-1:2000	Terminology work – Vocabulary – Part 1: Theory and application
ISO 22134:2007	Practical guidelines for socioterminology
ISO/TR 24156:2008	Guidelines for using UML notation in terminology work
ISO 29383	Terminology policies – Development and implementation

## ISO/TC 37/SC 2 – Language Codes

- ISO 639-1:2002
- ISO 639-2:1998

ISO 639-3:2007

ISO 639-4: 2009

ISO 639-5:2008

- Codes for the representation of names of languages – Part 1: Alpha-2 code
- Codes for the representation of names of languages Part 2: Alpha-3 code
- Codes for the representation of names of languages – Part 3: Alpha-3 code for comprehensive coverage of languages
  - Codes for the representation of names of languages – Part 4: General principles of coding of the representation of names of languages and related entities, and application guidelines
  - Codes for the representation of names of languages – Part 5: Alpha-3 code for language families and groups
- ISO 639-6:2009 Codes for the representation of names of languages – Part 6: Alpha-4 code for comprehensive coverage of language variants

ISO 1951:2007 Presentation/representation of entries in dictionaries – Requirements, recommendations and information ISO 10241-1.2 Terminological entries in standards – Part 1 ٠ General requirements and examples of presentation Alphabetical ordering of multilingual ISO 12199:2000 ٠ terminological and lexicographical data represented in the Latin alphabet Bibliographic references and source identifiers ISO 12615 ٠ for terminology Project management guidelines for terminology ISO 15188:2001 standardization ISO 23185:2009 Assessment and benchmarking of terminological ٠ resources – General concepts, principles and requirements ISO 22128:2008 Terminology products and services – Overview and • guidance

#### ISO/TC 37/SC 2 Translation-Related Projects & Standards

Draft Number	Name
ISO 12616:2002	Translation-oriented terminography
ISO/CD TS 11669	Translation projects – General guidance
ISO/WD 13611	Interpreting/Interpretation processes – Community Interpreting/Interpretation
ISO/NP 14080	Assessment of translations

- ISO 12200:1999
- ISO 12620:2009

- ISO 16642:2003
- ISO DIS 22274
- ISO 26162:2010

ISO 30042:2008

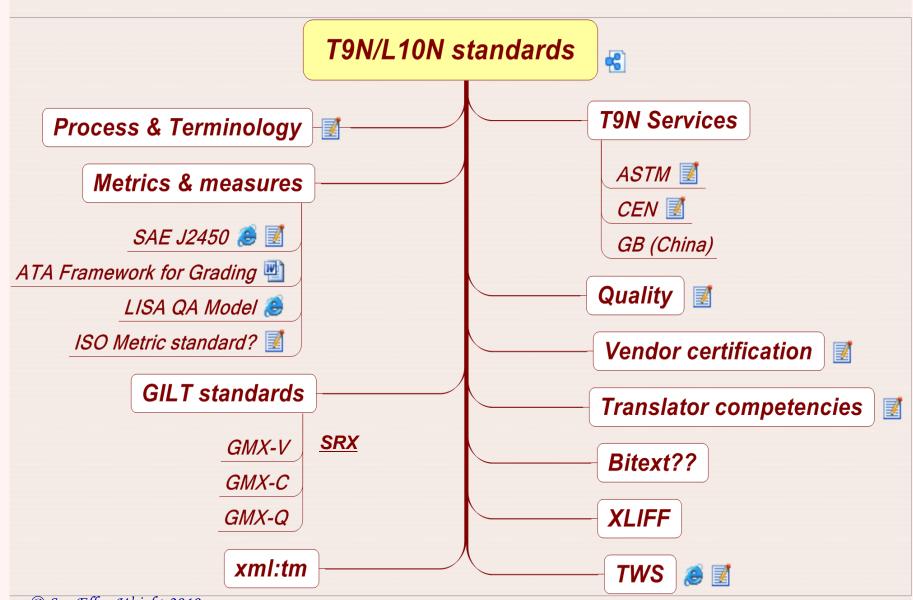
Computer applications in terminology – Machine-readable terminology interchange format (MARTIF) – Negotiated interchange Terminology and other language and content resources – Specification of data categories and management of a Data Category Registry for language resources -> ISOCat – standards-asdatabase

- Computer applications in terminology Terminological markup framework
  - Systems to manage terminology, knowledge and content – Design, implementation and maintenance of classification systems
  - Systems to manage terminology, knowledge and content – Design, implementation and maintenance of terminology management systems
- Systems to manage terminology, knowledge and content TermBase eXchange (TBX)

•	ISO 24610-1:2006	Language resource management – Feature structures – Part 1: Feature structure representation
•	ISO 24610-2	Language resource management – Feature structures – Part 2: Feature system declaration
•	ISO/NWI 21829	Terminology for language resources
•	ISO/FDIS 24614-1	Language resource management – Word segmentation written texts – Part 1: Basic concepts and general principles
•	ISO/FDIS 24614-2	Language resource management – Word segmentation written texts – Part 2: Word segmentation for Chinese, Japanese, and Korean
•	ISO/DIS 24611	Language resource management – Morpho-syntactic annotation framework
•	ISO/DIS 24612	Language Resource Management – Linguistic Annotation Framework (LAF)
•	ISO 24613:2008	Language resource management – Lexical markup framework (LMF)

- ISO/DIS 24619 Language resource management Persistent identification and access in language technology applications
- ISO/DIS 24617-1 Language resource management Semantic annotation framework (SemAF) – Part 1: Time and events
- ISO/CD 24617-2 Language resource management Semantic annotation framework (SemAF) – Part 2: Dialogue Acts
- ISO/FDIS 24616 Linguistic resources management Multilingual information framework

#### Potential Areas for T9N Standardization



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### ISO 12620:1999/2010

- Replaces ISO 12620:1999, which provided a hardcopy list of data categories for use in terminology work
- 12620:2010 provides a framework for the TC 37 Data Category Registry – <u>http://www.isocat.org</u>
- Data categories for a range of Thematic Domains, including morphosyntax, language resource metadata, and terminology, among others

## ISO 16642:2003 — TMF

- Provides a meta-model for designing terminology management systems
- Defines levels for distributing data elements in TMSs
- References data categories for use in TMSs as per ISO 12620
- Provides for interoperability between Terminology Markup Languages

### ISO 30042:2008 – TBX

- Provides for a family of XML-based terminology markup languages for use in exchanging data between TMSs compliant with ISO 16642 and ISO 12620
- Provides a wide range of flexibility with respect to:
  - Level of data category detail
  - Vocabulary style (native TBX xcs representation vs. W3C .xsd

### Role of Import & Export Formats

- Legacy data
- Sharing data
- Different types of outputs (glossaries, dictionaries, XML files
- Interaction with other tools (lexicographical works, glossaries, MT lexicons, etc.

### ISO 26162:2010(E) Implementing TMSs

- Systems to manage terminology, knowledge and content — Design, implementation and maintenance of Terminology Management Systems
- Criteria for designing, implementing and maintaining terminology management systems (TMS)
- Rationale for using a TMS

