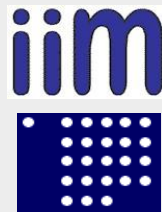


Applied Principles of Terminology Work

**Terminology Summer School - Cologne
06 - 10 July 2009**



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Content

- **Definitions, short historical overview**
- **Terminology working methods**
- **Terminology projects**
- **Special issues of terminology work** (term, definition, context, documentation, maintenance)
- **Terminology standardization** (companies, TC37)
- **Terminology workflow**

Terminology work

- **terminology work**

work concerned with the systematic collection, description, processing and presentation of **concepts** and their **designations**


















- ~~terminography~~ **terminology management**
part of **terminology work** concerned with the recording and presentation of **terminological data**

NOTE: Terminological data may be presented in the form of term banks, glossaries, thesauri or other publications.

Short history: first approaches

- In Central Europe, the first approaches to elaborate and order the terminology of a specific domain started several centuries ago:
 - **DÜRER (1471-1528) Mathematics**
 - **VESALIUS (1514-1564) Anatomy**
 - **LAVOISIER (1743-1793) Chemistry**
 - **BERTHOLLET (1748-1822) Chemistry**
 - **von LINNE (1707-1778) Botany und Zoology**
- Some of the developed nomenclatures are still valid and used today (e.g. Vesalius, Linne)

Below: a page from a German–Latin school book, *Teutsch lateinisches Wörter-Büchlein*
 Printed around 1722, it contains about 6,000 words, each of which is illustrated.

	Zhor Porta. f. 1.		Bestung Arx. f. 3.		Wirtshaus Diverforium. n. 2.
	Kirch Templum. n. 2.		Zhurk Turris. f. 3.		Garlücke Caupona. f. 1.
	Kloster Monasterium. n. 2.		Hohe Schul Academia. f. 1.		Kaufstaden Stram Tabernaculum. f. 1.
	Palast Palatium. n. 2.		Schul Schola. f. 1.		Fleischbant Macellum. n. 2.
	Rathhaus Curia. f. 1.		Gasse Vicinus. m. 2.		Gefängnuß Carcer. m. 3.
	Stechhaus Nofodochium. n. 2.		Engte Gasse Augiporcus. m. 4.		Brude Pont. m. 3.
	Spittal Xenodochium. n. 2.		Breite Gasse Platea. f. 1.		Krautmarkt Forum olitorium. n. 2.
	Finbel Brophotrophium.		Treuhgasse Compium. n. 2.		Roßmarkt Forum equestrarium. n. 2.
	Brüderhaus Adelphotrophium. n. 2.		Bad Balneum. n. 3.		Ochsenmarkt Forum Boarium. n. 2.
	Zeughaus Armamentarium. n. 2.		Markt Forum. n. 2.		Speißmarkt Forum equestrarium. n. 2.

Early terminological dictionaries

- **Alfred Schlomann**, a German engineer, elaborated and published systematically arranged technical dictionaries with illustrations
- Each dictionary covers (all) the concepts of a specific domain
- Between 1906 and 1928, 16 volumes of his “illustrated technical dictionaries in 6 languages” („Illustrierte Technische Wörterbücher in 6 Sprachen“) were elaborated
- Each volume contains between 400 and 2000 pages

HEBEMASCHINEN UND TRANSPORTVORRICHTUNGEN

13 155

In sechs Sprachen:

Deutsch, Englisch, Französisch, Russisch, Italienisch, Spanisch

Unter redaktioneller Mitwirkung von

Dipl.-Ing. Paul Stülpnagel

Mit 1560 Abbildungen und Formeln

Ill. Rechn. Wb. Bol. 7)

Intertext
Reg.-Nr. 13 155
T 337



MÜNCHEN UND BERLIN

INHALTSÜBERSICHT.

I. Last und Lastbewegung	1
II. Grundbegriffe der Dynamik	18
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a) Huborgane	24
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1 Kettenhaken (m)
chain hook
crochet (m) de chaîne



цепной крюк (m)
gancio (m) da catena
gancho (m) para cadena

2 Seilhaken (m)
rope hook
crochet (m) de câble



канатный крюк (m)
gancio (m) da fune
gancho (m) para cable

3 Doppelhaken (m),
Widderkopf (m)
double ramshorn or
hook
crochet (m) double



двойной крюк (m)
gancio (m) doppio
gancho (m) doble

4 Ösenhaken (m)
eye hook
crochet (m) à œillet



крюк (m) с ушком
griffa (f) adocchiello
gancho (m) de ojal

5 Wirbelhaken (m)
shackle or swivel hook
crochet (m) à tourillon,
émerillon (m)



вертложный крюк (m)
griffa (f) o gancio (m)
giratorio
gancho (m) giratorio

6 S-Haken (m)
S-hook
crochet (m) en S



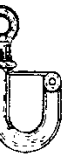
S-образный крюк (m)
gancio (m) in forma di S
gancho (m) en S

7 Karabinerhaken (m)
carbine
crochet (m) porte-mous-
queton



крюк (m) с замком;
крюк с караби-
ном
gancio (m) porta-cara-
bina
gancho (m) de mosquetón ó mosquetero

8 Sicherheitshaken (m)
safety hook
crochet (m) de sûreté



предохранительный
крюк (m)
gancio (m) di sicurezza
gancho (m) de seguridad

Klauenhaken (m)
claw-hook
crochet (m) à griffes



когтеобразный крюк (m)
gancio (m) a griffa 1
gancho (m) de garras ó
garfios

Zughaken (m)
draw bar hook
crochet (m) de traction
ou d'attelage



тяговый крюк (m)
gancio (m) di trazione 2
gancho (m) de tracción

leerer oder unbelasteter
Haken (m)
empty hook
crochet (m) à vide

пустой или ненагру-
женный крюк (m)
gancio (m) non caricato 3
gancho (m) no cargado

die Last an den Haken
hängen (v) oder in den
Haken einhängen (v),
die Last einhängen (v)
to put the load on the
hook
accrocher (v) la charge,
suspendre (v) ou amar-
rer (v) la charge au
crochet

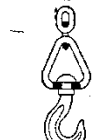
прицепить или подве-
сить груз к крюку
sospendere (v) od attac-
care (v) il carico al
gancio 4
suspend (v) ó colgar
(v) la carga al gancho

Schlaufe (f), Lastbügel
(m)
loop, triangular lifting
eye
boucle (f) ou œillet (m)
de suspension



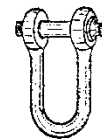
петля (f); грузовой
бугель (m)
occhiello (m) triangolare 5
aspa (f), ojuelo (m)

Schäkel (n)
shackle
maillon (m) d'émerillon



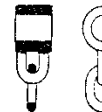
дужка (f) или ушко (n)
крюка
anello (m) porta-gancio 6
eslabón (m) giratorio

Kuhmaul (n)
D-shackle
manille (f) en forme de D



D-образная дужка (f)
maniglia (f) in forma
di D 7
grillete (m) en forma
de D

Öse (f)
eye
œillet (m)



ушко (n); петля (f)
occhiello (m) 8
grillete (m), ojal (m)

Anschlagkette (f), (An-
schlagseil (n)), [Last-]
Schlingkette (f),
Schlenkkette (f)
sling chain (sling rope)
chaîne (f) (câble (m)) à
deux bouts tendus



грузовая цепь (f), (гру-
зовой канат) (m)
catena (f) o fune (f) da
imbracatura 9
cadena (f) de dos ra-
males

Early terminological standardization

- 1906 the International Electrotechnical Commission (IEC) was founded in London. The working programme already contains the task to elaborate an international dictionary
- 1938 the first issue of the dictionary was published with about 2000 concepts in 14 sub-domains
- The dictionary contained terms in English, French, Italian, Spanish(, German) and Esperanto with definitions in English and French

Early terminological standardization

- Beginning of page 43 of the IEC dictionary:

Section 10-15. — Moteurs — Motors.

10-15-005	Moteur électrique : Machine qui produit de l'énergie mécanique par transformation de l'énergie électrique.	Electric motor : A machine which produces mechanical energy by the transformation of electrical energy.	Elektromotor Motore elettrico Motor eléctrico Elektromotore
10-15-010	Moteur à courant continu : Moteur électrique destiné à fonctionner avec du courant continu.	Direct-current motor : An electric motor working with direct current.	Gleichstrommotor Motore a corrente continua Motor de corriente continua Motore por kontinua fluo

Early terminological standardization

- 1917 the technical committees of the German Standards Association (DNA = Deutscher Normenausschuss, later called DIN = Deutsches Institut für Normung) established specific sub-committees for terminology
- 1926 the same happens on international level in ISA (International Standards Association, later called ISO)
- Also other national standards bodies established terminological sub-committees

Early terminological standardization

- Example of a terminology standard:
(British Standard 206 (1943) containing concepts and terms in the field of electrical engineering)

SUB-SECTION 26 : PARTS AND TYPES OF WINDINGS

No.	Term	Definition
2601	Drum winding	A winding formed of coils arranged wholly inside or outside a cylindrical core and situated either on the surface or in the slots.
2602	Ring winding TOROIDAL WINDING GRAMME WINDING	A winding formed of coils wound round a magnetic core of annular form, in such a manner that one side of each coil is looped through the ring.

Early terminological standardization

- **Eugen Wüster**
- 1931 Dissertation „Internationale Sprachnormung in der Technik, besonders in der Elektrotechnik“
- 1936 foundation of a technical committee dealing with terminological principles (ISA/TC37, later ISO/TC37)
- To improve the basic principles of terminology for the creation of a standard, Wüster elaborated the systematic dictionary “The Machine Tool” (1967/1968)

The Machine Tool

An Interlingual Dictionary of Basic Concepts

comprising

An Alphabetical Dictionary and
A Classified Vocabulary
with Definitions and Illustrations

English-French Master Volume

*Prepared under the auspices of
The United Nations
Economic Commission for Europe
and under the direction of
Eugen Wüster*



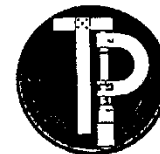
TECHNICAL PRESS
LONDON

Grundbegriffe bei Werkzeugmaschinen

Deutscher Ergänzungsband zu dem Grundwerk
**The Machine Tool: An Interlingual Dictionary
of Basic Concepts**
**Dictionnaire Multilingue de la Machine-Outil:
Notions fondamentales**

(Mehrsprachiges Wörterbuch in Sach- und Abc-Folge,
mit Begriffsbestimmungen und Abbildungen)

*Ausgearbeitet auf Veranlassung der Europäischen
Wirtschaftskommission der Vereinten Nationen
unter Leitung von
Eugen Wüster*



TECHNICAL PRESS
LONDON

UDC 531.2/.4 *STATICS AND DYNAMICS*CDU 531.2/.4 *STATIQUE ET DYNAMIQUE*

34 UDC 531.211

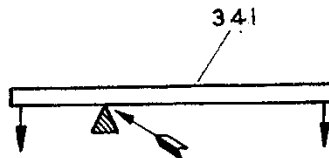
mechanical force IEC; **force** BS, ISO; **power**³: Any physical cause capable of modifying the condition of movement or of rest of a body, or of deforming it IEC.

force mécanique IEC, NF; **force** IEC, ISO, NF: Toute cause physique capable de modifier les conditions de mouvement ou de repos d'un corps, ou d'y produire une déformation IEC, NF.

35 UDC 531.211

fulcrum; **pivot**¹ (point): The point of support of a lever (341).

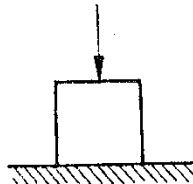
point d'appui (d'un levier); **centre de résistance**; **centre de rotation** (d'un levier); **point de levier**: Point supportant un levier (341).



36 UDC 531.223

compressive force; **pushing force**; **pressure**¹; **total pressure** BS: Any force (34) tending to compress a body.

force de (com)pression; **pression**¹: Force (34) qui tend à comprimer un corps.



37 UDC 531.223

pressure² ISO (external); **intensity of pressure** BS: The force (34) per unit area exerted upon the surface of a body.

pression spécifique; **pression**² ISO, NF (extérieure): Rapport de la force (34) exercée sur une partie de la surface d'un corps à la superficie de celle-ci.

38 UDC 531.223

thrust; **thrust load** ISO: Any compressive force (36) acting on a body in the direction of its axis.

poussée axiale [longitudinale]; **charge axiale** ISO; < **force axiale [longitudinale]**: Force de pression (36) agissant sur un corps dans la direction de son axe.

Vide not. fig. 227

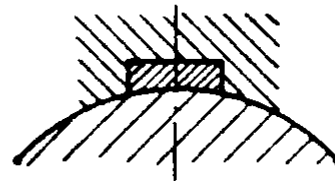
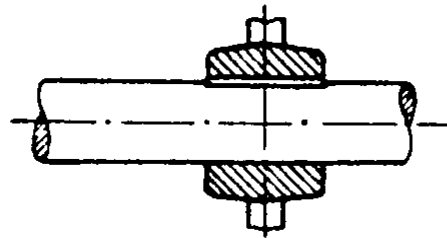
forming¹ /forming^{II}, or cutting with stock removal/
— cross forming 1170
forming^{III} /forming^{III}, moulding or assembling/ 1384
— ^Imetal forming^I < 1384
forming without stock removal 1384
forming^{III} /cutting without stock removal, or plastic deformation/ 1385
— ^{II}metal forming^{II} BS < 1385
— metal forming machine tool < 1388
forming attachment 1163
forward
forward movement 1117
forward stroke 1117
four-arm spider 1088
four bar linkage 322
four-jaw chuck 989
four jaw independent chuck /with holes and slots/ 993
four jaw independent lathe chuck /with holes and slots/ 993
four jaw plate 993
four pin driven collar nut
— circular four pin driven collar nut 707
frame
— box frame 862
— box-section frame 862
— C-shaped frame 866
— gap frame 866
— horizontal frame 860
— lattice frame 865
— machine frame BS 844
— portal-type frame 868
— ribbed frame 864
— stirrup frame 868
— tumbler gear frame 482
frame /machine frame/ 844
frame of triangular bridge-type construction 865
free
— load-free speed 839
frequency
— operating frequency /of a mechanism/ 1055
— rotational frequency IEC, ISO 28
frequency of operations 1055
friction
— cone friction brake 1200
— rolling friction 92

friction—cont.
— sliding friction 91
frictional contact drive 214
friction clutch BS 312
— multi-plate friction clutch 314
friction coupling 312
friction drive 557
friction gear(ing) 557
friction wheel drive 557
fro
— to-and-fro movement 25
fulcrum 35
fulcrum slide 545
full
fully adjustable speed drive 366
full load IEC /of an electrical machine/ 830
fully motorized drive 1322

G

GACO oil seal /GB/ < 1297
gage ASA 64
— depth gage 60
— limit gage ASA 72
— reference gage ASA 196
— plug gage 68
— — thread(ed) plug gage ASA 70
— thread ring gage ASA 71
— working gage ASA 195
gage block 47
gap
— air gap gage 49
— (depth of) gap 818
gap frame 866
gap gauge BS 67
Garlock oil seal /USA/ < 1297
garter spring 1035
gash 403
gasket
gasket ASA (for joints) 1288
gasket material 1286
gas thread 629
gate
— valve gate 127
gate BS /valve gate/ 137
gate valve BS 138
gauge
— acceptance gauge ISA 197
— air gap gauge 49
— plain bar type gauge BS 69
— block gauge BS 47
— ¹cal(II)per gauge¹ /with hinge, i.e. caliper/
— — internal caliper gauge 59
— — caliper gauge /outside/ 58

- =2 hollow saddle key BS: A taper key (775) fitting a keyway (771) in the hub (221), the bottom of the key being formed to fit the cylindrical surface of the shaft (268) BS. - (BS 46:Part 1:1929 no.9 / idem)
- =4 clavette inclinée creuse sans talon NBN, clavette creuse à serrage VSM: Clavette inclinée (775) qui s'introduit sans une rainure (voir 771) du moyeu, la face inférieure de la clavette étant formée creuse pour s'ajuster sur la surface cylindrique de l'arbre (268) \cong BS. - (NBN 66, 1951 p.1; VSM 15 110a F.1, 1939 / $i \cong 2$)



NBN

7. 5. 52

Wd/Kom +

(NBN 66, 1951
p 1)

Fachgebiet(e)			Sprache
Teilbestand	Projektcode	Notation	Klassifikations- schlüssel
Benennung			Quelle
(Kurzformen, Abkürzungen, orthographische Varianten)			Grammatische Angaben
Definition(en)			Quelle(n)
Kontext(e)			Quelle(n)
Bemerkungen			
Synonyme (falls nicht als separater Eintrag, dann mit Angabe der Quelle)			Quelle(n)
Erfasser – Datum	Bearbeiter - Datum		Eintragsklasse

Computerized terminology: mainframes

- **Since the middle of the 1960th, language departments of large organisations and companies started to develop mainframe databases for terminology management**
 - **TEAM (Siemens)**
 - **LEXIS (Bundessprachenamt)**
 - **EURODICAUTOM (EU Commission)**
- **first paper templates for recording terminology; data typists for data input and retrieval; printed terminology lists; only for internal usage; later published on microfiche and access via modem**

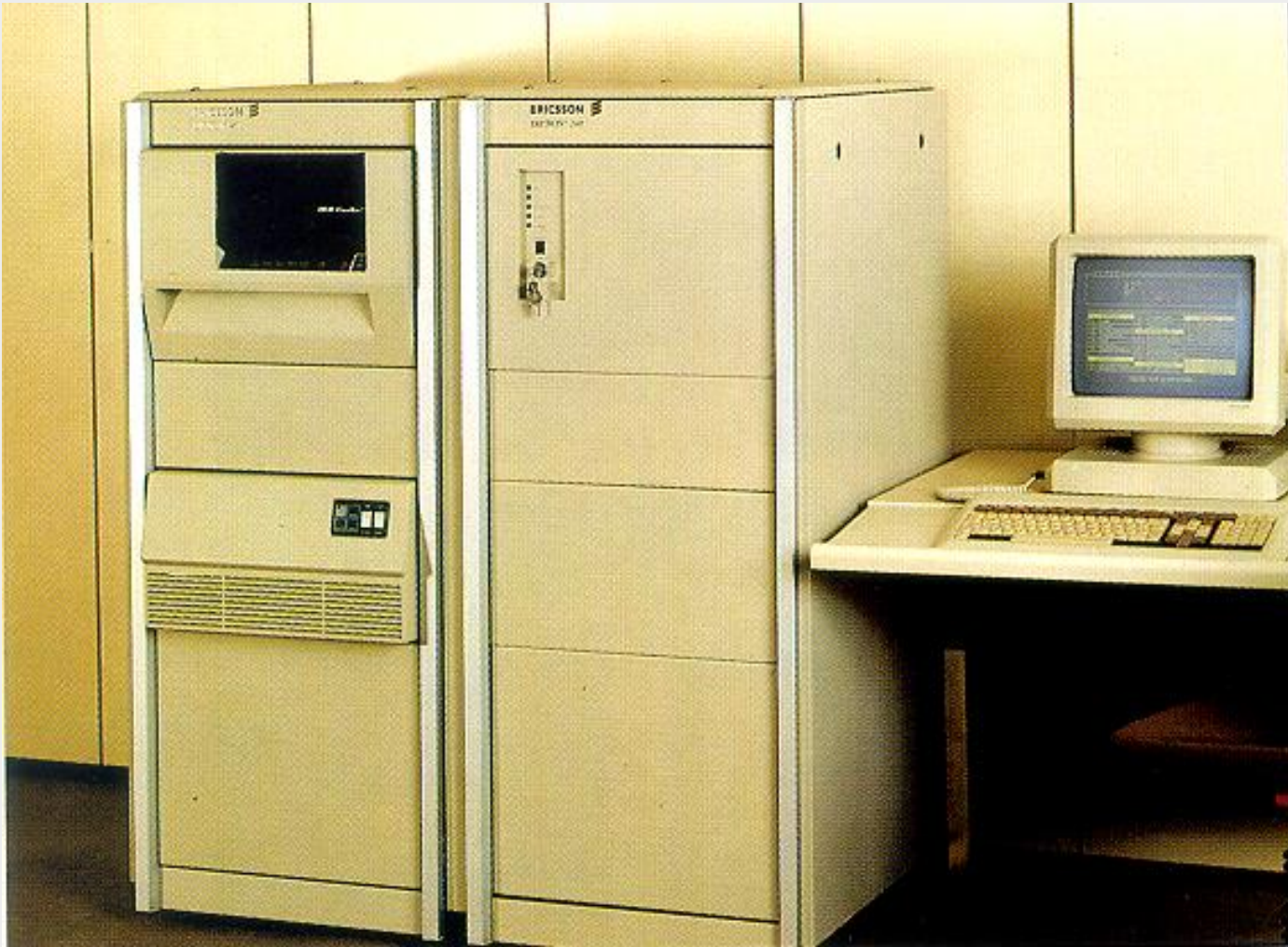


K.-D. Schmitz, IIM, FH Köln

Computerized terminology: minicomputers

- **End of the 70th / beginning of the 80th: minicomputer are used for terminology work**
- **Multi-user systems in smaller language department or translation services**
- **Sophisticated terminology management software (e.g. Ericsson CAT)**
- **Direct interaction of TMS with word processor and document management**
- **Terminologists AND terminology user are working directly (online) with the system**

Computerized Terminology: minicomputers



MECHANIK ELEKTRONIK

Schlauch /050988,SG,IS,SG,1/ (/SG/)

DEF: Bauteil aus flexiblem Material (z.B. Kunststoff, Gummi) in der Form eines langen zylindrischen Hohlkörpers zur Leitung von Flüssigkeiten oder Gasen.

DOK: biegsam, flexibel; Kunststoff; Gummi; lang; Flüssigkeitsleitung; Gasleitung

*OB hohlzylindrisches Bauteil

*BB Buchse

*BB Ring

*BB Rolle 01

*BB Rohr 01

*BB Scheibe 01

*BB Tülle

- flexible <m> /v,020289,FM,FM,FM,1/ (/NF X 10-030 Abschnitt/Nr 2/)

DEF: Ensemble constitué par un tube ou un tuyau souple équipé de deux pièces d'extrémité.

KON: Quelque soit sa nature (métallique ou non), le tube ou le tuyau doit présenter une souplesse suffisante pour que ces pièces d'extrémité puissent être couplées à des pièces de raccordement non nécessairement alignées sans subir pour autant des contraintes préjudiciables à leur emploi.

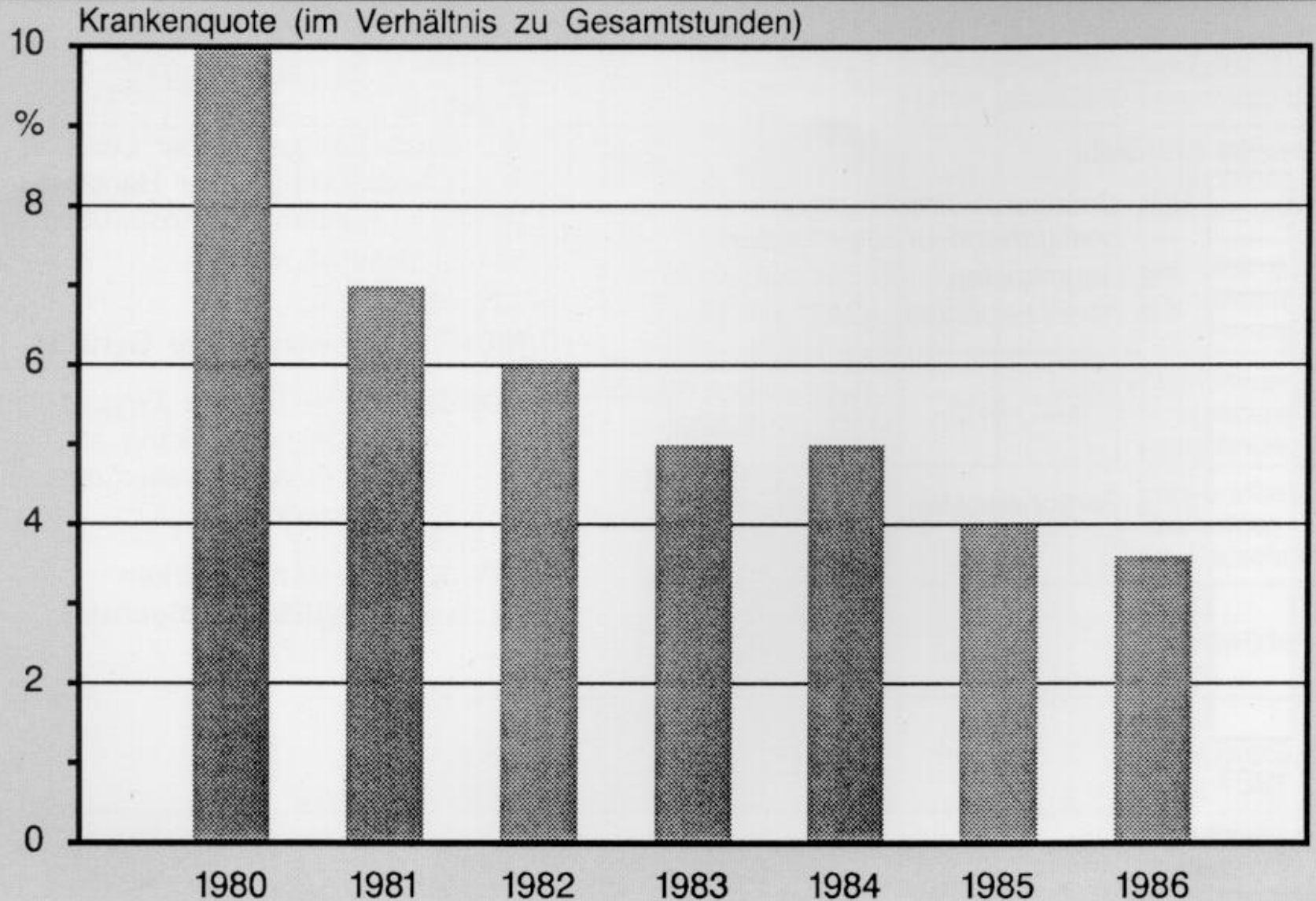
DOK: flexible, souple; extrémité;

- tuyauterie flexible <f> /v,080289,FM,FM,FM,1/ (/NF E 29-820
Abschnitt/Nr 3.1/)

KON: Flexible n'étant pas (dans ce cas) un substantif, il est d'usage dans la profession d'utiliser le terme 'tuyauterie flexible' en lieu et place de 'flexible' substantif.

- tuyau souple <m> /v,020289,FM,FM,FM,1/ (/NF X 10-030 Abschnitt/Nr 2/)

*OB tuyau 01



Computerized terminology: DOS-PCs

- **More and more PCs are used in translations offices and by freelance translators**
- **In the middle of the 80th, the first terminology management programs for PCs are offered (e.g. MTX)**
- **Single user systems with a simple data model and only few data categories**
- **In order to communicate with word processing software, they have to be memory-resident**
- **Character set problems (7 bit / 8 bit)**
- **Combination with dictionaries**

Computerized Terminology: DOS-PCs

[Abscheidegrad]

{1} arrestance◀

{2} taux d'efficacité gravimétrique◀

{n} gegenüber synthetischem Staub◀

{z} 7 {dat} 080291 {t} d {g} nm {f} klima◀



Computerized terminology: Windows-PCs

- **First PCs with Microsoft Windows**
- **Beginning of the 90th: first terminology management systems running under Windows (e.g. TermPC)**
- **Single user systems, but PC networking started**
- **More complex data models and maintenance procedures**
- **Easier communication with word processor**
- **Examples: MultiTerm, TermStar, etc.**
- **At the end of the 90th: only few “commercial” TMS**

Block Löschen Eintrag Position Optionen Sonstiges Beenden

00> AN0015
 04> 12.91
 05> 05
 06> ZoOr
 10> Wolf
 11> n.
 12>
 14> Über die nördliche Erdhalbkugel verbreiteter Wildhund mit vielen Unterarten. Als Nahrungskonkurrent des Menschen und als Feind der Haustiere verfolgt man den Wolf fast überall; der Japan. W. (Canis lupus hodophilax) und der kleine Ruhr-W. (Canis lupus minor) aus SO-Europa sind bereits ausgerottet. Beim nord-amerikan. Wolf (Timber-W.), einer der größten Unterarten, sind dunkle Einzeltiere bes.häufig. Der Europ. W. (Canis lupus lupus) wandert von O- gelegentlich bis nach mitteleuropa. (dtv)

15> "Der Wolf und die sieben Geißlein" ist ein deutsches Volksmärchen.
 16> Canis lupus
 17> Rotwolf; Mähnenwolf
 20> wolf (pl.-ves)
 21> n.
 22> LG D-E
 24> Any of various large predatory mammals that resemble the related dogs, are destructive to game and livestock, and may rarely attack man esp. when in a pack. (WNC)

25> "A wolf in sheep's clothing" is a person who cloaks a hostile intention with a friendly manner.
 26>
 27> coyote; jackal

TRADOS MultiTerm '95 Plus! - ASTHMA.MTW <Ansicht>

Datei Bearbeiten Anzeige Suchen Hilfe

Index **Deutsch** Ziel **Englisch**

Allergisches Asthma **Alveolen** Analgetica

Eintragsnummer **70**
 Fachgebiet **Medizin**
 Lench-Code **#ME:**
 Autor **Nadine Monschau**

Alveolen *f. pl.*
 Quelle **Gesundheitslexikon.1973, S. 21**
 Definition **1. Lungen-A., Lungenbläschen, die kleinste Baueinheit der Lungen, ausgekleidet mit dem sog. respiratorischen Epithel. ...**
 D-Quelle **Gesundheitslexikon.1973, S. 21**
 Kontext **Am Ende dieser fortlaufenden dichotomen Teilungen entstehen die Bronchiolen, die über die Alveolargänge in die Alveolen, die Lungenbläschen, übergehen.**
 K-Quelle **www.medicine-worldwide.de...grundlagen.2001**

Lungenbläschen *n. Synonym*
 Quelle **B.I. Goldene Regeln, S. 6**
 Kontext **Den Blättern des Baumes entsprechen die Lungenbläschen (Alveolen), mehrkammrige blasige Gebilde.**
 K-Quelle **B.I. Goldene Regeln, S. 6**

alveolus *sub*
 Quelle **www.americasdoctor.com...mwmedical.2001**
 Definition **... b: an air cell of the lungs ...**
 D-Quelle **www.americasdoctor.com...mwmedical.2001**
 Kontext **The bronchi carry air to and from the alveoli in the lung**
 K-Quelle **Bayer:researchE.1998, S. 28**
 Anmerkung **Def. im Sing.; im Sprachgebrauch jedoch meist im Pl.**

Französisch **alvéole f.**
 Quelle **Petit Larousse.1998, S. 57**

Sortierbegriff -> Kontext

Network Options

Add **Delete**

User List

quest			
Lafontaine			
Lopez			
Schmitz			
super			

Access Rights

Class	Read	Write
1	<input type="checkbox"/>	<input type="checkbox"/>
2	<input type="checkbox"/>	<input type="checkbox"/>
3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
4	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
5	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8	<input type="checkbox"/>	<input type="checkbox"/>

User ID
Lafontaine

Password
Oskar

Help **Close**

Computerized terminology: PCs plus

- **Local computer networks and internet everywhere**
- **Terminology management systems are integrated into workbench systems and communicate with translation memories (and machine translation)**
- **Professional features allow the application in larger language or translation services**
- **Additional components for project management, interchange standards and term extraction**
- **Beginning of 2000: first approaches for web-based terminology management and client-server systems (MUWI, MUWA, WebTerm, MultiTerm iX)**


Beumer

Source Language: Deutsch

Target Language: Englisch

Layout: Bilingual-Layout

Search Help



- 1-fach Kettenrad
- 1-fach Rollenkette
- 2-fach Kettenrad
- 2-fach Rollenkette
- 3-fach Kettenrad
- 3-fach Rollenkette
- abgeschirmtes Kabel
- Abisolierzange
- Absperrventil
- Ankerschraube
- Anschlußwabe
- Aufsteckgetriebe
- Augenlager
- Augenschraube
- Axialzylinderrollenlager
- Axial-Zylinderrollenlager
- Bedienpult
- Bedienterminal
- Bockrolle
- Bogenzahnkupplung
- Buchsenförderkette
- Buchsenkette
- Check-In-Förderer
- Flughafen
- Deckellager
- Doppelbackenbremse
- Drahtseilklemmen
- Drehflügelschalter
- Dreifachrollenkette
- Dreifach-Rollenkette
- Elastische Klammer

Entry Number 62



Fachgebiet: Fördertechnik
Erfassung: teilweise

 **Deutsch** **Ankerschraube**

Genus: f
Numerus: s & p
Wortart: Substantiv
Endung: - / -n
Erfasser: Och
Prüfer: Och
Grundform: Schraube

 **Englisch** **anchor bolt**

Numerus: s & p
Wortart: Substantiv
Erfasser: Hoheisel
Prüfer: Bories

Computerized terminology: today

**see presentation tomorrow
on terminology management systems**

Terminology working methods I

- **ad hoc terminology work**
solving a current terminological problem
(research for unknown terms, equivalents, synonyms)
- **text-oriented terminology work**
preparatory terminology research for a given text
(solve all terminological problems before you translate)
- **domain-oriented terminology work**
terminology research for all concepts of a given
subject field
(elaborate a complete terminology with concept relations)

Terminology working methods II

- **descriptive terminology work**
determine and describe the (current) usage of concepts, terms and definitions
(typical for freelance translators, interpreters, techwriters)
- **prescriptive (normative) terminology work**
lay down and define concepts, terms and equivalents, classify them as preferred, admitted and deprecated
(typical for standards bodies, but also for companies etc.)

Terminology working methods

Factors that influence terminology work:

- Objectives and user groups of terminology work
 - Amount of concepts and languages to be elaborated
 - Structure and information fields of termbase
 - available persons involved
 - intended time frame
 - available and accessible information / documentation
 - existing technical infrastructure
- ⇒ economic factors will often lead to compromises that do not follow the basic and established principles !

Terminology projects

- Planning and calculating the project
- Getting into the subject field (literature, experts)
- Limiting and structuring the subject field
- Accessing and analyzing the documentation material
- Searching for existing terminology resources
- Collecting terms; creating a monolingual term list; defining of concepts to be elaborated and documented
- Collecting further information (terms in other languages, definitions, context examples etc.) ⇒

Terminology projects

- Processing the material; terminological analysis:
 - Checking of equivalences
 - Clarifying of synonyms, abbreviations etc.
 - (Specifying of preferred, admitted, deprecated terms)
 - Coining of new terms (if terms do not exist)
 - Documenting the terms (grammar, usage, etc.)
 - Selecting (writing) definitions; selecting context examples
 - If useful, selecting graphical representations, figures etc.
 - Writing notes for (problems with) synonymy, equivalence, usage
- (Creating concept systems and concept relations)
- Quality control (by experts) and final check
- Making terminology available for user groups

Term-related issues

Terms should be entered in canonical form:

- normally in lowercase (but: *Drucker, Microsoft*)
- nouns normally in singular (pl: *trousers, Leute*)
- verbs normally in infinite form
- multi-word terms in spoken/written order
- nouns not with articles (*der, le*)
- verbs not with infinite particles (*to, à, zu*)
- spelled correctly

Term-related issues

If you have to create new terms (e.g. for new concepts), follow the principles of term formation

- **Transparency (torque wrench vs. monkey wrench)**
- **Consistency (nylon, orlon, dracon, ... -on)**
- **Appropriateness (nuclear energy vs. atomic energy)**
- **Linguistic economy (term bank vs. terminological data bank)**
- **Derivability (herb vs. medicinal plant)**
- **Linguistic correctness**
- **Preference for native language**
- **Uniqueness (don't create homonyms in one domain !)**

Definition-related issues

- **Try to provide just one good definition (see 704)**
(Multiple definitions can be confusing)
- **Try to find and enter existing definitions**
(with the source); **shortenings and extensions**
are sometimes necessary and helpful
- **Definitions should be as short as possible and as long as necessary**
- **Stating a synonym is not a definition!**
e.g. diaphragm spring = Belleville spring

Definition-related issues

- **Use terms for referenced concepts and characteristics consistently**
- **If the term is mentioned in the definition, try to use it in singular form**
- **Definitions do not exist for ever: concepts are changing; therefore check and update**
- **In database: maintain only one definition in one field / data category**

Definition-related issues

If you have to write you own definition:

- **state what kind of thing your concept represents (usually the broader concept) and mention what differentiates your concept from other closely related concepts**
- **let a domain expert check the definition**
- **do not use finite verbs like *is, refers to, is called***
- **do not mention the term in the definition (DE !)**
- **punctuation, capitalization, article usage: provide styleguides**

Definition-related issues

- **Examples:**

Term: *terminography*

Term: *terminology management*

Def: *part of terminology work concerned with the recording and presentation of terminological data*

Ref: *ISO 1087-1:2000*

Note: *Terminological data may be presented in the form of term banks, glossaries, thesauri or other publications.*

Context-related issues

- **The Context field contains a text chunk, which includes the term in question**
- **Context contains a manageable amount of textual information (e.g. a sentence)**
- **The context shows that and how the term is really used (linguistic and situational environment)**
- **Therefore, find and enter existing contexts (with source)**

Context-related issues

Different types of context can be differentiated:

- **defining context** (“incomplete definition with term”)
- **explanatory context** (“bad explanation with term”)
- **associative context** (associates concept to domain)
- **linguistic context** (function of term in discourse)

Documentation issues

- **Sources of text-related information have to be appropriately cited (e.g. **definitions, contexts, notes, graphics**) if quoted**
- **Sources of terms only if required (e.g. if no context can be found for a synonym)**
- **Use Source-IDs (Codes) that refer to full bibliographical information of the source (to be efficient and consistent in coding)**
- **For web resources, use URL and date**
- **Follow advises in literature for evaluating the quality of the source (esp. for web sources)**

Maintenance issues

- **Terminological data collections, whose **content** is not maintained, become outdated, obsolete, incorrect, incomplete, and will no longer be used.**
- **Besides the maintenance of the content, a **formal** maintenance and checking of the data is necessary (called data validation)**
- ****Data validation:** process used to determine whether data are formally accurate, consistent, correct, complete and plausible (ISO 1087-2:2000)**

Maintenance issues

Data validation procedures:

- **double-entry check (real homonyms vs. double entries)**
- **consistency check (e.g. cross-references)**
- **spelling check**
- **completeness check (mandatory information)**
- **format check (e.g. date format)**
- **plausibility check (is content conforming to spec.)**

- **Can be done during data input or periodically by specific validation routines !**

Standardization of terminology

- Standardized terminologies shall reflect a coherent terminological system, shall be precise and lead to increased clarity in communication.
- One primary function of a standardized terminology shall be to indicate preferred, admitted and deprecated terms.
- Standardizing terminology is a task of technical committees in **standards organizations**, but also in **companies, organizations, professional associations etc.**

Terminology Standardization (int.)

- **ISO/TC37** (founded in 1936/1947)
(Terminology: principles and coordination)
(Terminology and other language resources)

Terminology and other language and content resources

- **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.

Terminology Standardization (int.)

- **ISO/TC37**
 - **SC 1: Principles and methods**
 - **SC 2: Terminographical and lexicographical working methods**
 - **SC 3: Systems to manage terminology, knowledge and content**
 - **SC 4: Language resource management**

Standardization (nat.)

- **e.g. DIN/NAT (NA 105)**
„Normenausschuss Terminologie“
 - AA 1: Grundlagen der Terminologiewerk
 - AA 3: (Terminologiepraxis)
 - AA 5: Systeme für die Verwaltung von Terminologie, Wissen und Content
 - AA 6: Sprachressourcen

Standardization (other)

- **European standardization:**
no standardization of terminological principles and methods until now
- **standardization among enterprises:**
e.g. LISA (TMX, TBX), KÜDES (recommendation)
- **standardization within an enterprise:**
e.g. corporate language, terminology guidelines, style guides

Terminology solutions in enterprises: benefits from standardization

■ **basic principles and methods**

- **ISO 704:** Terminology work - Principles and methods
- **ISO 1087:** Terminology work – Vocabulary (2 parts)
- **DIN 2330:** Begriffe und Benennungen - Allgemeine Grundsätze
- **DIN 2342:** Begriffe der Terminologielehre - Grundbegriffe

■ **concept orientation + term autonomy + other principles**

Terminology solutions in enterprises: benefits from standardization

■ working procedures

- **ISO 26162:** Computer applications in terminology - Design, implementation and use of terminology management systems (CD)
- **ISO 15188:** Project management guidelines for terminology standardization
- **DIN 2339:** „Terminologiewerk“ (review)
- **KÜDES:** Empfehlungen für die Terminologiewerk

■ guidelines for terminology management/work

Terminology solutions in enterprises: benefits from standardization

■ IT-realization: design

- **ISO 12200:** Computer applications in terminology - Machine-readable terminology interchange format (MARTIF) - Negotiated interchange
- **ISO 16642:** Computer applications in terminology - Terminological markup framework (TMF)
- **ISO 26162:** Computer applications in terminology - Design, implementation and use of terminology management systems (CD)

■ data modeling + meta-model

Terminology solutions in enterprises: benefits from standardization

■ **IT-realization: data categories**

- **ISO 12620:** Computer applications in terminology - Data categories ([new DIS](#))

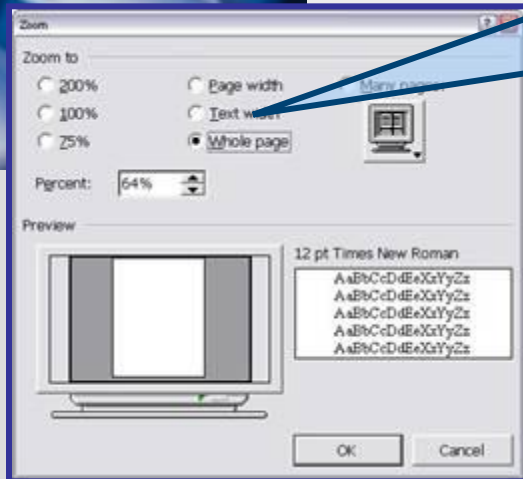
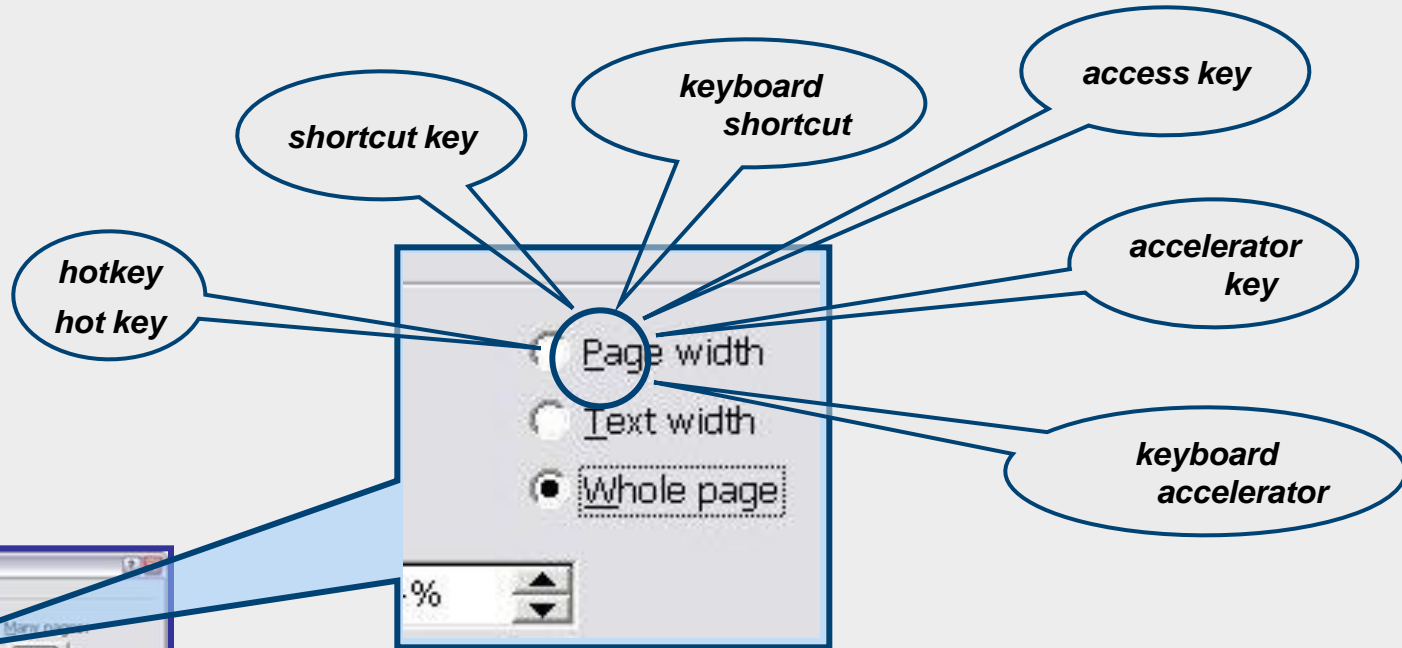
■ **IT-realization: data interchange**

- **ISO 12200:** MARTIF
- **ISO 16642:** Terminology markup framework (TMF)
- **ISO 30042:** Term-Base eXchange ([from LISA](#))

Standardizing terminology

- terminology should be defined and used consistently:
 - within a document
 - within a product
 - within a company
- **only one term for a given concept (no synonyms!)**
- **only one concept behind a given term (no homonyms!)**

Standardizing terminology



Matthias Heyn, SDL,
tekem-Jahrestagung 2005

Standardizing terminology

Begriffsnummer: 127

Begriffsklärung:

Benennung: Leichtmetallscheibenrad

Synonyme: Leichtmetallrad
Alufelge
Aluminiumscheibenrad
Aluminium-Scheibenrad
Leichtmetall-Scheibenrad
Scheibenrad Aluminium



Reference: Susanne Göpferich, DAISY-Projekt, DTT-Symposion 2004

Standardizing terminology

Rec. No.
Record No.
Rec.-No.
Rec #
Rec No.
Rec. No.:
Rec. Number
Rec. Number:



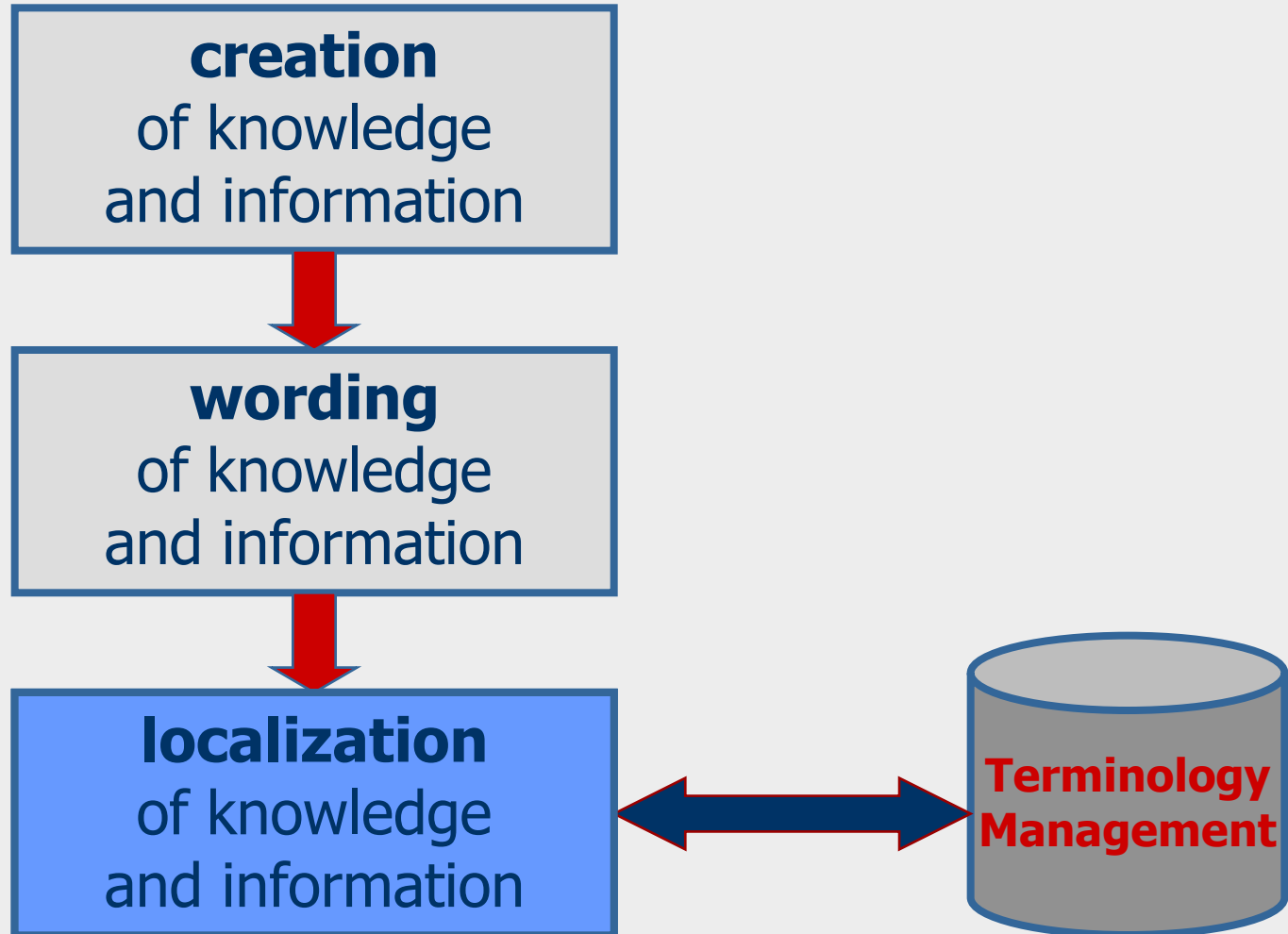
Record number

Terminology / information workflow

- Terminology workflow: the translation viewpoint
 - Documents to be translated:
 - manuals, handbook, guidelines, tutorials
 - technical specifications
 - scientific books, articles
 - patents, standards
 - contracts, offers, tenders
 - software user interfaces
 - etc.
 - less often fiction and general language texts

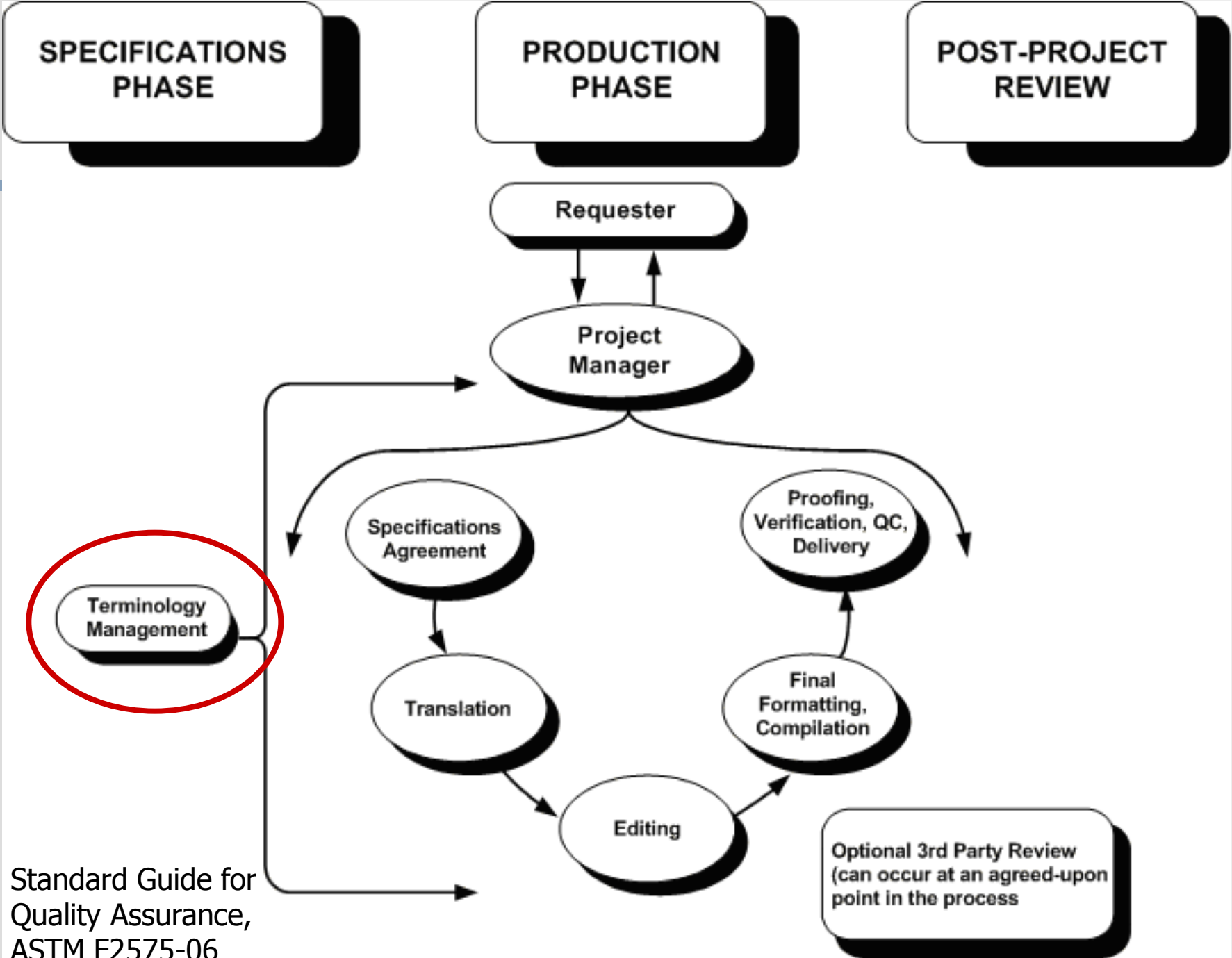
⇒ **high frequency of “technical” terms !**

Information development workflow

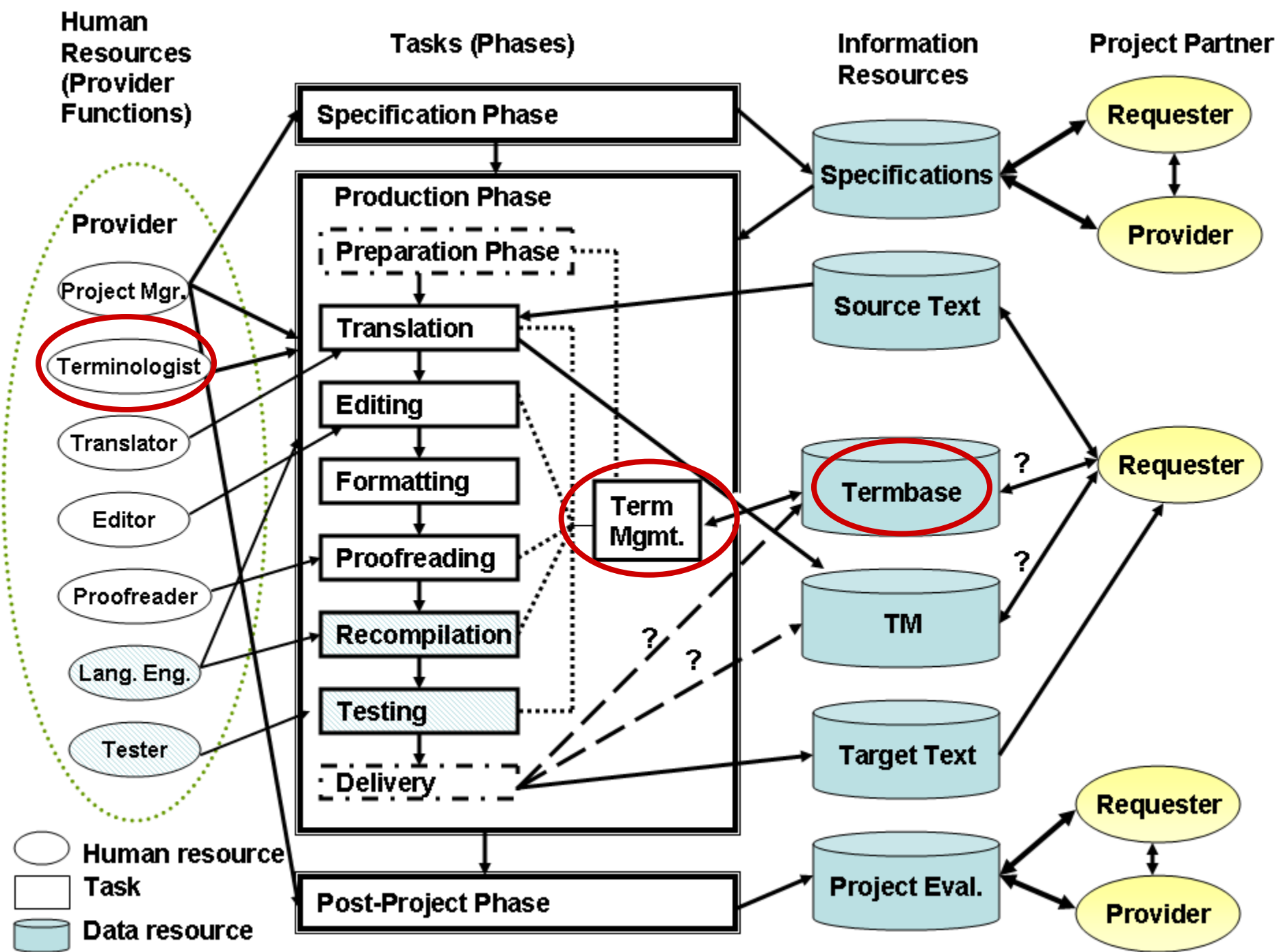


Terminology for the target text

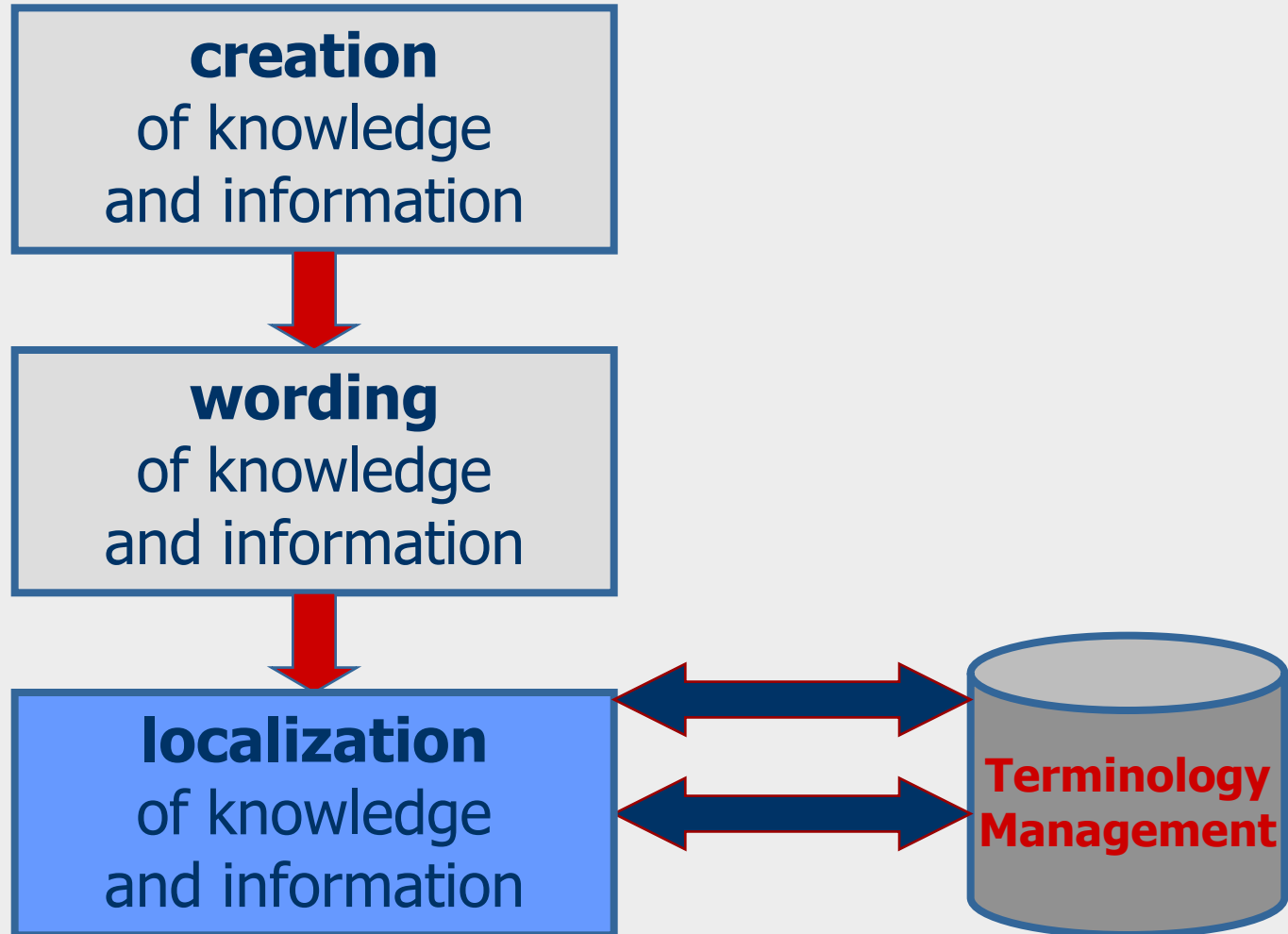
- Terminology must be defined accurately and used consistently within one target language document:
 - Only one term for each concept
(avoid synonyms !)
 - Only one concept for each term
(avoid homonyms !)
- **Terminology management necessary for the whole translation/localization process!**



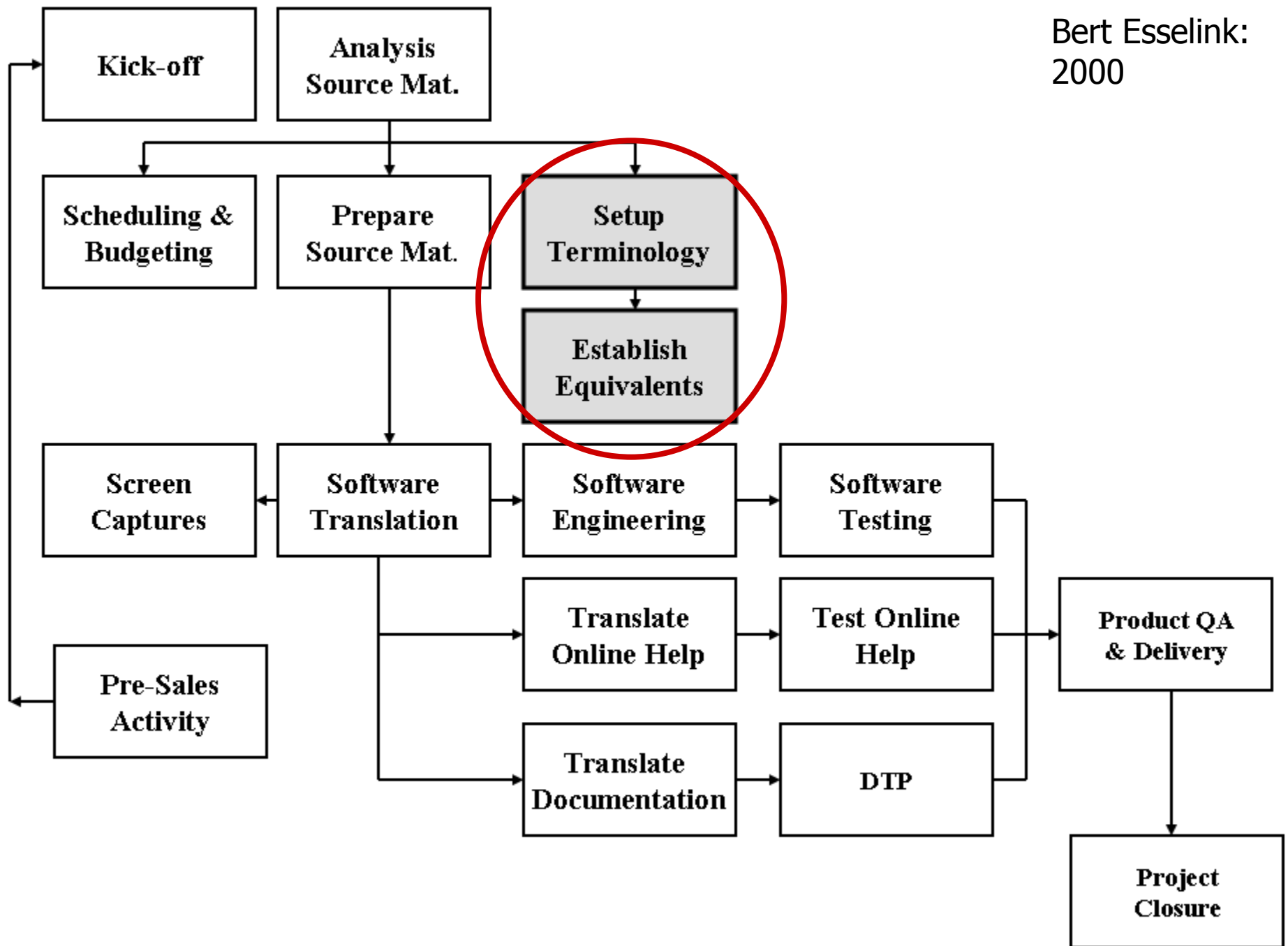
Standard Guide for
Quality Assurance,
ASTM F2575-06



Information development workflow



Bert Esselink:
2000

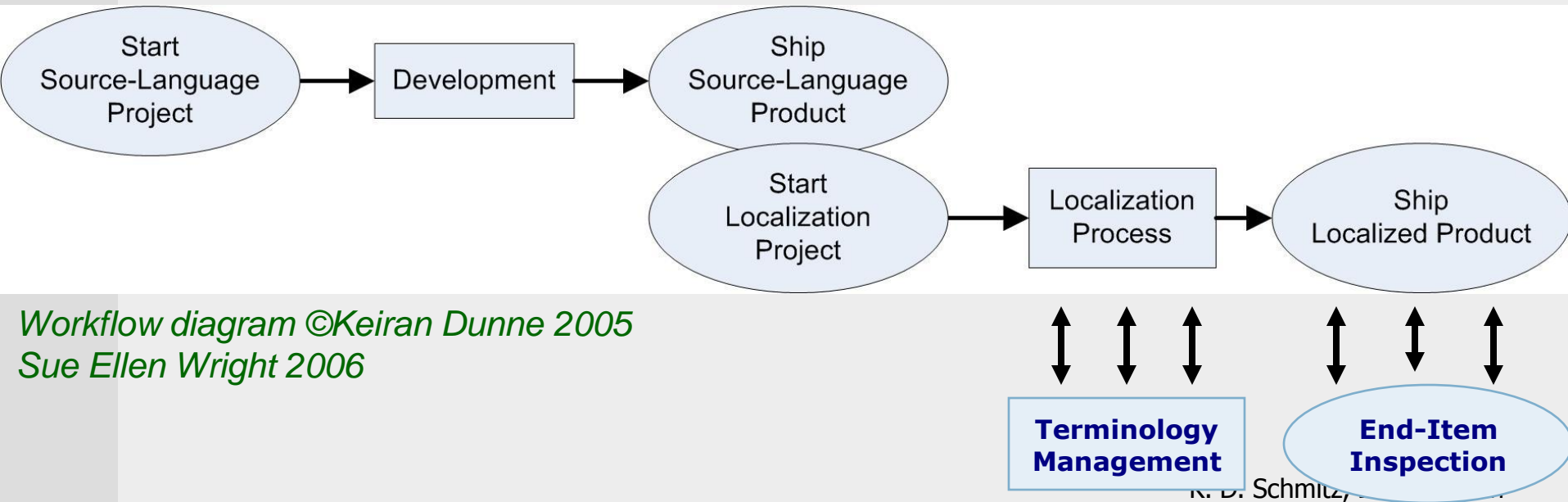


Terminology for software localization

- Especially for software localization, terminology has to be defined (and created) **before** the localization process starts.
- And: very often the localization starts **before** the “source text” is finalized, in order to assist a simultaneously shipping of the product in several markets at the same time.

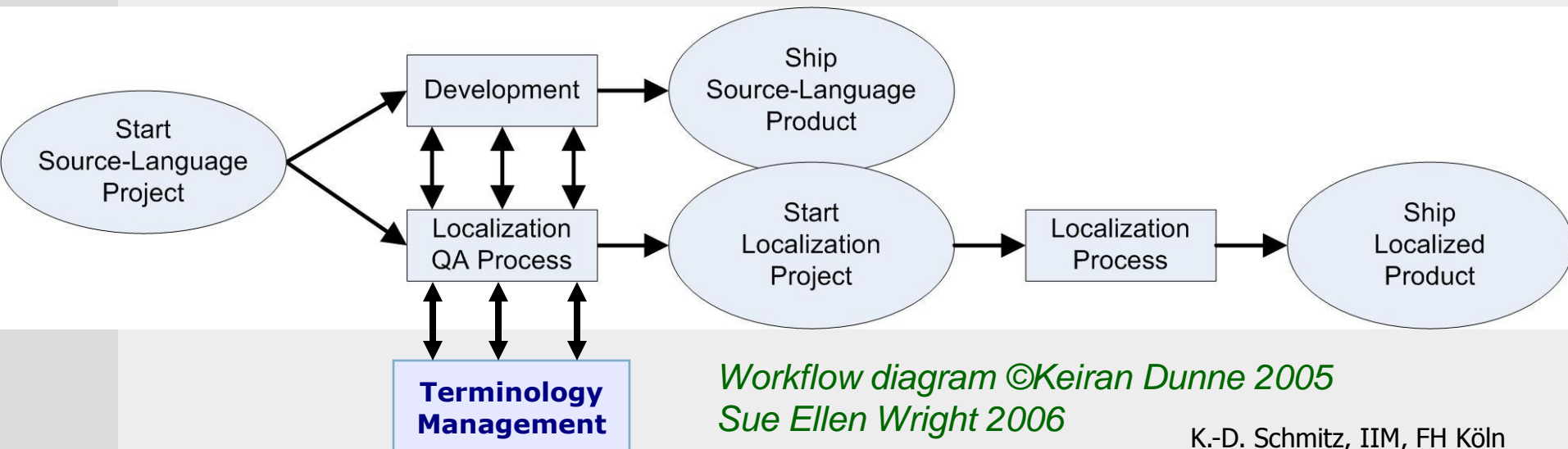
Terminology for software localization

- Traditional process:
 - Ad hoc terminology management
 - Reactive project-specific terminology management
 - No influence on document production, i18n

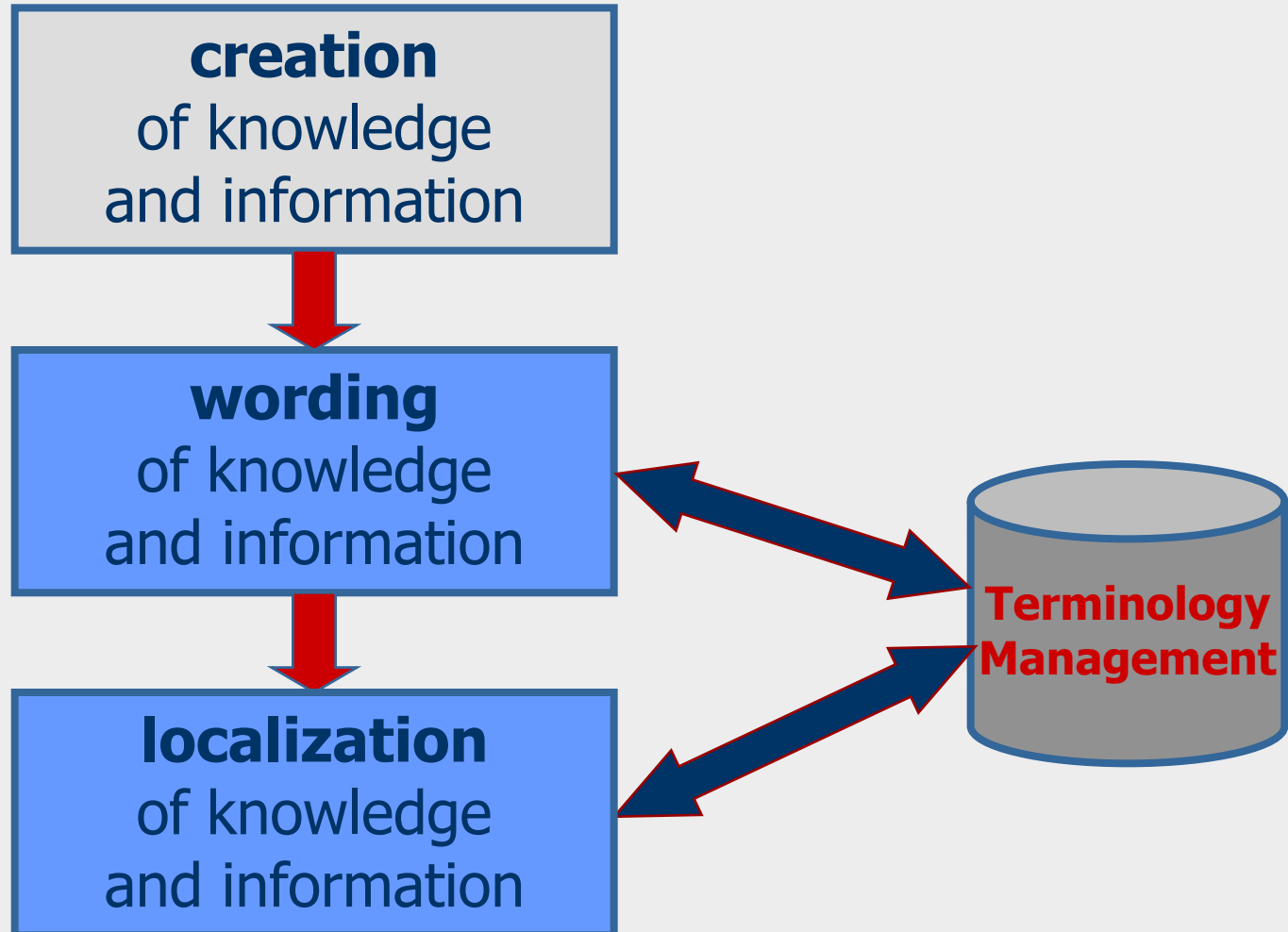


Terminology for software localization

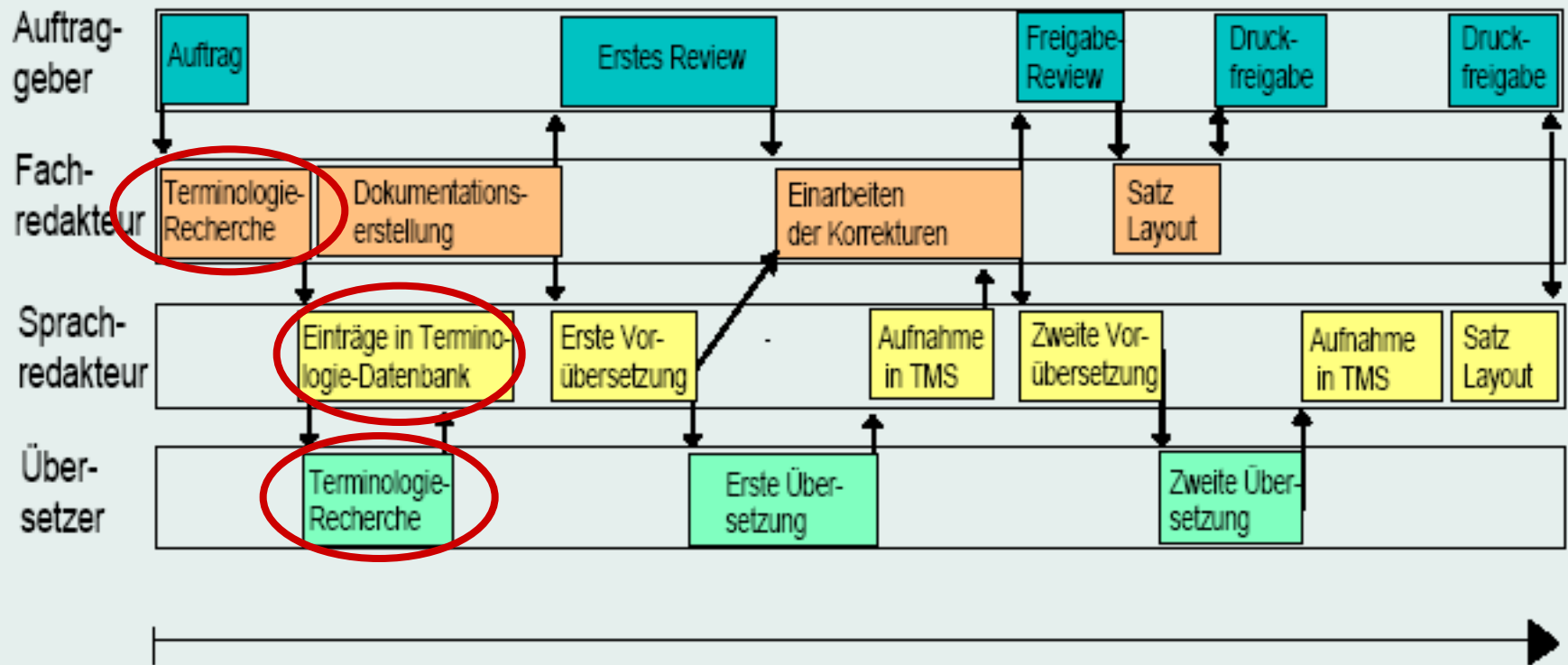
- Terminology management as a function of QA (Quality Assurance) management
- Terminology management and QA upstreamed to planning stage
- **Proactive terminology management**



Information development workflow



Typische Prozess-Schritte bei der mehrsprachigen Dokumentationserstellung heute



Susanne Murawski, 2005

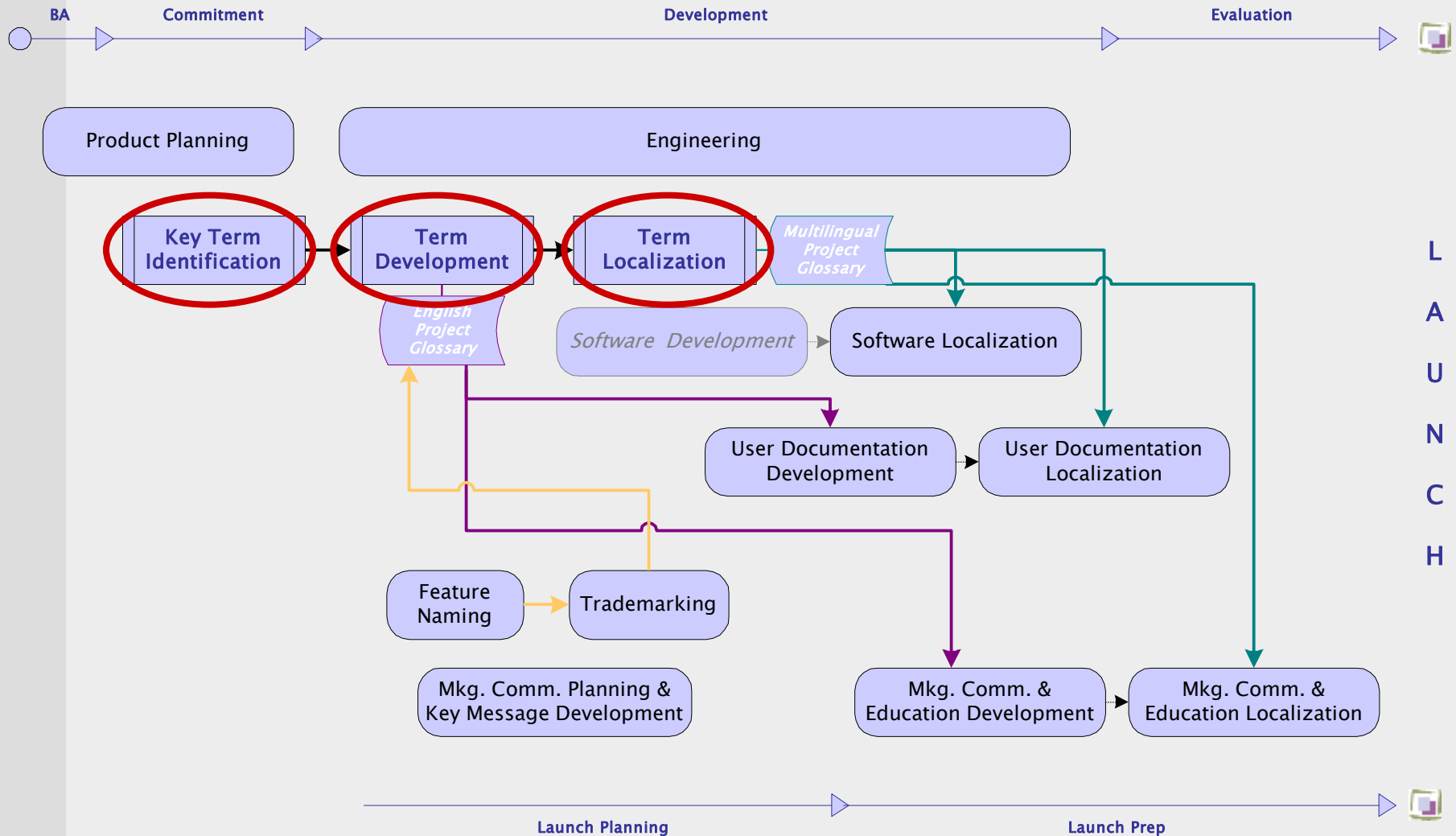
SDI-Seminar „Übersetzungsworkflow“

cognitas.

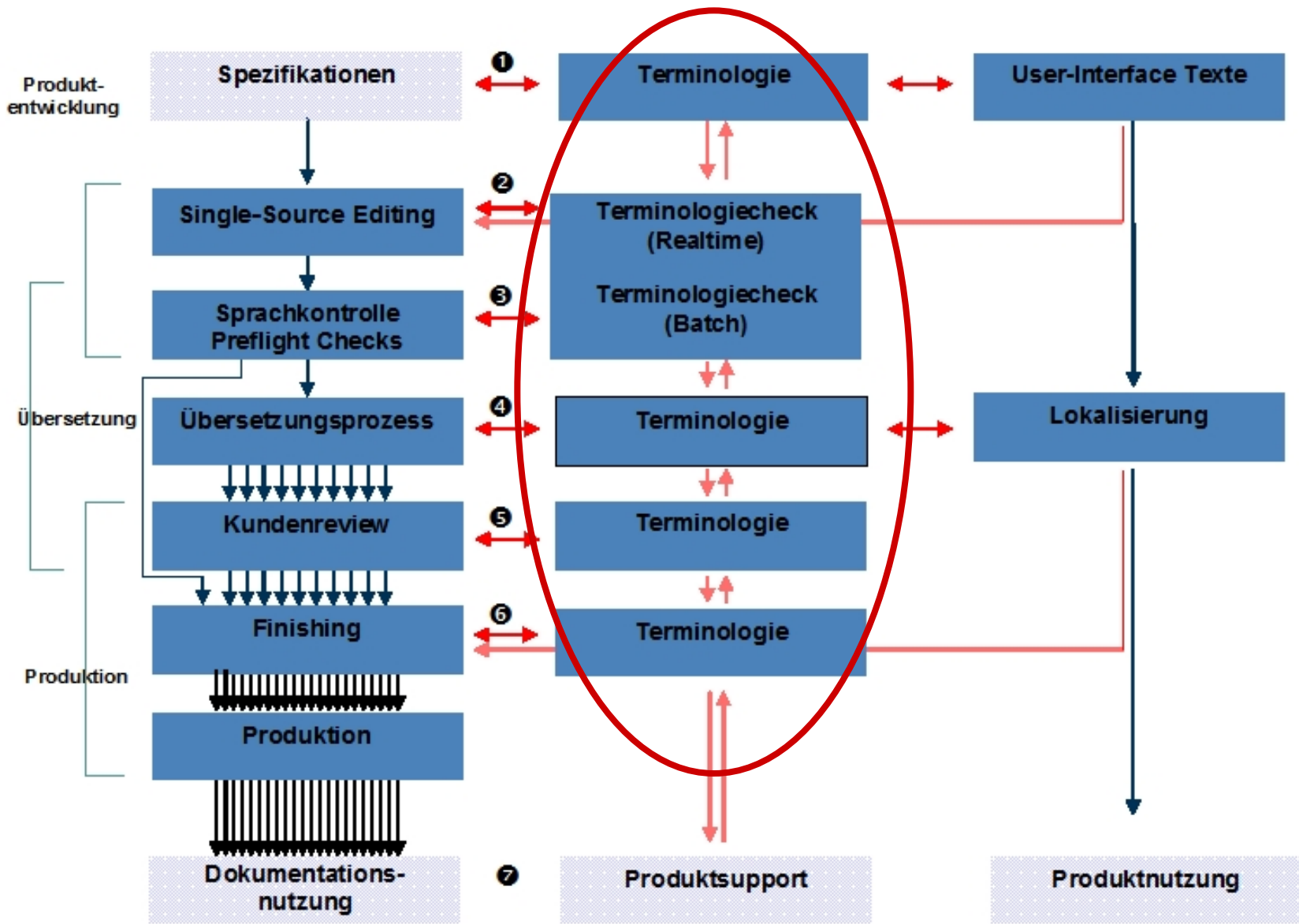
Terminology for the source text

- The selection of appropriate terminology with well defined concepts as well as the correct and consistent usage of terms are pre-conditions for successful information development
- Diligent terminology (management) does not only help end-users but also documentation and localization experts
(less errors in the source text, less questions at the author)
- **Terminology management is necessary for the whole information creation and localization process !**

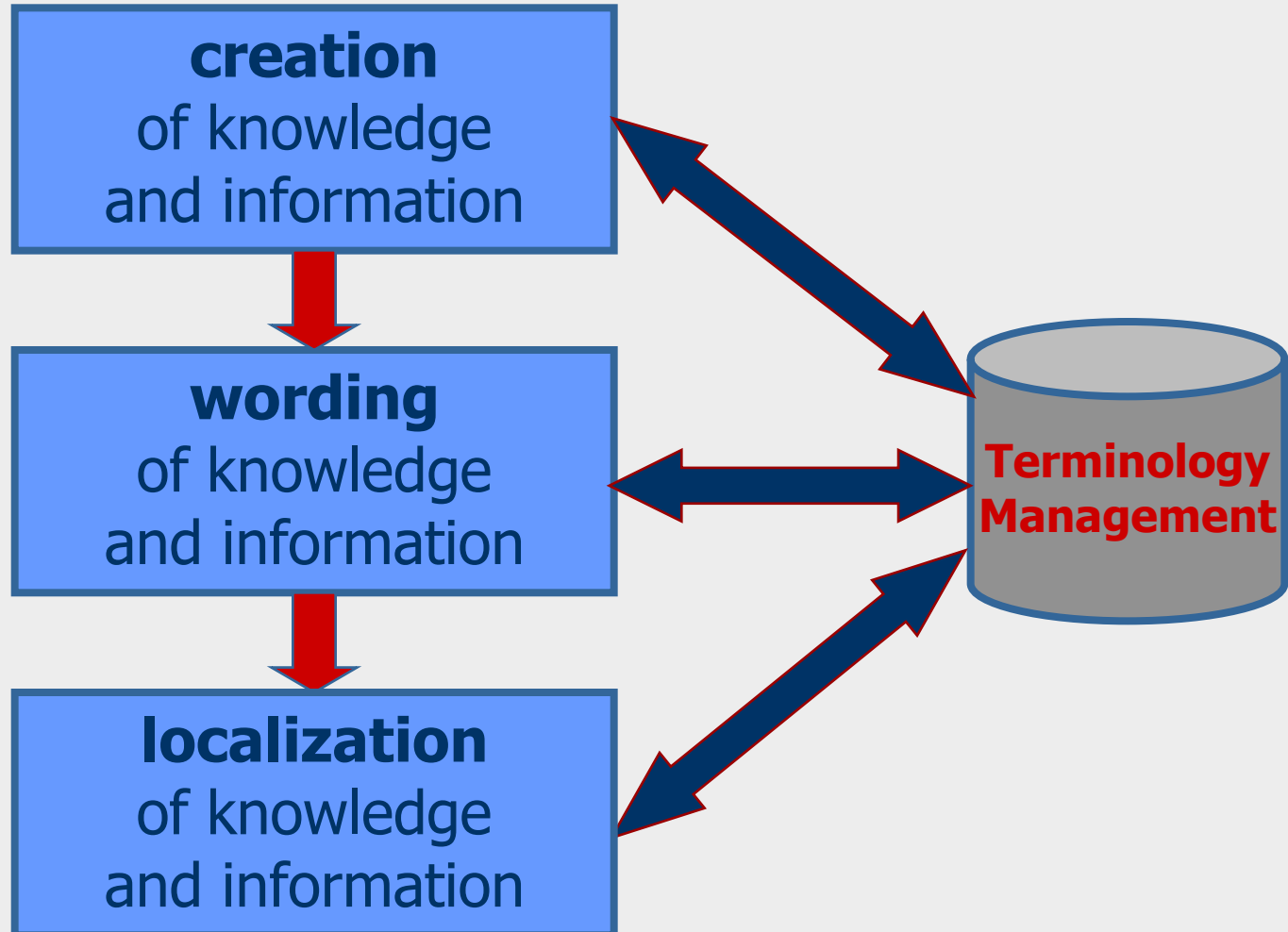
Medtronic Terminology Workflow



One World Publishing (OWP) Gesamtprozess und 7 mögliche Phasen der Terminologiepflege und -kontrolle



Information development workflow



Conclusion I

- High-quality terminology work is time-consuming and therefore expensive.
- The more persons or applications make use of the terminology, the better the benefit.
- The “earlier” terminology work starts, the more efficient will be the process of software development and software localization.
product liability, user satisfaction, time to market, etc.

Conclusion II

- terminology solutions in enterprises, taking into consideration all aspects of terminology theory and terminology management,
 - reduces efforts and costs for translation and localization
 - brings products faster to the market
 - supports user friendliness and user acceptance of products and documentation, also in the local market
 - (supports non-native speakers)

Conclusion III

- national and international standards offer help and support for enterprises:
 - designing terminology solutions,
 - defining working procedures,
 - implementing technical solutions,
 - interchanging terminological data.

**Thank you
for your attention**

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