

INTERNATIONAL TERMINOLOGY STANDARDIZATION

reasons, institutions, results,
implementation

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The objective of this presentation is

to illuminate 4 basic general questions concerning terminology standardization

- **What** is terminology standardization?
 - **Why** is it important?
 - **Who** standardizes terminology?
 - **How** is standardization done?
-
- **International Terminology Methodology Standards**

We can distinguish between

Technical Standards

e.g. size of fasteners, degree of allowed emission of car engines,
testing methods for the performance of air conditioners in official buildings

and

Terminology Standards

What is (International) standardization?

(International) Standardization is the process of producing consensus agreements between (national) delegations representing all the economic stakeholders concerned – i.e. suppliers, users, government regulators and other interest groups, such as consumers...

What is standardization?

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on **specifications and criteria** to be applied consistently in the

- classification of materials,
- manufacture and supply of products,
- testing and analysis,
- **terminology** and in the
- provision of services.

... to be continued

What is standardization?

continued...

International Standards provide **a reference framework, or a common technological language**, between suppliers and their customers - which facilitates trade and the transfer of technology.

The **result** of this process is **a standard**.

Source: <http://www.iso.ch/iso/en/aboutiso/introduction/index.html#one>

Why develop a **Terminology Standard**?

Why develop a **Terminology Standard**?

A terminology standard is a fundamental standard. Its purpose is

to support the work of the other committees by providing them with the terminology to draft linguistically and conceptually consistent standards or documents.

A feedback mechanism must therefore be established between the terminology committee and the committee(s) developing the (technical) standards or documents in a domain. Furthermore, the committees must work collaboratively.

A Terminology Standard...

...is an agreement as to which technical terms will be used in a standard.



It specifies the characteristics by which the selected terms are to be understood.



It provides standardizing groups with the tools to draft terminologically and conceptually consistent standards.

Terminology Standardization almost always involves
a choice among competing terms.

Several factors influence this choice:

- **Economic reasons** (term is less cumbersome than another)
- **Precision** (term has greater transparency or clarity than another)
- **Appropriateness** (term has negative/political connotation)

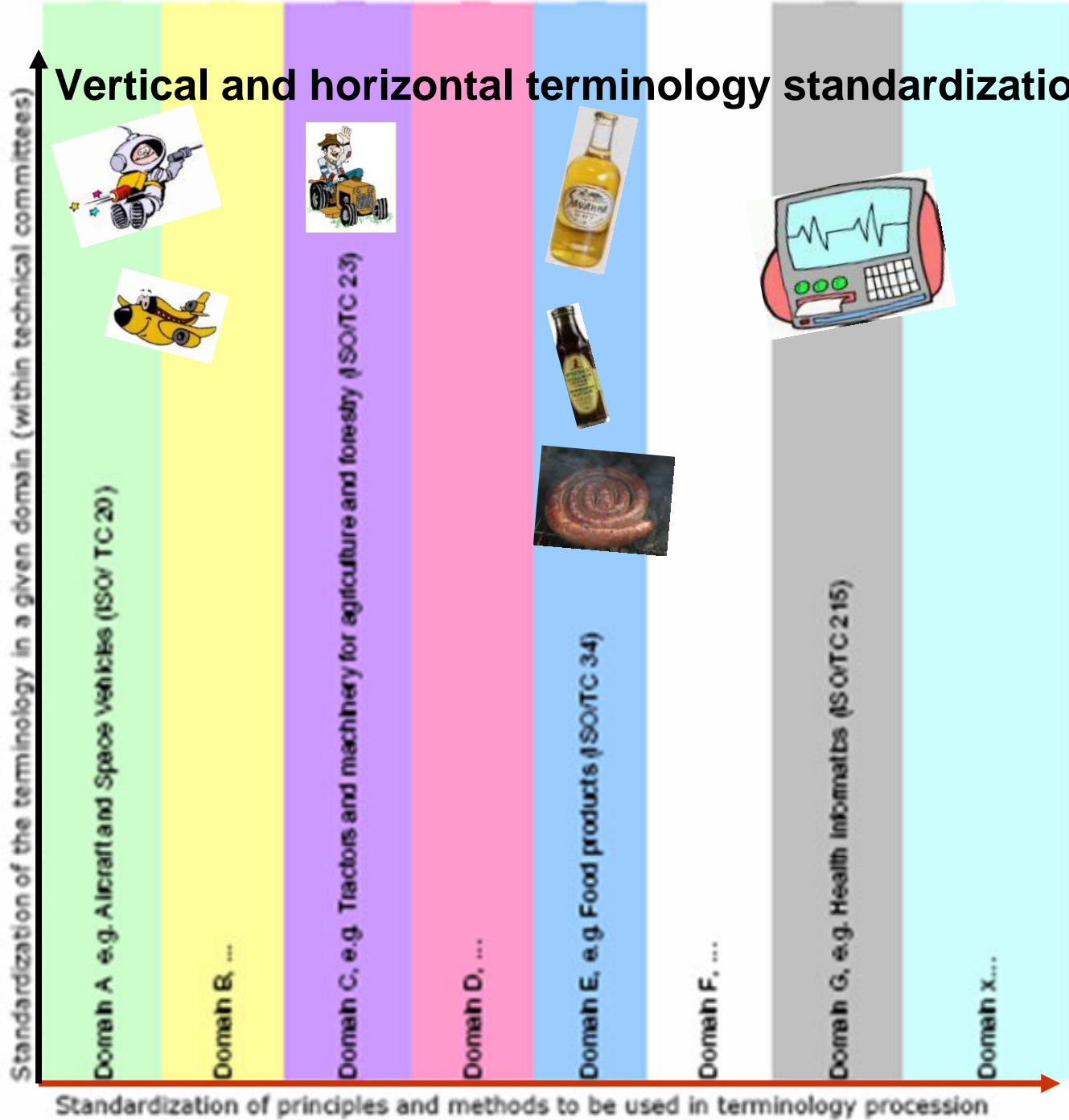
Why develop a **methodology standard** for terminology and language resources?

A methodology standard is a technical standard.

Purposes:

- **To create consistency in work procedures for standardizers.**
- **To foster interoperability (technical and semantic) between different systems used in different organizations, projects and environments**

Vertical and horizontal terminology standardization



Who develops terminology standards?

Types of terminology standards

Terminology standards are generally **de jure** standards, i.e. produced by a standardization/official body

De facto standards are established by market share

Once a technology becomes dominant, it becomes the **de facto** standard (including its terminology)

- e.g. Microsoft Windows and its accompanying terminology are **de facto** standards (Enter key, Clipboard, etc.)

Source: The Pavel Online Terminology Tutorial

(Terminology) Standardization can take place on different levels:

Professional level: developed by consortia:

companies, e.g. Microsoft,

associations, e.g. LISA (for language technology): OSCAR,

to ensure consistency in the particular market segment

→ agreements between major market players,

esp. in fast-developing domains.



The result are de facto standards. They are supplementary: input to international standards, associations may have a liaison status

(Terminology) Standardization can take place on different levels:

National level: in areas of national interest standardization institutions create committees or mirror committees to ISO committees.

National standards bodies are either private, semi-private or public, are themselves responsible or oversee others to create standards, e.g. SABS, BOBS, MBS, NSIQO, INNOQ, SQAS, DIN, ON, ANSI*, etc.

TC 85	
Nuclear energy	
Secretariat:	AFNOR
Secretary:	Mme Fabienne Rami
Chair:	vacant
Scope:	
Standardization in the field of peaceful applications of nuclear protection of individuals against all sources of ionising radiations	
Total number of published ISO standards related to the TC and its SCs:	136
Number of published ISO standards under the direct responsibility of the TC 85:	
Secretariat:	34
Participating countries:	17
Observer countries:	25
Other ISO and IEC committees in liaison:	ISO TC 11, TC 12, TC 13, TC 14, TC 15, TC 16, TC 17, TC 18, TC 19, TC 20, TC 21, TC 22, TC 23, TC 24, TC 25, TC 26, TC 27, TC 28, TC 29, TC 30, TC 31, TC 32, TC 33, TC 34, TC 35, TC 36, TC 37, TC 38, TC 39, TC 40, TC 41, TC 42, TC 43, TC 44, TC 45, TC 46, TC 47, TC 48, TC 49, TC 50, TC 51, TC 52, TC 53, TC 54, TC 55, TC 56, TC 57, TC 58, TC 59, TC 60, TC 61, TC 62, TC 63, TC 64, TC 65, TC 66, TC 67, TC 68, TC 69, TC 70, TC 71, TC 72, TC 73, TC 74, TC 75, TC 76, TC 77, TC 78, TC 79, TC 80, TC 81, TC 82, TC 83, TC 84, TC 86, TC 87, TC 88, TC 89, TC 90, TC 91, TC 92, TC 93, TC 94, TC 95, TC 96, TC 97, TC 98, TC 99, TC 100, TC 101, TC 102, TC 103, TC 104, TC 105, TC 106, TC 107, TC 108, TC 109, TC 110, TC 111, TC 112, TC 113, TC 114, TC 115, TC 116, TC 117, TC 118, TC 119, TC 120, TC 121, TC 122, TC 123, TC 124, TC 125, TC 126, TC 127, TC 128, TC 129, TC 130, TC 131, TC 132, TC 133, TC 134, TC 135, TC 136, TC 137, TC 138, TC 139, TC 140, TC 141, TC 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International organizations in liaison:	CE - Commission, CEI, ICGA, WANO, WHO,
<u>ISO technical programme:</u> (drafts and new work items under the direct responsibility of TC 85)	
Business plan (PDF 148 KB)	
Working area on ISO/TC 85	
Committee Title	
TC 85/WG 1 Terminology, definitions, units and symbols <i>The convener can be reached through:</i> ANSI	
TC 85/WG 3 Dosimetry for radiation processing <i>The convener can be reached through:</i> ANSI	

Regional level: standards organizations are mainly regional counterparts of the International standards organizations, e.g. CEN, CENELEC, ARSO, NATO)

International level ...

Who is responsible for terminology standards on the International level?

The 3 major players:



International Organization for Standardization – ISO

International Electrotechnical Commission – IEC

International Telecommunications Union – ITU

Who is responsible for terminology standards on the International level?

International Organization for Standardization – ISO:

Status of an NGO,

Standards are developed through ISO's technical committees.

A broad range of subject fields are covered, most of them having an own sub committee or Working Group for terminology.

3 official languages: English, French, Russian



Who is responsible for terminology standards on the International level?



International Electrotechnical Commission – IEC:

Standardizing and defining electro-technical terminology since 1909.

Carried out by the Technical Committee on Terminology (TC1)

Who is responsible for terminology standards on the International level?



International Telecommunications Union – ITU:

Is an international organization within the United Nations System, where governments and the private sector coordinate global telecom networks and services.

It hosts a terminological data base for telecommunication terms in English, French and Spanish.


In international standardizing organizations standards are developed...

...by subject-field experts working in groups or committees: discussions, persuasions.

Once there is sufficient consensus for the document under study it is circulated for ballot.

The participating member countries vote on whether to accept or reject the document, or abstain.

Different standard types and their origin:

-  International standards are reached by international consensus among members.
- De facto standards are established by the market.

Standards are voluntary!

They are widely used

because they guarantee
interconnectivity and interoperability,

not because they are binding.

They can be incorporated in national regulations by decree and this way become mandatory on the national level.

Work organization within ISO

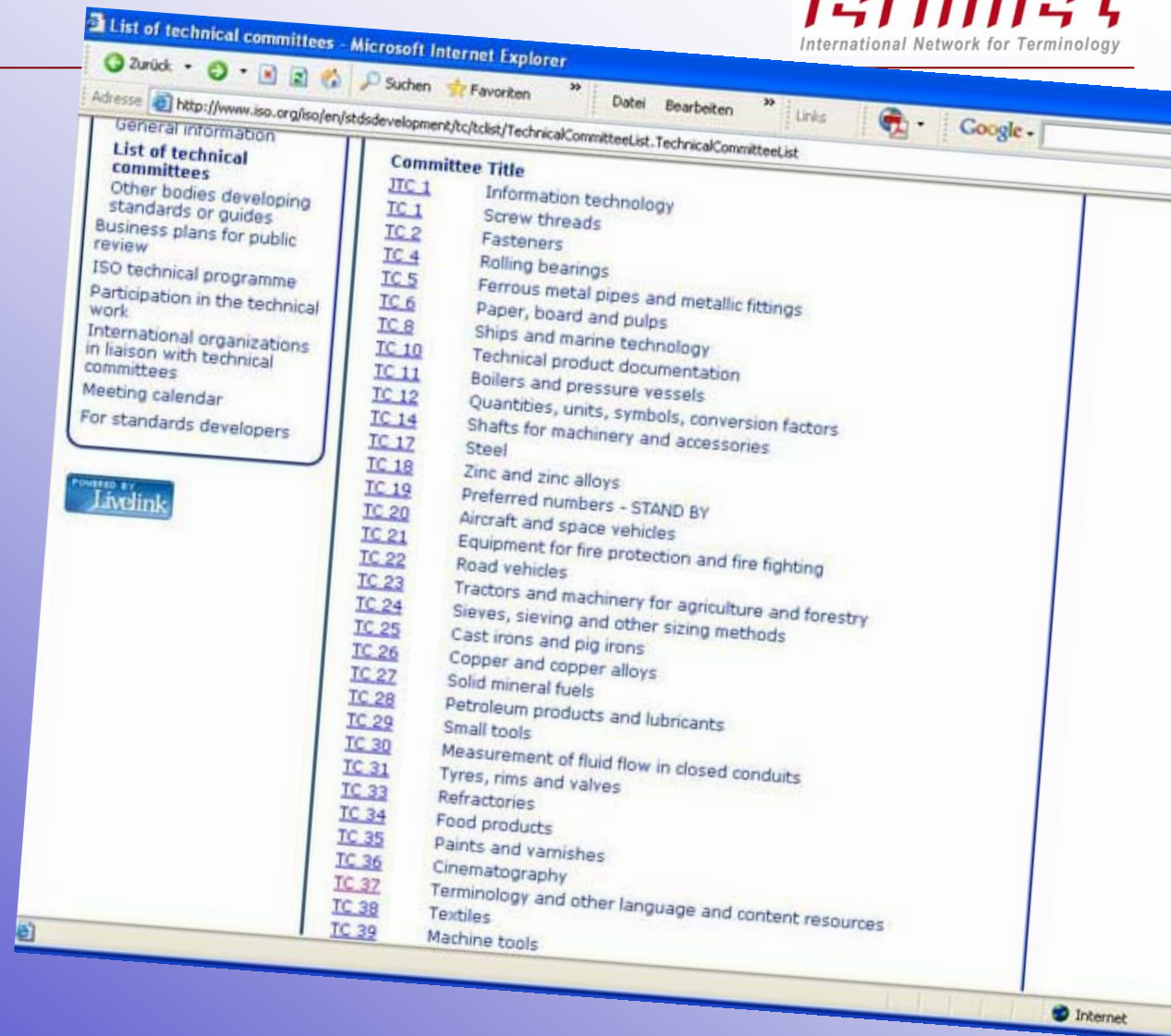
Currently ISO has

229

Technical committees (TC)
and about

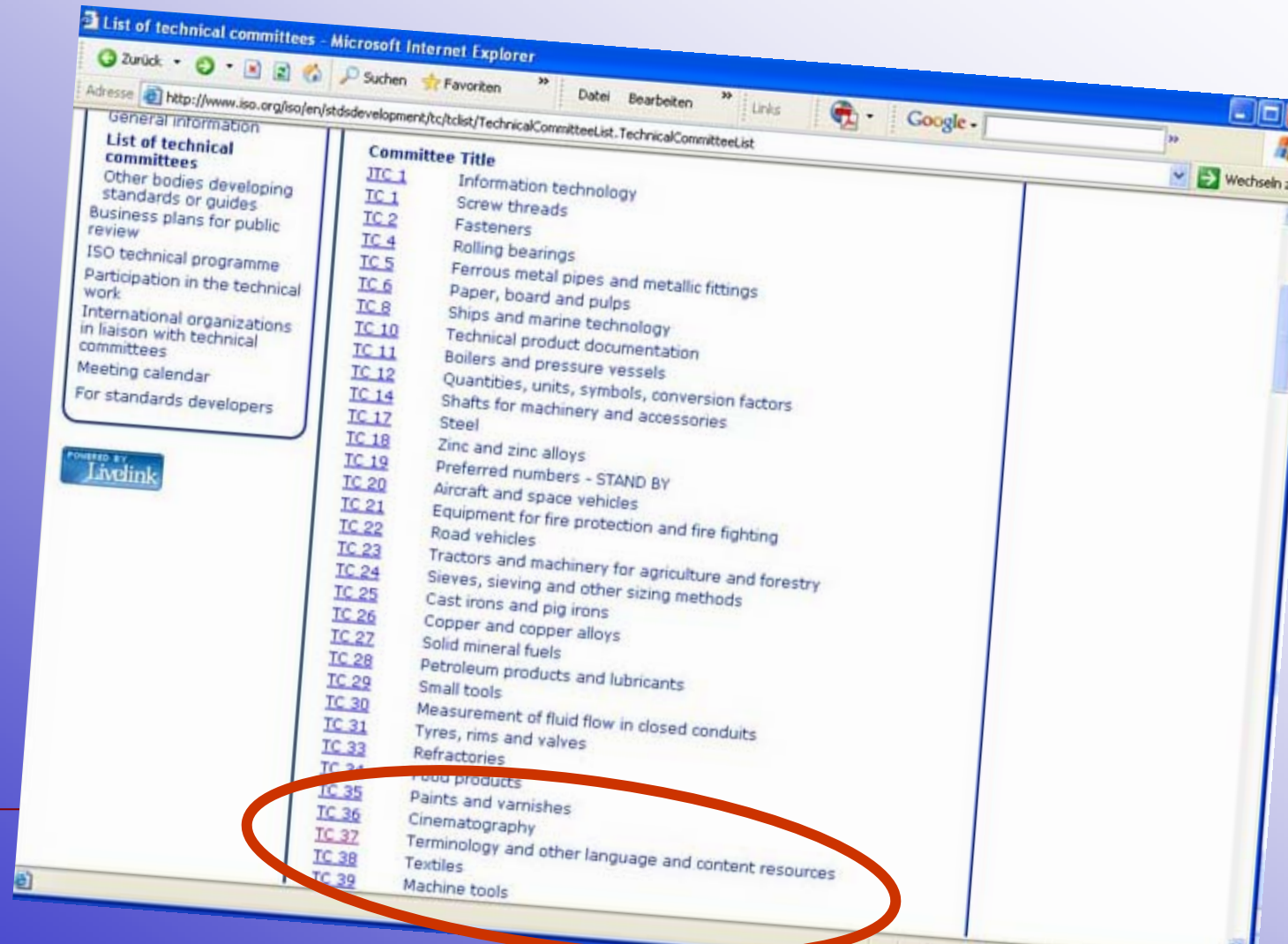
3000

Sub committees (SC) &
working groups (WG).



Terminological principles and methods are standardized by

ISO/TC 37 “Terminology and other language and content resources”.



An overview of

TC 37

Terminology and other language and content resources

Secretariat: [ON](#)
 Secretary: Dr. Christian Galinski
 Chair: Mr. Håvard Hjulstad until end 2006

Scope: Standardization of principles, methods and applications relating to terminology and other language and content resources in the contexts of multilingual communication and cultural diversity.

Total number of published ISO standards related to the TC and its SCs: [15](#)
 Number of published ISO standards under the direct responsibility of the TC 37 Secretariat: none
 Participating countries: [26](#)
 Observer countries: [32](#)
 Other ISO and IEC committees in liaison: ISO [TC 12](#), [TC 20/SC 8](#), [TC 46](#), [TC 61/SC 1](#), [TC 120](#), [TC 145](#), [TC 154](#), [TC 173/SC 2](#), [TC 176/SC 1](#), [TC 184/SC 4](#), [TC 215](#)
 ISO/IEC [JTC 1](#), [JTC 1/SC 22](#), [JTC 1/SC 29](#), [JTC 1/SC 31](#), [JTC 1/SC 32](#)
 IEC [IEC/TC 1](#)
 International organizations in liaison: [AILA](#), [BISFA](#), [CE - Commission](#), [CERN](#), [EAFT](#), [FAO](#), [GTW](#), [ICAO](#), [ICOGRADE](#), [ICSU](#), [IFAC](#), [IFLA](#), [IFT](#), [IIR](#), [ISKO](#), [ITU](#), [IUPAC](#), [Infoterm](#), [LAS](#), [LISA](#), [OIML](#), [REALITER](#), [RIFAL](#), [TERMNET](#), [UATI](#), [UEA - Esperanto](#), [UIC](#), [UN](#), [UN/ECE](#), [UNESCO](#), [UPU](#), [WHO](#), [WMO](#), [eCI@ss e.V.](#)

[ISO technical programme:](#)
 (drafts and new work items under the direct responsibility of TC 37)

[Business plan](#) (PDF 148 KB)

[Working area on ISOTC](#)

Committee Title

TC 37/AG Advisory group
The convener can be reached through: [ON](#)
 TC 37/JAC ISO 639 RA Joint Advisory Committee
The convener can be reached through: [SN](#)

[TC 37/SC 1](#) Principles and methods
[TC 37/SC 2](#) Terminographical and lexicographical working methods
[TC 37/SC 3](#) Computer applications for terminology
[TC 37/SC 4](#) Language resource management

Meeting calendar

* Information definite but meeting not yet formally convened

** Provisional

Month	Date	Location	Committee
April 2006	20-22	Los Angeles (USA)	** TC 37/SC 4
August 2006	20 & 23	Beijing (China)	TC 37/AG
August 2006	20-25	Beijing (China)	** TC 37/SC 3
August 2006	21 & 23-24	Beijing (China)	TC 37/SC 4
August 2006	24	Beijing (China)	TC 37/SC 1
August 2006	24	Beijing (China)	TC 37/SC 2
August 2006	25	Beijing (China)	TC 37
August 2006	25	Beijing (China)	TC 37/SC 3

ISO/TC 37

TC 37/SC 1 Principles and methods

ISO 704:2000 Terminology work -- Principles and methods

ISO 860:1996 Terminology work -- Harmonization of concepts and terms

ISO 1087-1:2000 Terminology work -- Vocabulary -- Part 1: Theory and application

TC 37/SC 2 Terminographical and lexicographical working methods

- ISO 639-1:2002 Codes for the representation of names of languages -- Part 1: Alpha-2 code
- ISO 639-2:1998 Codes for the representation of names of languages -- Part 2: Alpha-3 code
- ISO 1951:1997 Lexicographical symbols and typographical conventions for use in terminography
- ISO 10241:1992 International terminology standards -- Preparation and layout
- ISO 12199:2000 Alphabetical ordering of multilingual terminological and lexicographical data represented in the Latin alphabet
- ISO 12615:2004 Bibliographic references and source identifiers for terminology work
- ISO 12616:2002 Translation-oriented terminography
- ISO 15188:2001 Project management guidelines for terminology standardization

TC 37/SC 3 Systems to manage terminology, knowledge and content

ISO 1087-2:2000 Terminology work -- Vocabulary -- Part 2: Computer applications

ISO 12200:1999 Computer applications in terminology - Machine-readable terminology interchange format (MARTIF) -Negotiated interchange

ISO 12620:1999 Computer applications in terminology - Data categories

ISO 16642:2003 Computer applications in terminology - Terminological markup framework

TC 37/SC 4	Language Resource Management
ISO/WD 21829	Terminology for language resources
ISO/PRF 24610-1	Language resource management-Feature structures-Part 1: Feature structure representation
ISO/CD 24611	Language resource management -- Morphosyntactic annotation framework
ISO/AWI 24612	Language resource management - Linguistic annotation framework
ISO/CD 24613	Language resource management - Linguistic annotation framework
ISO/AWI 24614-1	Word segmentation of written texts for mono-lingual and multi-lingual information processing- Part 1: General principles and methods
ISO/AWI 24614-2	Word segmentation of written texts for mono-lingual and multi-lingual information processing-Part 2: Word segmentation for Chinese,Japanese and Korean

Key points to remember:

- All standardizing organizations have similar missions, that is, to arrive at a solution for making a product, service, process or system interconnected and interoperable.
- International de jure standards are developed largely by consensus of the participating members while de facto standards are market-driven.
- Standards are generally voluntary and become mandatory only when incorporated into national regulations or legislation.
- In the field of terminology, both technical (methodology) and terminology standards are important.
- International standards, especially terminology standards, are generally published in more than one language, while national standards tend to be monolingual.

Source: The Pavel Terminology Online Tutorial



Thank you for your attention.

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Further reading:

ISO Website <http://www.iso.org>

ISO/ TC 37 Document Server <http://www.iso.org/tc37>

Pavel Online

Terminology Tutorial http://www.termium.gc.ca/didacticiel_tutorial/english/lesson1/index_e.html

Why Standardization: 10 Good reasons for Standardization <http://www.infoterm.info/standardization>