Collection, consolidation and dissemination of multilingual terminology resources through cooperation of terminology institutions

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#### Terminology resources in new EU countries

- Many institutions involved in terminology development with insufficient cooperation
- Subject fields fragmented in different publications, data collections and files
- Different structure, incompleteness, inconsistency
- Different approaches in terminology development
- Large variety of incompatible storage formats (inc. many resources on paper only)
- Majority of resources are bilingual



# Examples of activities to consolidate national terminology

- termnet.lv Terminology portal of Terminology Commission of Latvia
- Terminology portal of Lithuanian State Language Commission





termnet.lv - Terminology portal of Terminology Commission of Latvia



Terminology portal of Lithuanian State Language Commission

EuroTermBank goal is to collect, harmonise and disseminate terminology resources in new EU member states, transferring experience from other EU terminology projects and accumulating competencies and efforts of the accessed countries.

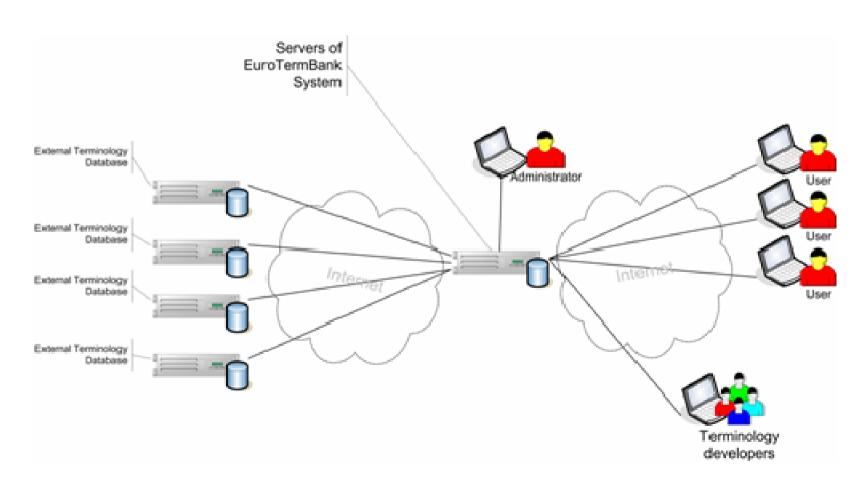


#### Focus areas of the EuroTermBank

- Development of <u>methodology</u> recommendations for new EU member states, aligned with the best practices in EU
- Establishment of <u>network</u> of national and international terminology institutions
- Consolidation, harmonization and centralization of fragmented terminology <u>resources</u>
- Creation of online terminology <u>data bank</u> with links to various external term databases and banks



# EuroTermBank – Single Access Point to Multilingual Terminology



# European Union eContent Programme Project

- Part of EU eContent programme aimed to stimulate the development and use of European digital content on the global networks and to promote the linguistic diversity in the information society
- Project partners are from Germany, Denmark, Estonia,
  Latvia, Lithuania, Hungary and Poland
- Partners comprise universities, private companies and institutions of state coordinated/regulated terminology



# Euro TermBank Participants & Roles

- Center for Language Technologies, University of Copenhagen – Denmark
  - Assessment of the best practice
  - Development of methodology recommendations
- University of Applied Sciences Cologne Germany
  - Development of organisational and legal frameworks
  - Networking of terminology institutions
- The Institute of the Lithuanian Language) Lithuania
  - Collection of national resources
  - Awareness, dissemination, marketing and exploitation
- Tilde Latvia
  - Coordinator
  - Project management
  - System development and implementation



# Euro TermBank Participants & Roles

- Latvian Academy of Sciences Latvia
  - General content selection, acquisition and processing
  - Collection of national resources
- MorphoLogic Hungary
  - Requirements analysis and system design
  - Collection of national resources
- Department of Estonian and Finno-Ugric Linguistics,
  University of Tartu Estonia
  - Assessment, evaluation and system elaboration
  - Collection of national resource
- Information Processing Centre Poland
  - Collection of national resource
  - Awareness and dissemination on national level



#### Users & Benefits for Users

- Targeted to both terminology users and terminology creators
- Single and free online access point to comprehensive terminology resources in different languages and fields
- Effective dissemination of terminology resources
- Involvement of general public in terminology development and dissemination through online discussions
- Facilitation of professional terminology development through authorized online database tools and discussions
- Sophisticated search mechanisms taking into account language specifics



# Usage Scenarios

- Translation
- Technical writing
- Reference/research
- Terminology development, lexicography
- Online data source for dictionary software and translation tools



Terminology Work Recommendations

Provide information and recommendations for all aspects of terminology work based on standards and best practice

- compilation of terms, conceptual analysis, creation of term entries
- Architecture, design and data structure of term base



#### Terminology scenarios

- The composition of goals and conditions that typically co-exist suggested 3 terminology scenarios
  - Local
  - National
  - International
- These 3 scenarios are different in crucial respects and also share some goals and conditions



# International Scenario – some Goals and Conditions

- Coordination
  - Approval/dismissal and harmonization of terms
- Multilingual terminology collection
- Usually well-organized infrastructure
- Broad domain coverage
- All types of language professionals represented
- Quality is high priority
- Exchangeability is high priority
- Availability is high priority



National Scenario – some Goals and Conditions

- Coordination and regulation
  - Approval/dismissal and harmonization of terms
- Mono- or bi-lingual terminology collection
- Usually well-organized infrastructure
- Broad domain coverage
- All types of language professionals represented
- Quality is high priority
- Exchangeability is high priority
- Availability is high priority



Local Scenario – some Goals and Conditions

- Translation
- Bi- or multi-lingual terminology collection
- Terminologists often not part of terminology team
- Focused domain coverage
- Tight time frames co-exist with and put limitations on requirements for – high quality
- Exchangeability is high priority
- Availability is not a priority



# Consolidation of terminology resources

- Identification of existing terminology resources
- Evaluation and Selection of Resources
- Content acquisition (contracts with owners)
- Content digitalisation and processing
- Modification to harmonize and meet structural and technical requirements

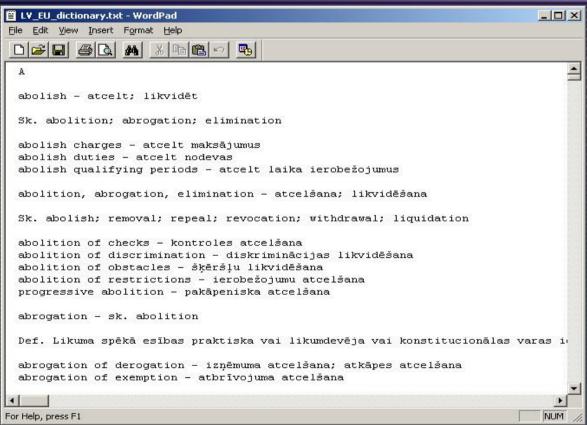


#### EE-EN-RU Mathematical terms in printed form

		555		M1 n	naagiline	107	M 33 majoreerimine	
. 361	lähenema	106	L 388 lüliti				35 Majoreerinine	
L 36	l lähenema piirväärtu-	approach a limit	приближаться к пределу		M			
L 36	2 lähenemine	approaching	приближение		maagiline ruut	magic square	магический квад-	
	3 lähim 4 lähis-	closest, nearest	ближайший прилежащий	M 2	maastikuformaat	landscape size	горизонтальный формат	7
	5 lähis- (= lähend-)	approximate	приближённый		maatriks	matrix	матрина	₹**
	5 lähiskaatet	adjacent side	прилежащий катет		maatriks-	matrix	матричный	
	7 lähiskülg	1:	прилежащая сто-		maatriksalgebra	matrix algebra	матричная алгебра	
	8 lähismurd		рона подходящая дробь		maatriksesitus	matrix representa-	матричное пред- ставление	
		convergent	исходищая дрооь		maatriksi astak	rank of a matrix	ранг матрины	
	9 lähte-	initial, original, starting	ный		maatriksi diagonaal	diagonal of a matrix	диагональ мат- рицы	
	0 lähteandmed (⇒ alg- andmed)	initial data, source data	исходные данные, начальные дан- ные	М 9	maatriksi elemen- taarteisendused	elementary opera- tions on matrices	элементарные опе- рации над мат- рицами	
	l lähtehulk	domain, initial set	множество отправ- ления		maatriksi jälg	spur of a matrix, trace of a matrix	след матрицы	
L 37	2 lähtepunkt (= algus- punkt)	initial point, starting point	исходная точка, начальная точка, отправная точка		maatriksi pööramine	inversion of a matrix, matrix inversion	обращение мат- рицы	e er
L 37	3 lähtesümbol	initial symbol	начальный символ		maatriksite liitmine	addition of matrices	сложение матрип	
L 37	4 lähtevõrrand	original equation	исходное уравне-		maatriksite ring	ring of matrices	кольцо матриц	0-
	, 1		ние, первона- чальное уравне- ние		maatriksmäng maatrikstähistus	matrix game matrix notation	матричная игра матричная симво-	
1 37	5 lähtuma	start 8	исходить	M 16	maatriksväärtustega	matrix-valued func-	лика	
L 37	6 lävi	threshold	порог		funktsioon	tion	матрица-функция, матричнознач- ная функция	ag-
L 37	7 lühem telg (⇒ väike- telg)	minor axis	малая ось	M 17	Mackey topoloogia Maclaurini rida	Mackey topology	топология Макки	
L 37	8 lühend	abbreviation ,	аббревиатура, со- кращение	M 19	madalaim numbri-	Maclaurin's series least significant digit	ряд Маклорена младший разряд	
L 37	9 lühendama	abbreviate, shorten	сокращать, уко- рачивать	M 20 1	madalamat järku magasin (⇐ pinu)	of lower order	низшего порядка	
L 38	0 lühendamine	abbreviation, short- ening	сокращение, уко- рачивание	M 22	nagasin (← pinu) nagasinalgoritm	stack stack algorithm	магазин, стек магазинный алго-	MS.
L 38	1 lühendatud	abbreviated, abrid- ged, con- tracted	сокращённый 🤌 🥫		magasinautomaat	push-down automa- ton	ритм магазинный авто-	
L 38	2 lühendatud korruta- mine	abbreviated mul- tiplication	сокращённое умножение	M 25 r	nagasini tipp nagistraal	top of stack	вершина стека	···
L 38	3 lühendatud tähis	abridged notation, contracted nota- tion	сокращённое обоз- начение	M 27 r	naha tõmbama nahatõmbamine naht (= mahukus)	cross out	вычёркивать вычёркивание	0.0
L 38	4 lühike	short	короткий	M 29 n		capacity	ёмкость	
	5 lühim	shortest	кратчайший	M 30 n			ёмкий	C.
	6 lüke (← translat- sioon)	shift, slide, trans- lation	перемещение, перенос, сдвиг	M 31 n	najorant	majorant	мажоранта	IXIT-
	7 lüli	link not	звено 164	М 33 п			мажорировать мажорирование	et.
L 38	8 lüliti	switch	переключатель			28	Y.	
				14*				

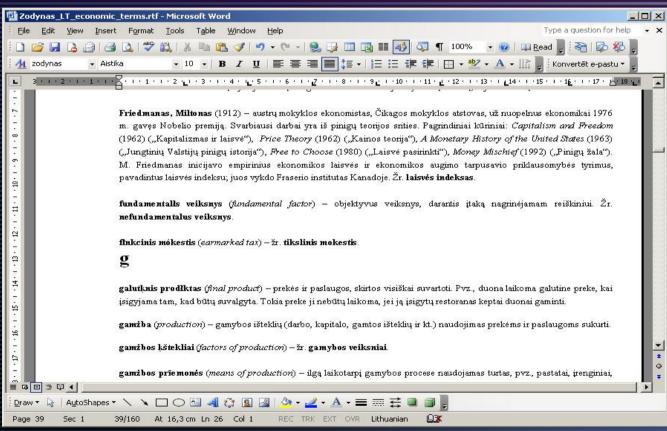


#### **EN-LV** Term collection in TXT format



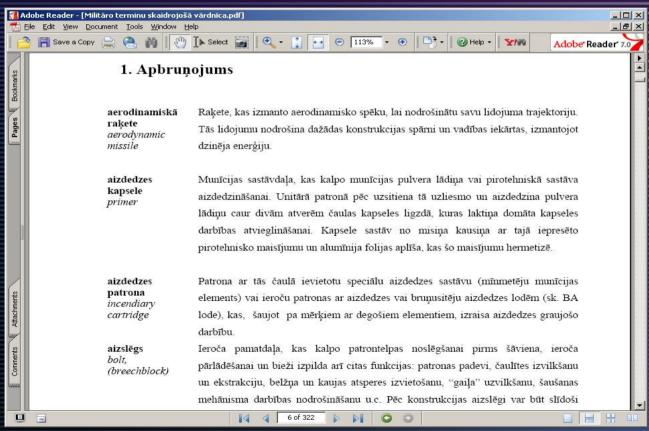


# LT Explanatory dictionary of Economy terminology in Word format



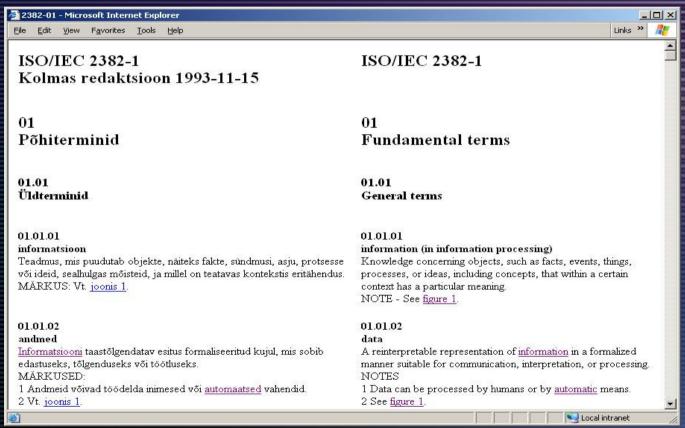


#### LV Military terminology in PDF format



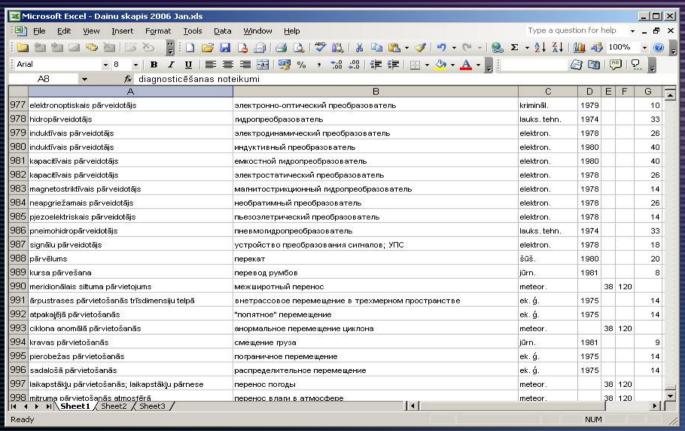


#### EE ISO IT Standard terminology in HTML



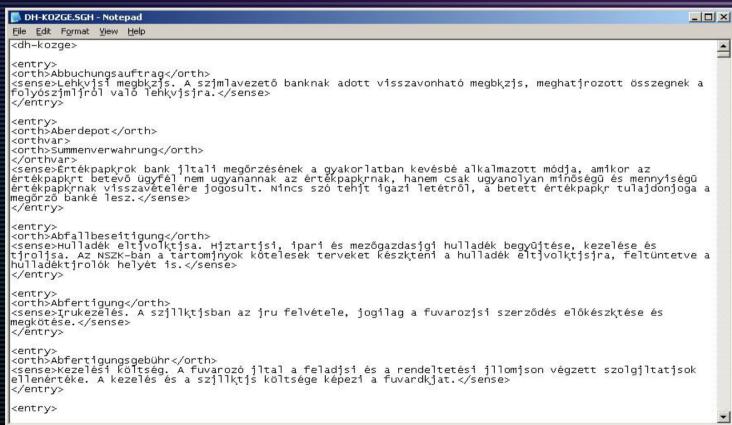


#### LV-RU Multi-Domain term list in Excel



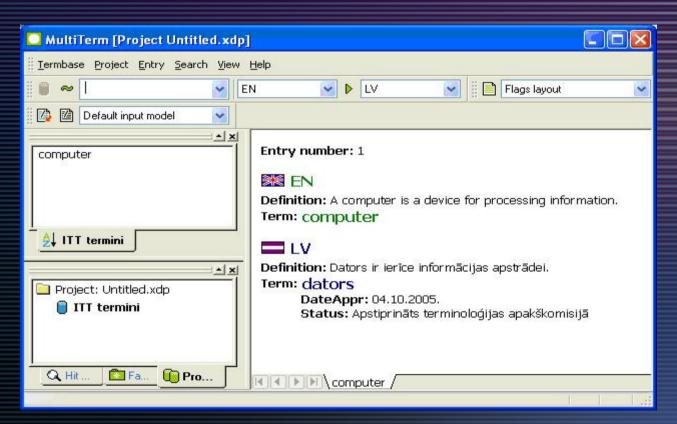


# GE-HU Financial Terminology in Tagged text format





#### EN-LV IT Termbase in Trados MultiTerm





# Standards – technical base for cooperation

- To ensure completeness and uniformity of data
- To ensure exchangeability of data
- To ensure wide applicability of data



# Terminology Standards for Resource Description and Data Modeling

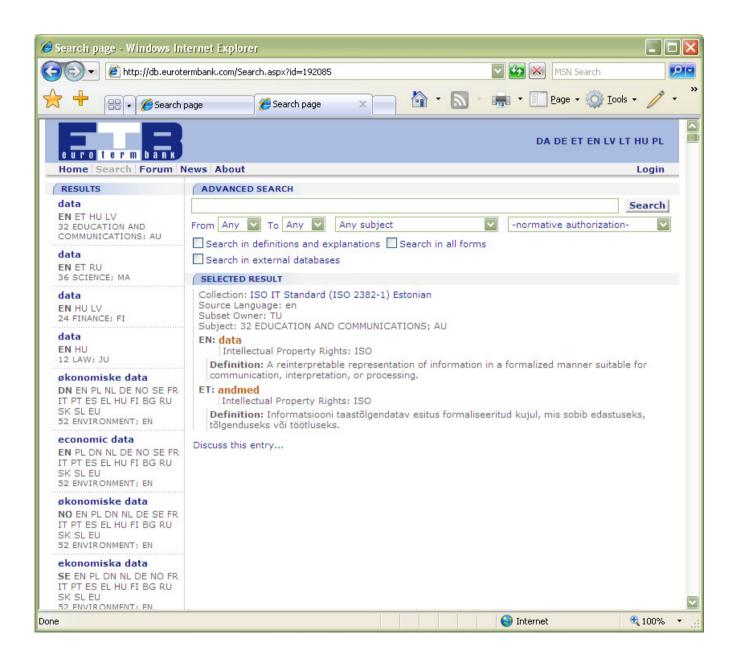
- TeDIF The Terminology Documentation Interchange Format
- ISO 12200: Computer applications in terminology Machinereadable terminology interchange format (MARTIF)
- ISO 12620: Computer applications in terminology Data categories
- ISO 16642: Computer applications in terminology Terminological markup framework (TMF)
- TBX: LISA (Localization Industry Standards Association) developed industry standard compliant with TMF, specifying data categories from ISO 12620 and adapting XML style compatible with MARTIF

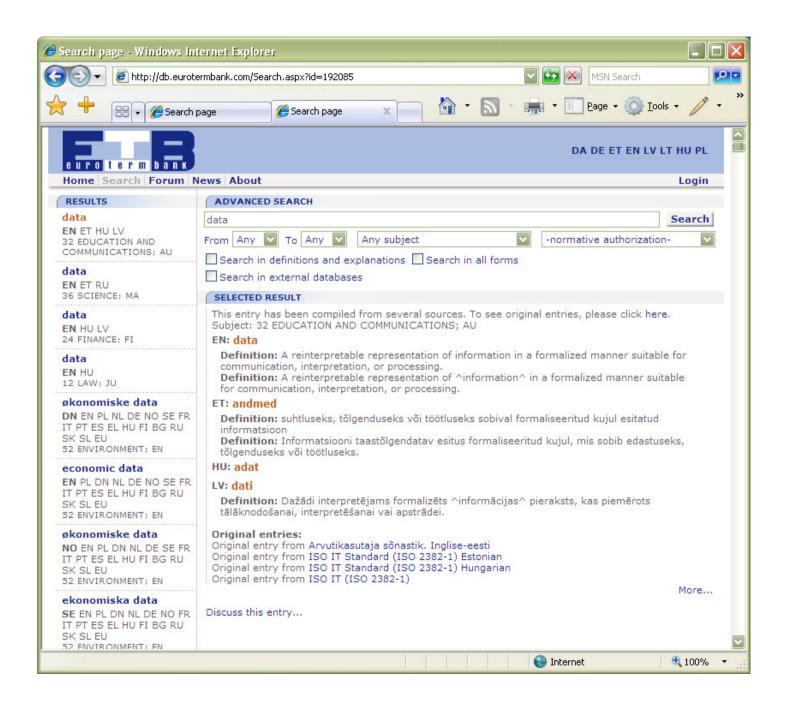


#### **Current Status and Further Developments**

- Current methodology and best practices in new EU member countries summarized
- Methodology recommendations prepared
- 468 terminology resources identified and described
- >700 000 entries collected, >400 000 in database,
  200 000 digitized from paper format
- Beta version of online database launched, publicly available from December 2006
- Developments on entry consolidation from several sources to form unified concept-oriented representation



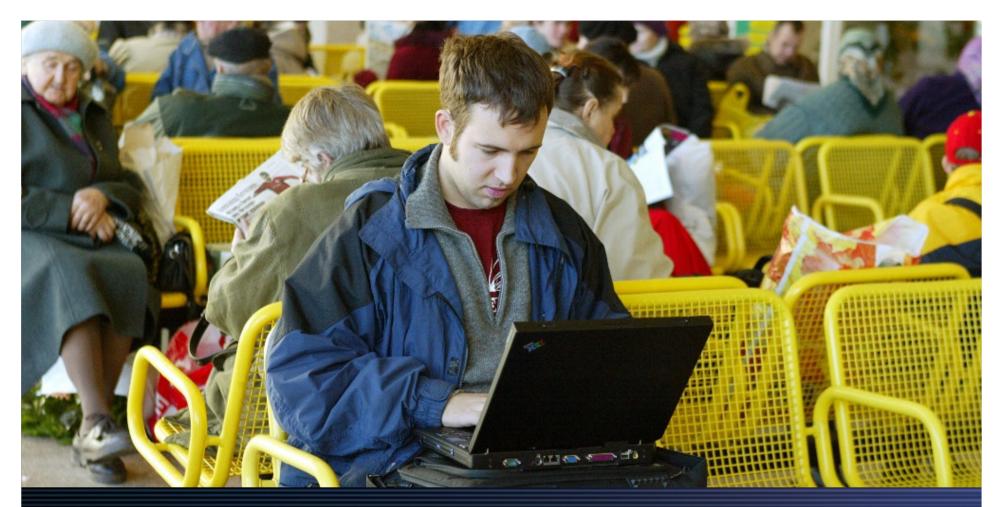




# Key Success Factors

- Assessment and accumulation of the best practice
- Reliance on ISO and industry standards
- Standardized procedures and agreements
- Distributed approach
- Openness and flexibility





Thank you and Welcome to

#### www.eurotermbank.com

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Terminology Summit 2006, Brussels 13-14 November, 2006.