eContent

Project acronym:	**EuroTermBank**		
Project title:	**Collection of Pan-European Terminology Resources through Cooperation of Terminology Institutions**		
Contract number:	**EDC - 22 267 - EuroTermBank**		
Starting date:	**01/01/2005**	**Ending date:**	**31/12/2006**

D8.4 Final Report

Period covered: 01/01/2005 to 31/12/2006

Version: *V 1.0*
Date: *26/02/2007*

Dissemination: *Public*

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Preface

This section describes the purpose, contents and administrative information of the EuroTermBank Project Final Report.

The purpose of this document is to report project results and provide main conclusions, covering project activities performed during the whole project period.

Section 1, Project summary and main conclusions provides a concise overview of the EuroTermBank project and its impact in the context of reaching eContent programme objectives, as well as conclusions and recommendations for future.

Section 2, Objectives and results provides a brief description of major project outputs in regard to the initially set project objectives.

Section 3, Work activities contains a consolidated project overview by workpackages. (Note that reports of tasks completed by each particular project partner were annexed to the interim reports 2005 and 2006.)

Section 4, Deliverables submitted to the EC lists all items provided to the European Commission during the whole project period.

Annex I is a summary of resources submitted to the project co-ordinator and included in the EuroTermBank database.

The Report covers the whole 24 month project period from the beginning until the end of the project.

This document is based on the reporting requirements as defined in Article 4 of the General Conditions and in Article 4.2.3 of Annex 1 of the model contract. Final financial statements of the project are submitted with this Report.

This report is prepared by EuroTermBank project co-ordinator TILDE.

1 Project summary, main conclusions and recommendations

Accessibility to harmonized multilingual terminology resources is a growing requirement for economic and social development, particularly in the European context. However, terminology creation and dissemination efforts are often fragmented across institutions, industries, and languages, specialized terminology collections are often difficult to access, a lot of terminological data are available only in print or in small and highly specialized term banks, and considerations of confidentiality and copyright often take precedence over accessibility and quality.

The EuroTermBank project addresses these weaknesses and problems by focusing on development of methodology for harmonisation of terminology processes, development of a web-based terminology data bank, consolidation of terminology content, networking of terminology professionals and achieving sustainability of the project results.

1.1 Project summary

In summary, EuroTermBank project has reached the following results:

• Best practice methodology for terminology management has been developed, documented and disseminated. It focuses on a number of important terminology processes, like terminology workflow, concept analysis, data structure, exchange formats, and others, analysing them and providing recommendations on three levels: local, national, and international. This novel approach facilitates identification of best practice that is particular for specific types of actors, instead of general recommendations for any terminology-related body at large. The key results of this research are available in the monograph "*Towards Consolidation of European Terminology Resources. Experience and Recommendations from EuroTermBank Project*".

• A wealth of terminology-related institutions, organizations and individuals, both public and private, have been networked and involved in different aspects of the EuroTermBank project, including national terminology institutions in the partner countries and multinational organizations like Infoterm and ISO. Terminology collections of a multitude of content providers have been networked and are co-available now through the EuroTermBank portal.

• With 8 project partners from 7 countries, The EuroTermBank project has been truly multi-national, bridging the terminology worlds of the "new" (Hungary, Poland, Estonia, Latvia, Lithuania) and the "old" (Germany, Denmark) Europe, as well as benefiting from public-private cooperation (partners include two private companies, three research institutes at universities, two state-financed research institutes and one academy).

• Based on the results of a user needs survey, a web-based terminology data bank has been designed, developed and implemented. It serves as a pan-European information service, ensuring general accessibility to comprehensive multilingual terminology resources on the Web at www.eurotermbank.com. As a single point of service, the EuroTermBank portal provides a consolidated search interface to its central database as well as other national and international terminology banks, interlinked with EuroTermBank.

• Currently, the EuroTermBank portal enables searching within approximately 600,000 terminology entries containing over 1.5 million terms in various languages and coming from

about 100 terminology collections. A number of these collections were not available in digital format before this project; a few specialized term banks were not available to the general public at all. The initial focus of EuroTermBank has been on the "new Europe", including Estonian, Hungarian, Latvian, Lithuanian, and Polish terms and their equivalents in English, German, French and other languages (overall, almost 30 languages are involved). No other database on European level contains such multitude of multilingual terminology that is available to the general public and includes the languages of "new" Europe. The EuroTermBank Consortium plans to continue to integrate available terminology resources into the EuroTermBank database, or interlink them via EuroTermBank as a central terminology gateway.

• EuroTermBank carefully researched terminology copyright issues, including Infoterm's methodology known as Code of Good Practice for Copyright in Terminology and copyright legislation in participating countries, to ensure proper treatment of content providers' rights. Terminology resource acquisition workflow was created and a set of legal documents and templates were developed and applied, in order to enter into mutually satisfactory contracts with the authors and content providers.

• To ensure compatibility, the portal uses a comprehensive data structure developed according to ISO standards 12200, 12620 and 16642. Terminology search is facilitated by application of categorization of Eurovoc, the official multilingual thesaurus of the EU. EuroTermBank is an important early implementation of TBX, the ISO-based LISA (Localization Industry Standard Association) terminology data exchange format, enabling easy data exchange with content providers and the user community.

• The EuroTermBank project establishes an innovative approach to terminology dissemination and availability, both at methodology and implementation levels, translating the new business model into the appropriate distributed architecture. The EuroTermBank portal enables entry compounding – an innovative approach of identifying matching multilingual terminology entries across all terminology collections in its database.

• The EuroTermBank business plan has been developed to identify further development directions and positioning of the EuroTermBank portal in the market. As established during dissemination activities, there is a lot of interest and market potential in this unique resource. Although several business models have been identified during project development phase, the most successful business model can only emerge during the initial exploitation period of this novel type of service. To ensure sustainability of project results, project partners have signed the Consortium Agreement, which provides the necessary legal framework for further activities and ensures the sustainability of EuroTermBank beyond the end of eContent financing in 2006.

1.2 Conclusions and recommendations

To conclude, the EuroTermBank project has resulted in a pan-European single point of multilingual terminology service that pools together terminology content from both public and private sectors and makes it conveniently accessible to the general public.

Its digital data collections network a considerable part of Europe, focusing on the new countries, and is easily scalable toward full European (as well as beyond European) coverage.

Its unique entry compounding technology is aimed at creating new multilingual links across the existing terminology collections.

It has established a best practice methodology in multilingual terminology management and a model of handling IPR issues of terminology, thus facilitating consolidation of international terminology activities.

It has identified key business opportunities to develop EuroTermBank into a commercially viable service that offers added value to its users.

For future development, the EuroTermBank Consortium has identified a few important objectives for further activities on the basis of these results:

- developing the notion of a new concept-based and multimedia enabled generation of terminology units, providing adequate methodology and system support, and exploring automated techniques for creation of semantically rich terminology data;

- extending the EuroTermBank resources geographically to cover other languages of the European Union (the established good contacts with the European terminology community will be used to promote and further develop EuroTermBank) and exploring opportunities beyond European Union;

- identifying and implementing novel ways of applying and enhancing EuroTermBank content, e.g. by integrating the EuroTermBank services in productivity environments for multilingual content creators.

2 Objectives and results

The EuroTermBank project was focused on reaching the following major objectives:

• Development of **methodology** for harmonisation of terminology processes in new EU member countries and for ensuring compatibility of terminological resources for data interchange and resource sharing;

• Creation of a **network** of terminology-related institutions and organizations (creators and holders of terminology resources) on both national and multinational levels to facilitate institutional cooperation and harmonisation, consolidation and dissemination of terminological resources;

• Design, development and implementation of a web-based terminology **data bank** to provide easy access to centralised terminology resources;

• Consolidation of terminology **content** from different sources and owners for creation of national terminological databases and further integration into the EuroTermBank database or their interlinking;

• Achieving **sustainability** of the project results.

To reach the objectives of the EuroTermBank project, the following eight workpackages were identified, included in Annex I (Description of Work) of the Contract and successfully executed, as the building blocks towards reaching the objectives of the project:

No	**Workpackage**	**Leading partner**
WP1	Development of methodology and standards	CST, University of Copenhagen
WP2	Networking, development of organizational and legal frameworks	IIM, Cologne University Of Applied Sciences
WP3	Requirements analysis and system design	MorphoLogic
WP4	Content selection, acquisition and processing	Latvian Academy of Sciences
WP5	System development and implementation	Tilde
WP6	Assessment, evaluation and system elaboration	University of Tartu
WP7	Awareness, dissemination, marketing and exploitation	Institute of Lithuanian Language
WP8	Project management	Tilde

The following subsections provide a more detailed description of the key results obtained in the EuroTermBank project.

2.1 Methodology

To identify and implement the methodology for multilingual terminology management, a thorough research of current terminology processes was performed, a survey of terminology actors in participating countries was carried out, existing terminology standards and best practices were identified and evaluated. Among the terminology processes that were investigated are the state regulated or coordinated terminology work of the new EU member countries and the IATE terminology cooperation. A number of terminology standardization projects were reviewed; applicable ISO standards were identified and researched.

As a result, best practice methodology for terminology management has been developed, documented and disseminated. It focuses on a number of important terminology processes, like terminology workflow, classification systems, concept analysis, data structure, exchange formats and validation. Three levels or scenarios were identified that provides the basis for analysis of terminology work and for providing recommendations: local scenario, national scenario, international scenario. This novel approach facilitates identification of best practice that is particular for specific types of actors, instead of general recommendations for any terminology-related body at large.

The analysis of applicable standards resulted in recommendations of usage of industry standards such as TBX (TermBase eXchange), applicable ISO standards, and standards created in other EU-funded research projects, such as TeDIF (Terminology Documentation Interchange Format).

These methodology recommendations and research results have been applied when preparing the EuroTermBank data bank, for example, its data structure, exchange formats, approach to data consolidation, and others, putting the theory to practice and helping improve it by providing immediate feedback. Therefore, the multilingual terminology management methodology developed within the EuroTermBank project is a valuable asset for any further developments and other projects in the field of multilingual terminology management.

EuroTermBank methodology recommendations and research results were presented in national workshops in all participating countries, contributing to the harmonization of terminology management processes across Europe.

EuroTermBank methodology recommendations and research results are available in Deliverable D.1.1 – *Current standards and best practices assessment report*, Deliverable D.1.2 *Final methodology report* and in numerous publications and presentations used for dissemination activities like a dedicated workshop in TKE 2005 conference in Copenhagen and papers and presentations in LREC 2006 conference in Genoa and TSTT (Terminology, Standardization and Technology Transfer) 2006 conference in Beijing.

Methodology as well as other key results of the EuroTermBank project has been consolidated in the monograph "*Towards Consolidation of European Terminology Resources. Experience and Recommendations from EuroTermBank Project*".

2.2 Networking

A wealth of terminology-related institutions, organizations and individuals, both public and private, have been involved in different aspects of the EuroTermBank project, including national terminology institutions in the partner countries and multinational organizations like

Infoterm and ISO. Terminology collections of a multitude of content providers have been networked and are co-available now through the EuroTermBank portal.

The Cooperation Council has been established, consisting of creators and holders of terminology resources, with the aim to facilitate cooperation in terminology development and dissemination, implement recommended methodology, consolidate terminology resources and promote data sharing and interchange.

Terminology creators and holders have been actively involved in the network: they were surveyed as part of the methodology research; they participated in the user needs questionnaire and evaluation of the pre-release data bank; national workshops were held in all participating countries involving terminology creators and holders.

Various networking activities with key international players were performed on individual basis, e.g., a workshop was held with ISO representatives in Vienna.

Another result of the networking workpackage activities was the establishment of a procedural, organizational and legal framework, oriented mainly towards content-related issues.

Research was done to identify and analyse the applicable EU directives and industry standards: the "Guide to Terminology Agreements" and "Code of Good Practice for Copyright in Terminology" by Infoterm. As a result, the contracting procedure was defined and a set of legal documents was created, adapted for use in the participating countries and applied for contracting content providers: Declaration of consent, Agreement for data available free of charge, Agreement of data available for a fee, Terms of use, Disclaimer, Copyright notice.

The core of the terminology network established in this project continues to be the EuroTermBank Consortium.

2.3 Data bank

A most tangible result of the EuroTermBank project is its web-based data bank, available at www.eurotermbank.com. As a single point of service, the EuroTermBank portal provides a consolidated search interface to its central database as well as other national and international terminology banks, interlinked with EuroTermBank.

The main features of the EuroTermBank system are the following:

- Sophisticated search mechanism, which includes morphology support, selection of source and target languages, selection of subject field, searching in definitions, and searching in external databases

- User-friendly display of results, identifying the languages involved, the subject field and the source collection, and enabling easy browsing of multiple results

- Entry compounding – consolidation of matching multilingual terminology entries across all terminology collections in the database

- Discussions services available to registered subscribers

- Editing, import and export functionality available to specific types of users

To develop the data bank, state-of-the-art software development methodology steps were carried out, as described further in this section.

To ensure usability and correspondence to user requirements, a user needs survey was conducted, including over 50 respondents from the participating countries. The results of this survey as well as methodology recommendations were taken into account in preparation of technical implementation and standards, resulting in *Deliverable 3.1, User Needs Consolidation – Requirements Specification Report*, and *Deliverable 3.2, Design Document*. These documents served as the backbone for the technical implementation of the data bank.

Appropriate development tools were selected, the necessary hardware and software were procured, the development environment was set up, and development was done. The developed system was populated with content and installed in the production environment.

The system was properly tested, including integrity tests, functional tests, and performance tests, completed by testing specialists. All defects identified were fixed by development. Final acceptance tests were performed prior to full release of the system.

In addition, a two-stage usability study (a qualitative and a quantitative survey) was conducted in the user community in all participating countries. Taking into account feedback from the involved translators, lexicographers and linguists, system adjustments were identified and implemented.

The EuroTermBank system has a distributed multi-tier architecture with centrally stored resources and seamless live integration with remote resources, optimizing users' experience according to its business model and philosophy of single point of service:

- the various types of users access the system through a web browser
- other applications can access the system through its API (SOAP protocol, querying TBX) and use the terminology data of the EuroTermBank
- the EuroTermBank system accesses external terminology bases and displays consolidated results from both its internal database and from any associated external databases

The following picture illustrates the distributed architecture of the EuroTermBank system, showing how the business logic layer interacts with the database layer (internal and external) and uses the user interface layer and SOAP protocol to communicate with the various types of system users:

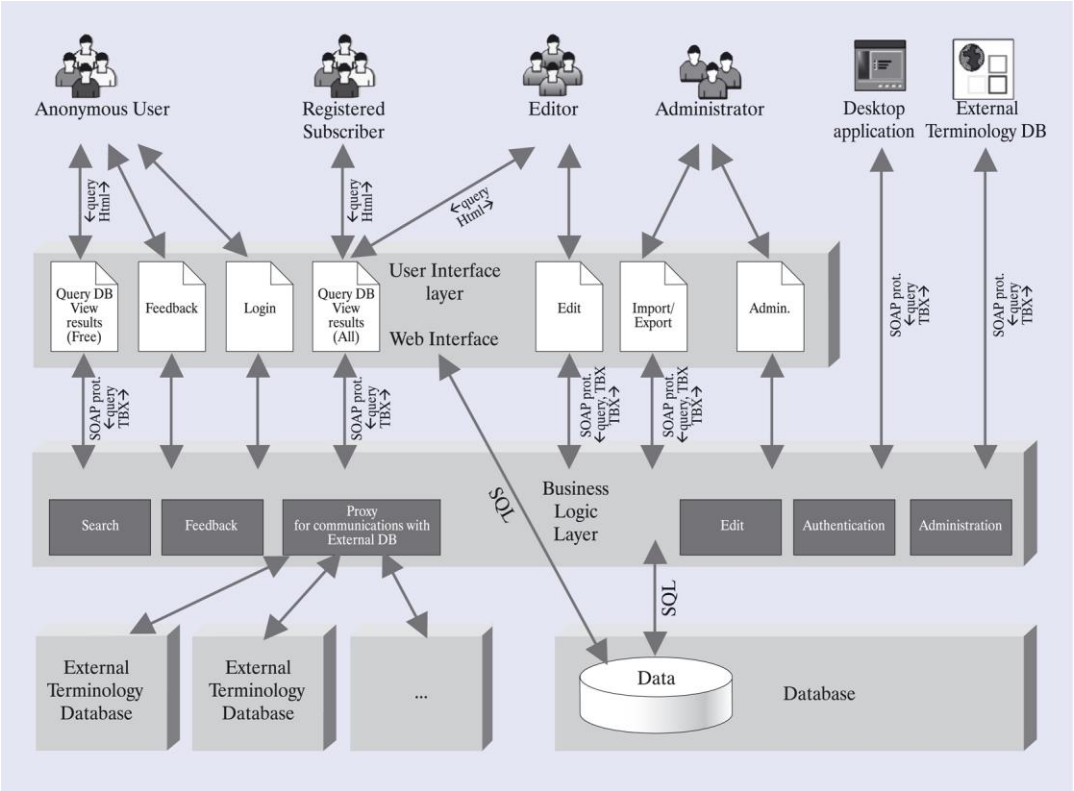


Figure : Distributed architecture of the EuroTermBank system.

The EuroTermBank system is based on open data exchange standards. It is localized for the languages of all partner countries.

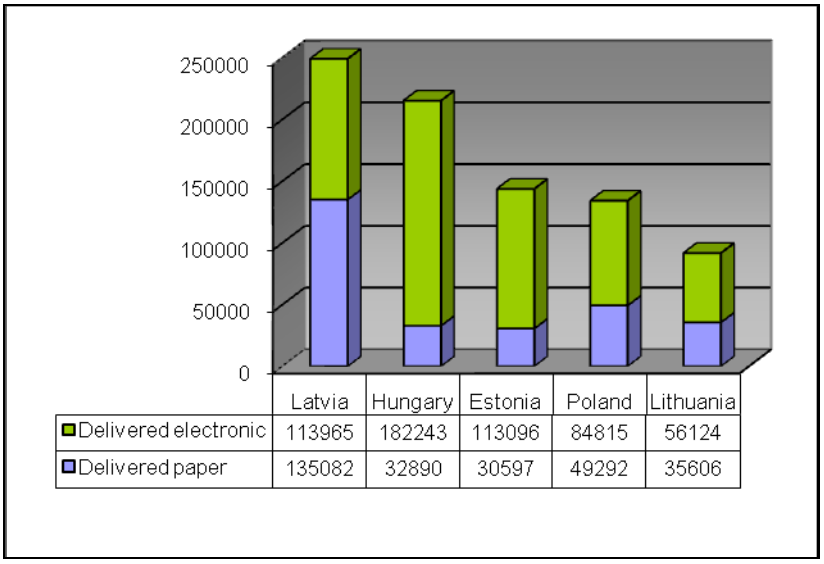
2.4 Content

Terminology content available through the EuroTermBank portal is a most important result and a great success of the EuroTermBank project. The expectations set forth in the Technical Annex of the EuroTermBank Contract with the EC are considerably exceeded, for example, almost 300 000 terms from paper sources were digitalized, compared to the planned 100 000 terms to be digitalized as per TA.

Currently, the EuroTermBank portal enables searching within approximately 600,000 terminology entries containing over 1.5 million terms in various languages and coming from about 100 terminology collections. A number of these collections were not available in digital format before this project; quite a few specialized term banks were not available to the general public. The initial focus of EuroTermBank has been on the "new Europe", including Estonian, Hungarian, Latvian, Lithuanian, and Polish terms and their equivalents in English, German, French and other languages (overall, almost 30 languages are involved). No other database on European level contains such multitude of multilingual terminology that is available to the general public and includes the languages of "new" Europe. The EuroTermBank Consortium plans to continue to integrate available terminology resources into the EuroTermBank database, or interlink them via EuroTermBank as a central terminology gateway.

Huge work was done in establishing criteria for selection of resources, preparing a questionnaire, identifying and describing resources in all participating countries, evaluating them, negotiating and establishing contractual relationships with authors and content holders.

Depending on the type of source material, the received resources were either digitalized, or converted electronically to the required TBX (TermBase eXchange) format. The framework, workflows, quality assurance criteria and procedures for resource conversion and digitalization were developed. A special converter was created for each type of resource, and an automated resource quality, integrity and format checking utility was developed, to test each processed resource. Digitalization included scanning, OCR, manual editing and transformation to TBX format. Electronic resources were converted with the converter. The picture below shows the approximate proportion of electronically delivered resources vs. paper resources that underwent full digitalization process:



	Latvia	Hungary	Estonia	Poland	Lithuania
Delivered electronic	113965	182243	113096	84815	56124
Delivered paper	135082	32890	30597	49292	35606

Figure : Proportion of electronic and paper sources.

A wide variety of subject fields were covered, including a large number of EU terms, as well as terminology used in technology, sciences and economics:

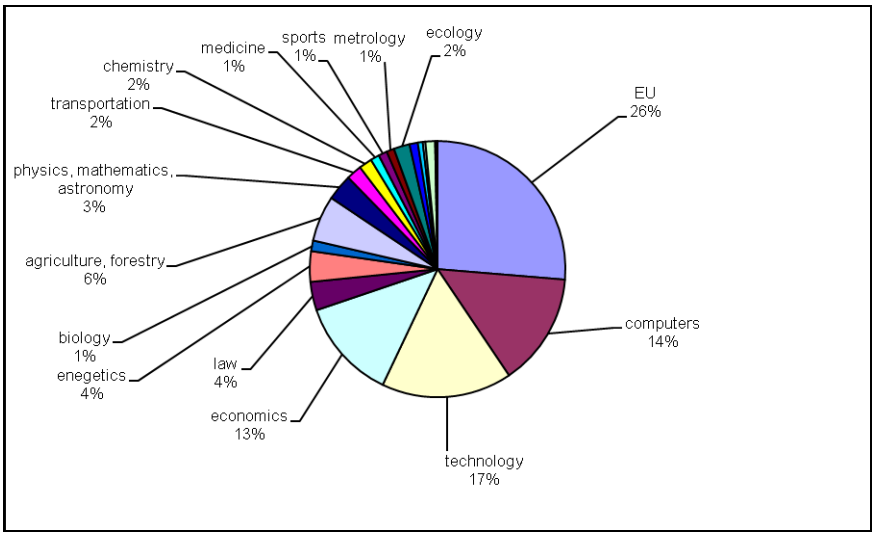


Figure : Distribution of subject fields in the EuroTermBank content.

In addition to resources included in the EuroTermBank database, the system currently enables searching in about 300 000 terms in external databases.

2.5 Treatment of IPR

EuroTermBank carefully researched terminology copyright issues, including Infoterm's methodology known as Code of Good Practice for Copyright in Terminology and national copyright legislation in participating countries, to ensure proper treatment of content providers' rights. Applicable EU directives and the Berne Convention were reviewed. The process of entering into contractual relationships with copyright holders – authors and publishers – was carefully designed. A set of legal documents and templates were developed, reviewed by lawyers of all partners and applied, in order to enter into mutually satisfactory contracts with the authors and content providers:

- Declaration of Consent
- Agreement for data available free of charge
- Agreement for data available for a fee
- Terms of Use
- Disclaimer
- Copyright Notice

The results of research in the copyright area are included in the appropriate deliverable (*D2.1 Standard document templates and procedures*) as well as in the book "*Towards Consolidation of European Terminology Resources. Experience and Recommendations from EuroTermBank Project*".

2.6 Use of and impact on standards

Application of industry standards has been of utmost importance in processing multilingual terminology resources.

To describe the multitude of various terminology resources across participating countries, the TeDIF (Terminology Documentation Interchange Format) standard was chosen. This standard establishes a common format for bibliographical and factual terminology data; it was developed in the framework of the TDCnet project, co-funded by the EU Commission. Several modifications and recommendations for improvement of TeDIF were made during the course of the project.

To ensure compatibility, EuroTermBank uses a comprehensive data structure that complies with ISO 12200, specifying the machine-readable terminology interchange format (MARTIF), ISO 12620, specifying the data categories used in computer applications in terminology, and ISO 16642, defining the terminological markup framework (TMF) for computer applications in terminology.

To enable easy term import, export and exchange with other terminology databases, the TBX (TermBase eXchange) standard was chosen. This standard was developed by the SALT project and later adopted by LISA (Localization Industry Standard Association). The EuroTermBank is an important early implementation of this standard that is prone to be adopted by many developers of terminology management tools and languages processing applications.

2.7 Innovation

EuroTermBank project establishes an innovative approach to terminology dissemination and availability. Traditionally, terminology resources have been dispersed, terminology research process requires consulting multiple sources in multiple formats, and the typical terminology collection is typically mono- or bilingual, highly specialized and difficult to access. EuroTermBank acts as a gateway to comprehensive multilingual terminology resources that are publicly available in a centralized location.

One of the key activities of the project has been development of methodology recommendations, best practices and standards for new EU member countries. The best practice of terminology management is identified on three levels: local/organizational, national, and multinational. This is an innovative approach in terminology methodology, which traditionally has been focused on creating mono- or bilingual terminology.

The innovative distributed architecture of the EuroTermBank system enables seamless communication of search results from remote databases to the user and acts as a web service available to other applications in real time.

The EuroTermBank portal provides an innovative approach of consolidating matching terminology entries across all terminology collections in its database. This mechanism has been named "entry compounding". It is a valuable research tool for terminologists, translators, localizers and other language workers.

2.8 Dissemination

Dissemination activities of the EuroTermBank have been directed towards the three levels of prospective user audiences:

- end-users at the local level, such as terminologists, translators, linguists
- actors at the national level, such as various terminology institutions
- actors at the international level, such as various multinational organizations

In line with the networking objective, dissemination activities were initiated early in the project by publishing articles and interviews in various professional publications and the mass media (about 20 publications), presenting the EuroTermBank project in numerous conferences and workshops (over 50 presentations, with about half of those in various professional conferences), and organizing individual meetings with key players, such as ISO, LISA, TermNet, and Infoterm. National EuroTermBank workshops were held in each participating country, to familiarize the national user communities with the EuroTermBank results.

Presentation materials that have been prepared and disseminated at various events include:

- project leaflet (several editions);
- project brochure;
- numerous presentations (ppt format);
- localized information in partners' websites;

- several press releases, including localized versions;

- the monograph *"Towards Consolidation of European Terminology Resources. Experience and Recommendations from EuroTermBank Project"*, summarizing the findings of the EuroTermBank project.

2.9 Sustainability

A key objective identified for the EuroTermBank project is ensuring sustainability of project results. As established during dissemination activities, there is a lot of interest and market potential in this unique product, both as a service and a tool. The EuroTermBank business plan has been developed to identify further development directions and positioning of the EuroTermBank portal in the market. It provides a competitive analysis of the terminology resources markets in participating countries, analyses the audience and the types of services to be offered by EuroTermBank, as well as provides SWOT analysis.

At the same time, it is important to note that EuroTermBank is unique in its segment, considering the scale and coverage of terminology resources across different countries, languages and subject domains, as well as the advantages of the single point of access and the state-of-the-art methodology. There is no well-established market for this type of multilingual terminology resources, mainly because limited or no resources have been available so far. Therefore, a new business model is to be created, which is a complex endeavour and may require several iterations of identifying, testing, adjusting and implementing new business directions. Therefore, a high degree of flexibility is vital in this proof-of-concept phase of marketing the EuroTermBank services.

As described in the business plan, EuroTermBank targets its services towards the following types of users: EU and international organizations, national governmental institutions, large corporations, translators and translation companies, publishing companies, libraries, universities, terminology and standardization organizations. In addition to these human and institutional users, the EuroTermBank resources can also be accessed as a web service by software applications developed by independent software vendors (ISVs).

According to the founding philosophy of the EuroTermBank project, general terminology lookup should and will be free of charge, excluding cases when resource owners agree to provide their resources for a fee only. The main source of income according to the EuroTermBank business plan is planned from added-value services provided to commercial users. Added-value services can be related to the handling (import, storage, export) of specific terminology collections, access by third-party tools (e.g. electronic dictionaries, office software, reference services), and integration with third-party tools (e.g. plug-ins for use with computer-assisted translation tools). The EuroTermBank business plan identifies several scenarios regarding payment models and subscription types.

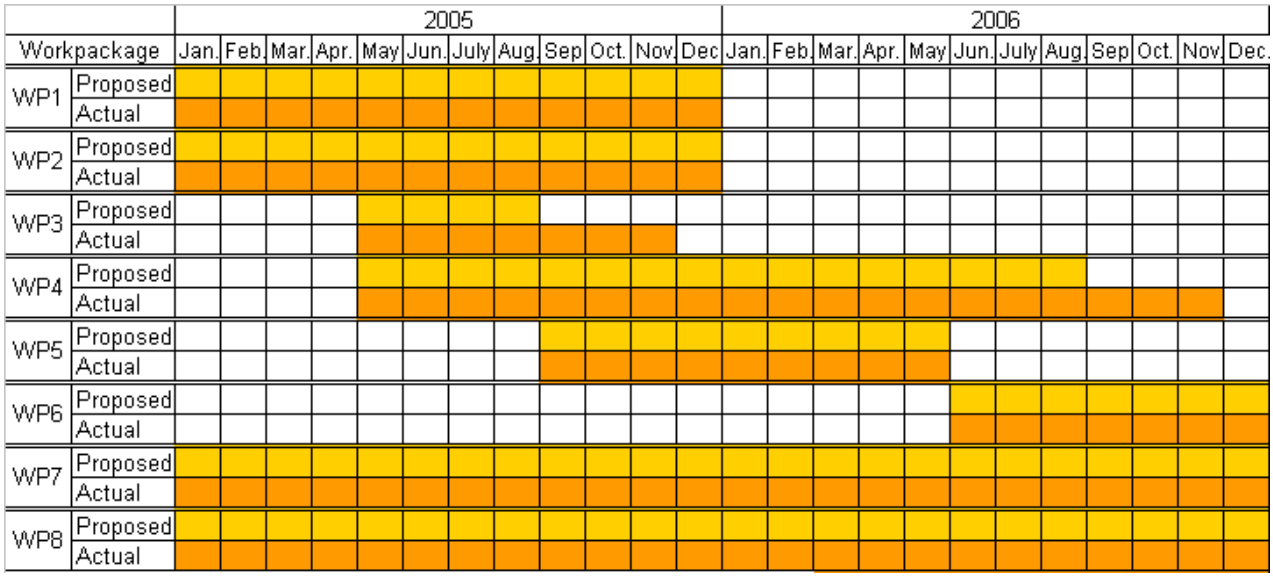
The importance of continuing networking with key players – terminology, localization and standardization organizations – is recognized in the business plan, to position EuroTermBank as a major European terminology gateway for professionals. For example, EuroTermBank is currently involved in discussing ways of cooperation with LISA (Localization Industry Standard Association); similar discussions have been successfully initiated with ISO and first contacts made with IATE.

And – last but not least – to ensure sustainability of project results, project partners have signed the Consortium Agreement, which provides the necessary legal framework, establishes key procedures of operation and identifies the responsible party for administration and hosting of the system.

3 Work activities

3.1 Project progress and planned activities

The table below shows overall project development and the planned activities during project period (01.01.2005 – 31.12.2006):



All the work packages described below are completed and the corresponding deliverables are submitted to the European Commission.

3.2 WP1 - Development of methodology and standards

The objectives of this WP are establishment of project organizational unit for supervising of methodology-related aspects of the Project and development of methodology for harmonisation of terminology processes in new EU member countries and for ensuring compatibility of terminological resources for data interchange and resource sharing.

WP1 leader - CST – University of Copenhagen

List of tasks performed during the reporting period:

Item No.	Task Title	List of activities and results, plans for next phase
Task 1.1	Establishing of "Methodology advisory Board"	The final establishment of the Methodology advisory board took place at the project workshop held in Cologne March 17th and 18th 2005. At this workshop the participants of the board were selected and its first meeting was held in which senior researcher Lina Henriksen (CST) was appointed chairman. The other members of the Methodology advisory board can be seen on the project website. As outlined in the contract, the board throughout the project time performed the function of a supervising unit with respect to methodology related aspects of the project.

Item No.	Task Title	List of activities and results, plans for next phase
Task 1.2	Assessment of current terminology processes, exiting standards and best practices	In order to initiate and guide the work on the report, Deliverable 1.1: *Current standards and best practices assessment report*, the CST group made presentations at the Cologne workshop and at the Budapest workshop held in the beginning of June, 2005. - *ISO Standards on Terminology* In order to establish a common knowledge basis of the existing ISO standards on terminology a walkthrough of the most important standards were given - *IATE Best Practice* As a practical example of the writing and implementation of best standards a presentation of the writing rules used in IATE (Inter-Agency Terminology Exchange) was given. - *D1.1 Content List* Based on preliminary version of the content list of Deliverable 1.1 a talk was given of the expected key elements of the report. As a result of the subsequent discussion, the content list was adjusted. - *D1.1 Draft. Current standards and best practices assessment report* This was a presentation given in order to reach consensus about both the structure and the content of a preliminary version of Deliverable 1.1. The work on writing this report is the result of a cooperative effort conducted by all project partners. In an iterative process the outline and the content of the report were discussed and agreed on. The project partners representing the new EU-countries provided information on terminology work in their own country while the project partners from Germany and Denmark have contributed by describing more internationally and language independently oriented terminology work. The result of task 1.2 can be considered as being a very practical reference book which will prove very beneficial with respect to the subsequent task in workpackage 1, which will give recommendations for how to conceive, collect and harmonise terminology material in the new EU-member states involved in the EuroTermBank project.
Task 1.3	Development of methodology and recommendations	The first phase of the work to be made in WP 1 was the mapping and description of terminological work conducted in the new EU member states. This work resulted in the Deliverable D.1.1 - *Current standards and best practices assessment report.*

Item No.	Task Title	List of activities and results, plans for next phase
		The partners from the new EU states made assessments of the terminological work done in their own countries described in D.1.1. In order to make these assessments homogenous, an evaluative table was made by CST. The partners scored various criteria with respect to degree of priority. For example a criterion was that the terminology should be available to other language professionals as fast as possible (even at the expense of a validation procedure). The partners then filled in the tables seen from different organisational angles. CST filled in the evaluative scores for terminological work done at international level - represented by the IATE term database. At the workshop in Riga held primo October, CST gave a presentation describing the status of the work on Deliverable 1.2 and giving some suggestions and guidelines on how to proceed in the further work on the *Final methodology report*. At the meeting it was decided to organise the work by distributing various responsibilities to the project partners both in terms of document editing tasks and more technical tasks. Centre for Language Technology managed the writing of best practice within terminological work at **the international level.** Latvian Academy of Sciences managed the writing of best practice within terminological work at **the national coordinated level.** Information Processing Centre managed the writing of best practice within terminological work seen from **the organisational level.** D.1.2 *Final methodology report* was finalised and delivered to the Commission in December 2005.

3.3 WP2 - Networking, development of organizational and legal frameworks

The objectives of this WP are creation of networking of organizations – creators and holders of terminology resources and development of standard project procedures and necessary document templates.

WP2 leader - IIM - Fachhochschule Koeln (University Of Applied Sciences Cologne)

List of tasks performed during the reporting period:

Item No.	Task Title	List of activities and results, plans for next phase
Task 2.1	Identification of existing terminology resources	A questionnaire was designed for the description of the existing term resources in Estonia, Hungary, Latvia, Lithuania, and Poland. The questionnaire in the form of an Excel table was sent out to the partners together with written instructions for

Item No.	Task Title	List of activities and results, plans for next phase
		use, with their feedback requested. The partners gathered information on the terminology resources available in their respective countries. After the Methodology Development Workshop held on 17 – 18 March at the University of Applied Sciences Cologne, the questionnaire was modified as agreed during the discussion. The questionnaire was posted on the project website, as well as "Criteria for the evaluation of terminology resources for the EuroTermBank Project" and a compilation of the ISO definitions of relevant concepts and terms in the document "Definitions of important concepts and terms for the EuroTermBank Project". In conjunction to above mentioned, IIM offered the possibility to describe the terminology resources in TeDIF (Terminology Documentation Interchange Format) developed in the project *European Terminology Documentation Centre Network (TDCnet).* This xml-based format allows to process and exchange the description of terminology resources automatically. TeDIF was presented at the Methodology Development Workshop and subsequently modified according to the special project requirements ("TeDIF – Terminology Documentation Interchange Format for EuroTermBank"). For the application of TeDIF a Document type definition (DTD) was elaborated. The partners sent their descriptions to IIM. During the project meeting in Budapest (2 – 3 June, 2005) IIM informed the partners of the status quo and led a discussion on the further proceeding. In the middle of June IIM presented an extensive survey on the terminology resources described so far, assessing the quality and completeness of the descriptions as well as the contents of the term resources. All described resources were collected in .xls and .xml format from the respective partners and methods for the analysis of the resources were developed. All questionnaires were analyzed and the results were recorded on Excel tables for further processing of data, which was performed within WP4. IIM established the structure of the Deliverable providing an overview on all data of the recorded resources in the project partners countries. "Criteria for the evaluation of terminology resources" and description of "TeDIF - Terminology Documentation Interchange Format" are also part of the Deliverable, which is a contribution on WP4. All results and analyses were used for the collection of the sample terms and for the digitalization and integration of at least 100,000 terms into EuroTermBank, which was performed in the framework of WP4.

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Task 2.2	Establishment of the Cooperation Council of terminology resource creators and holders	The Cooperation Council (CC) was established according to the contract during the Methodology Development Workshop held on 17 – 18 March, 2005 at the University of Applied Sciences Cologne. CC members list is available on the project Web site. The cooperation with the following networks and projects were considered as preferable: - Infoterm - IATE - INTERA - ENABLER - Lirics - European Central Bank Infoterm is involved in the project by the direct participation of its director, Christian Galinski, in the project. CST was given task to assure the contact to IATE (Eurodicautom is not maintained anymore). Representatives of all projects and networks were invited to participate in the Requirements determination workshop that took place in conjunction with the TKE 2005 conference in August 2005 in Copenhagen to discuss cooperation issues. Klaus-Dirk Schmitz participated at RaDT (Rat für Deutschsprachige Terminologie) meeting in November in order to present ETB and discuss cooperation possibilities. CC members actively participated in discussions and the draft of Deliverables, further networking activities, evaluating reports of project partners. In 2006 the cooperation with owners of terminology/copyright holders was intensified.
Task 2.3	Establishment of procedural, organisational and legal framework	In order to create a legal framework for the cooperation with terminology resource copyright holders IIM made a Model agreement for the provision of terminology resources available free of charge and an Agreement on the use and re-use of terminological data for resources liable to charges on the basis of the "Guide to Terminology Agreements" produced by Infoterm and published jointly by the European Language Resources Association (ELRA) and TermNet (The International Network for Terminology). They both take into account the specific requirements of the project and are drafted with regard to the relevant EU directives. They were presented together with an introduction to the topic during the project meeting in Budapest. A version of both agreements modified according to the results of the discussion was distributed at the end of June with the request to present them to the lawyers of the project partners from the new EU member states. After getting their feedback, the corresponding model agreements were drafted. IIM established the structure of Deliverable 2.2, provided the

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		overview on the topic of copyright with regard to terminology and databases, described the relations between the parties involved – ETB Consortium, copyright holders, and users – described the relevant EU Directives, visualised the contracting procedure as well as the relations between the contracting parties, revised the already existing documents "Guide to Terminology Agreements" and "Code of Good Practice for Terminology Work", both written with significant participation of the International Information Centre for Terminology (Infoterm), with regard to the purposes of EuroTermBank, and drafted the following document templates: - Declaration of Consent - Agreement for data available free of charge - Agreement for data available for a fee - Terms of Use - Disclaimer - Copyright Notice. Partners from Estonia (TU), Latvia (LAS, Tilde), Lithuania (LKI), and Poland (OPI) contributed a presentation of their respective national legislation written by legal experts from their countries, and provided their legal comments on the document drafts. MorphoLogic (Hungary) contributed a brief summary of the legal situation in Hungary and described their contracting practice. IIM included the contributions of the partners into the draft and revised the document templates according to the experts' comments. Cooperation Council (CC) member Danuta Kierzkowska provided a Declaration of Consent by Co-authors which was attached to the Agreement for data available free of charge and the Agreement for data available for a fee. IIM sent the document templates to IPR Helpdesk, an internet portal for questions regarding intellectual property rights co-funded by the EU, for a check. IPR Helpdesk confirmed that they cover obviously all relevant aspects of copyright agreements. Some CC members took active part in drafting of D2.2, especially Nijole Dudlauskiene (Lithuanian Standards Board) who provided very thorough and extensive comments on the documents, Danuta Kierzkowska (Polish Society of Sworn and Specialized Translators TEPIS) who contributed a detailed description of the Polish copyright and drafted a Declaration of Consent by Co-authors as described above, and Christian Galinski representing both Infoterm and IIM, who is one of the main authors of D2.2. All partners and CC partners attending the project meetings took an active part in the discussion of the complex topic of

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		copyright with regard to terminology and the Deliverable which was submitted to the Commission according to the schedule. On ISO TC 37 meeting in August cooperation with ISO and copyright issues with regard to standardised terminology (ISO terminology) were discussed. IIM informed the partners on the project started by The East Asia Forum on Terminology (EAFTerm) aiming at establishing a terminology database of all ISO standardised terminologies. Christian Galinski was involved in the discussion on copyright issues held in this connection, keeping the Consortium informed and representing its' interests in this respect. IIM got in touch with ISO Central Secretariat in order to negotiate the restrictive practice of communicating ISO standards.

3.4 WP3 - Requirements analysis and system design

The objective of this WP is to create design of the Web-based terminology data bank which includes database, user interface, basic hardware and software, content formats and interchange/import/export mechanisms.

WP3 leader - MORPHOLOGIC - Morphologic Számítástechnikai Korlátolt Felelősségű Társaság

List of tasks performed during the reporting period:

Item No.	Task Title	List of activities and results, plans for next phase
Task 3.1	Usability and requirements determination (surveys, interviews)	In an initial proposal, which was accepted by the consortium members, MorphoLogic drew up the general guidelines for: 1. Data owner requirements planning 2. Content format design 3. User interface design 4. Database and architecture design. MorphoLogic also drafted a questionnaire of 12 quite complex questions, to which the project partners reflected. This questionnaire was used to identify the potential user groups and the needs and requirements of each user group. Filling-in of the questionnaire was supervised, so an interviewer asked question from the potential users and indicated their preferences in a questionnaire. The questionnaire was filled in by 51 respondents from Estonia, Hungary, Latvia, Lithuania, and Poland. In each country, the project partners conducted the interviews. During the Budapest meeting, the project partners discussed the

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		results. After the discussion, MorphoLogic drafted a document – based on the findings of the questionnaire survey and an analysis of the websites mentioned by respondents in the survey – on the user requirements specification. After some minor revisions, Deliverable 3.1, the user Needs Consolidation – Requirements Specification Report was finished and submitted to the Commission.
Task 3.2	Development of Technical Specifications	Tilde prepared D3.2 Implementation Specification (Design Document). This deliverable is based on D1.1 Current standards and best practices assessment report and D3.1 User Needs Report. Development of specification started with analysis of User needs (D3.1), then the conceptual system architecture and design was created. Conceptual system design was presented and discussed at Budapest and Copenhagen meetings. During these meetings a lot of feedback and suggestions where submitted by project partners. It was initially planned to complete the Deliverable by end of August 2005, however the Partners agreed during the workshop in Copenhagen in August 2005 that the period of development and discussion of this important document should be extended until November 2005. D3.2 consists of three major parts: 1) General overview of the system's conceptual design and functional specifications 2) The logical and physical design of the system 3) Implementation and testing of the system. The Logical Data Structure part is based on the EuroTermBank data categories and data structure document prepared by CST and included as Appendix A of D3.2. System specification defines the TBX terminology data exchange standard as EuroTermBank internal data representation and exchange standard. The Physical Design part also defines hardware and software necessary for the system. Evaluation and selection of hardware, database management system and development tools was performed. Final decisions about database design, data categories and exchange formats where made at the Data Structure meeting in Riga in October 2005. The Deliverable is the outcome of Task 3.2 and 3.3.

3.5 WP4 - Content selection, acquisition and processing

The objective of this WP is to consolidate content from different sources and owners for creation of national terminological databases and further integration into the EuroTermBank database.

WP4 leader - LAS - Latvian Academy of Sciences

Item No.	Tasks Title	List of activities and results
Task 4.1	Content prioritization and selection	According to the questionnaire drafted by IIM the information about the existing term resources, their holders, status, etc. in Estonia, Hungary, Latvia, Lithuania and Poland was gathered for assessment, selection and prioritisation of content for EuroTermBank. After completion of Deliverable 1.1 prepared by CST the collected material was assessed to opt for the best model of EuroTermBank entries data structure. Items about resource acquisition, copyright issues, etc. were discussed during the workshops in Cologne and Budapest. LAS brought forward to the partners a more mature approach to content selection and subject field prioritisation that was presented to partners during Copenhagen workshop 19 August 2005). Presentation of Prof. V.Skujina "Questionnaire for selection of content for 2000 entries with prioritised subject field terminology in all partner languages (prepared on the basis of D.1.1 and analysis of terminology resources by IIM) was created. To start the digitalization of at least 100,000 terms and integrate them into the EuroTermBank, a collection of sample terms was accomplished before. IIM has worked out a proposal for the selection out of the analysis of all terminology resources according to the different analysis tables (part of WP2.1). Final version of D2.1 "Identification of existing terminology resources" by partners was reviewed. With the purpose to ensure the maximum overlapping of terminology in all partner languages sample terms of ETB database decision was taken to fill it up by using ISO standards and terms of the following subject fields: Energetics, Economy, Computer science, Production and industry, Culture. Partners identified existing term bases in their countries. The status of terms presented in those databases was revised. The status and quality of various term dictionaries were evaluated, also their possibility to be used for the ETB project needs. The lists of dictionaries were presented.

Item No.	Tasks Title	List of activities and results
		Questionnaire about copyright status of delivered resources was generated and sent to all partners. Partners prepared the update of the analysis of the resources for further processing and a presentation on the description of the update for the Vilnius Progress and Coordination Meeting. Analysis of delivered resources (as of March 17, 2006) and their copyright status was presented at project workshop in Vilnius. Analysis showed that 47 terminology resources (~ 290 000 terms) have been delivered to SIA TILDE for incorporation into ETB database. The presentation "Current situation with delivered resources, their copyright status and resources delivering plan in future" was created by LAS for the project workshop in Vilnius. A detailed plan of bi-weekly delivery of the electronic un printed resources was communicated to each partner. Analysis of delivered resources (as of June 14, 2006) and their copyright status was prepared for project workshop in Tartu. Analysis showed that 83 terminology resources (~ 560 000 terms) have been delivered to SIA TILDE for incorporation into ETB database. The presentation "Current situation with delivered resources, their copyright status and resources delivering plan in future" was created and presented in Tartu. Analysis of delivered resources (as of June 30, 2006) and their copyright status was prepared for the semestrial report. Analysis showed that 90 terminology resources (~ 588 000 terms have been delivered to SIA TILDE for incorporation into the ETB database. 7 additional Questionnaires for resources have been filled in: - "Linux" dictionary; - Dictionary of Radio electronics terms; - Dictionary of Modern computer programs and network; - Dictionary of Telecommunication Terms - Educational dictionary of terminology; - Vascular plants of Lithuania; - Dictionary of Botanical Plants Names. Several dictionaries for further processing were selected: o Dictionary of Library science and bibliography terms; o Five Languages Explanatory Dictionary of Metrology; o English-Lithuanian Dictionary of Computing Terms. Dictionary of linguistic terms submitted. New terminology resources were selected (environmental protection, public administration, biochemistry, military, medical) regarding their

Item No.	Tasks Title	List of activities and results
		usefulness for the EuroTermBank data base. 86 "other" paper and electronic resources have been described, identifying: subject field, originator, subset owner, inputter, origination date. Selected terminology resources were surveyed.
Task 4.2	Establishing of contractual relationships with content (electronic, hardcopy) and content access rights acquisition	IIM drafted a Model agreement for the provision of terminology resources available free of charge and an Agreement on the use and re-use of terminological data for resources liable to charges on the basis of the "Guide to Terminology Agreements" produced by Infoterm. The offered versions were discussed during the workshop in Budapest. Modified versions of both agreements were submitted to lawyers for getting their feedback and implementing in draft model agreements. New contracts were signed with resource owners, e.g. LAS signed an agreement with the University of Latvia Institute of Mathematics and Computer Sciences granting LAS a right to use a term collection that covers various subject fields (approximately 114 000 entries). Thus these terms may be used by ETB Consortium. In order to obtain a right to use the terms included in National standards for the needs of ETB project, LAS held talks with and sent an official letter to the state LLC "Latvian Standard". In order to obtain a right to use the terms included in National standards for the needs of ETB project, LKI held negotiations with Lithuanian Standardisation Department for fair use of standard terms in ETB pilot version of 2000 terms. An "Agreement concerning the conditions of work within the LAS Terminology Commission" was drawn up. The latter stipulates that LAS is granted the right to use terms created within LAS TC and approved by LAS TC including a paragraph, which grants LAS the right to use the terms. At the project workshop in Vilnius were discussions about how to establish contractual relationships with content resource owners in order to collect and integrate term resources to be stored in the EuroTermBank term database. As of June 30, 2006, the partners have established contractual relationships with copyright holders of 81 delivered resources (~564 000 terms). LAS has settled signing of the declarations of consent that were signed by the following resource holders (compilers, creators): - Terminology collection on information technology and telecommunications; - Explanatory dictionary of military terms; - Dictionary of economics, office work, management terms;

Item No.	Tasks Title	List of activities and results
		- International Civil Aviation terminology, definitions and abbreviations; - Sports games dictionary; - Athletics dictionary; - Dictionary of Gymnastics; - Terminology collection on chemistry and chemical technology; - Terminology collection of building terms; - English-Latvian customs dictionary; - English-Latvian tax dictionary. The permission to reproduce the following ISO standards in ETB database was received from ISO headquarters: - ISO/IEC 2382-1:1993 Information technology - Vocabulary; - ISO 13943:2000 Fire safety - Vocabulary; - ISO 9000:2005 Quality management systems – Fundamentals and Vocabulary. The permission to reproduce CEN and its national member's standards in ETB database was received in e-mail form. Decision taken to establish contractual relationships with CEN by project partner IIM. Activities in Lithuania: March 27 - meeting with director of the Institute of Botany Mr. Valerijus Rasomavicius and senior research worker of Institute of Botany Mr. Zigmantas Gudžinskas. Negotiations concerning the digitalization and using for ETB needs of 2 dictionaries were pursued: 1) „Dictionary of Plant Names", 2) Z.Gudžinskas „Vascular Plants of Lithuania". Status – agreed to sign Declaration *of consent.* March 31 – The License of using Eurovoc Thesaurus Lithuanian version for ETB needs has been signed with Office of Official Publications of the European Communities. May 3 –meeting with the authors of the "Five Languages Explanatory Dictionary of Metrology" Mr. V. Valiukėnas and Mr. P.J. Žilinskas - non-commercial agreement (CANS) was signed. May 10 - meeting with the director of Science & Encyclopaedia Publishing Institute R. Kareckas and Editorial Manager of Science Edition & Encyclopedia Mrs. V.Bogusiene. The non commercial agreement (CANS) was signed for obtaining "Five Languages Explanatory Dictionary of Metrology" for ETB project. May 12 - meeting with the Director of Martynas Mažvydas National Library of Lithuania Mr. V. A. Gudaitis and presented

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		the EuroTermBank project. Declaration of consent has been signed and agreed that „Dictionary of Library science and bibliography terms" would be given for digitalization and including into ETB system. June 23 – meeting with director of Publishing house „Šviesa" A. Butkus and editor-in-chief Mrs. L. Rasimavičiene concerning cooperation with the ETB project and the dictionary, issued by K. Gaivenis and St. Keinys „Dictionary of linguistic terms". The "Declaration of Consent" has been signed. June 23 –meeting with prof. K. V. Paulauskas, the author of „Lithuanian-English-Russian Dictionary of Computing". Author signed the Declaration of consent. LAS has settled signing of the declarations of consent with the following resource holders (compilers, creators): - Dictionary of mechanical engineering; - Explanatory dictionary of mechanics basic terms - LAS terminology cards' collection; - The terminology database of LAS. - Dictionary of mechanics terminology. Hungary: Existing contractual relations with resource owners were reviewed for resources selected by the ETB Consortium management. All contracts were found sufficient to provide for the use of the respective resource in EuroTermBank. The contracts were delivered, both in the original language (Hungarian) and translated into English. MorphoLogic signed a declaration stating the above fact. Deliverable D4.1 "Contracts with content resource owners" was prepared by LAS and delivered to the project coordinator for review and submission to the EC. As of September 30, 2006 the partners have established contractual relationships with copyright holders of 101 delivered resources (~ 720 000 terms) and 2 external databases' holders (~ 172 000 terms). As of December 31, 2006 the partners established contractual relationships with copyright holders of 117 delivered resources (822 710 terms) and 2 external database holders (~ 172 000 terms).
Task 4.3	Content digitalization	The following terminology resources were delivered by LAS to SIA Tilde for incorporation into the ETB database: - Terminology collection on information technology and telecommunications (~ 4900 entries in digital format); - Explanatory dictionary of military terms (1558 records in

Item No.	Tasks Title	List of activities and results
		digital format); - Dictionary of economics, office work, management (11000 entries in digital format); - LAS Terminology Card File (5850 entries in XLS file format); - Sports games dictionary (2296 entries in digital format); - Athletics dictionary (678 entries in digital format); - Dictionary of Gymnastics (4523 entries in digital format); - Latvian–Russian Dictionary of Chemistry and Chemical Technology (11631 terms in digital format); - Terminology collection of building terms (41502 entries in database format); - English-Latvian customs dictionary (12000 terms in printed format); - English-Latvian tax dictionary (6000 entries in Word format); - Dictionary of mechanical engineering terms (4099 entries in Word Perfect file format); - Explanatory dictionary of mechanics basic terms (983) entries in Foxpro database format); - Dictionary of mechanics terminology (3306) entries in Word Perfect file format) as well as: - LAS terminology Card File (7 513 terms in XLS format); - Terminological dictionary of metal technology and machine parts (free resource, 1 511 entries in XLS file format); - Terminological dictionary of physics, mathematics and astronomy (free resource, 2 097 entries in XLS file format); - Scientific and technical terminology. Plant protection (free resource, 3 100 entries in XLS file format); - Terminological dictionary of linguistics (free resource, 2400 entries in XLS file format); - Terminological dictionary of physics (free resource, 6721 entries in WORD file format); - Terminological dictionary of radio electronics, communications, automatics and computing (free resource, 9 299 entries in WORD file format); - Terminological dictionary of pedagogy and education science (free resource, 7 975 entries in XLS file format); - Dictionary of scientific terminology (free resource, 8532 entries in XLS file format); - Dictionary of textile industry terms (free resource, 14243 entries in XLS file format); - Dictionary of hydrometeorology terms (free resource, 11000 entries in XLS file format). Other delivered resources: - Eurovoc v4.2 (6645 terms in digital format). - LAS Terminology Card File (3 900 entries in XLS file format);

Item No.	Tasks Title	List of activities and results
		- Chemistry. Terms selection from *Soviet Latvia Encyclopaedia* (free resource, 1 790 entries in XLS file format); - Agriculture. Terms selection from *Soviet Latvia Encyclopaedia* (free resource, 1 330 entries in XLS file format); - Physics. Terms selection from *Soviet Latvia Encyclopaedia* (free resource, 1 954 entries in XLS file format); - Linguistics. Terms selection from *Soviet Latvia Encyclopaedia* (free resource, 911 entries in XLS file format); - Medicine. Term selection from *Soviet Latvia Encyclopaedia* (free resource, 1 967 entries in XLS file format); - Astronomy and geodesy. Terms selection from *Soviet Latvia Encyclopaedia* (free resource, 900 entries in XLS file format); - Mathematics. Terms selection from *Soviet Latvia Encyclopaedia* (free resource, 999 entries in XLS file format); - Technology. Terms selection from *Soviet Latvia Encyclopaedia* (two volumes) (free resource, 4 778 terms in XLS format); - Terminology database of LAS as external database (145 000 entries in database format). University of Tartu has proofread 8 Estonian paper dictionaries, which have been digitised by Tilde. Altogether, the number of terms in these 8 dictionaries is 35,000. Resource about physics and physicists. Explanatory dictionary of physics terms (free resource, 4 000 entries in XLS file format). As of September 30, 2006 the partners have delivered to SIA Tilde 106 resources (~ 735 000 terms) and 2 external databases (~172 000 terms). As of December 31, 2006 the partners have delivered to SIA Tilde 120 resources (~833 710 terms) and 2 external databases (~172 000 terms). The section “Described and delivered resources” of deliverable D4.2 “Prepared content for database population” was prepared by LAS and delivered to the project coordinator on August 29, 2006 for submission to the EC.
Task 4.4	Transformation and modification of terminological resources according to structural and technical requirements defined in WP3 T3.2	The information about the status of approval of all delivered resources was summarized and sent to SIA TILDE on regular basis. With the purpose to assemble all information about resources and to ensure filling of all mandatory fields in ETB database (according requirements of 3.2) SIA TILDE together with LAS have developed the online common use database for resources registration. This online database is due to replace hitherto used EXCEL sheets, which are difficult to manage for multi-access. The manual for filling the fields of the above database was

Item No.	Tasks Title	List of activities and results
		prepared. Tilde provided qualitative checking of database entries to make sure if all fields are filled and are entries valid. Tilde performed the process of converting the terminology resources received from ETB Partners into TBX format (TermBase eXchange format - EuroTermBank system data storage and exchange format, For more information see Implementation Specification deliverable D3.2 Chapters 3.3 and 3.4), as well as content digitalization. Tilde developed a framework, workflows, quality assurance criteria and procedures for resource conversion and digitalization. As each incoming terminology resource is in a different format, a special converter was created for each resource. Tilde has developed a generic resource converter which has been adapted to work with each particular resource. Tilde has also developed an automated resource quality, integrity and format checking utility which has been used to test each processed resource. Content digitalization includes scanning, optical character recognition (OCR), manual editing and transformation to TBX format. Printed resources where digitalized, edited and transformed to TBX format. Special OCR was performed for each digitalized resource, to increase precision of recognition and to customize OCR so that the recognized content would be suitable for further automated transfer into TBX format. Special digitalized terminology resource editing format has used to exchange data between data digitalization team and the editors. Out of 120 resources received from ETB partners, 92 resources were processed, 25 of which were in printed form. Others were postponed due to difficult processing format, overlapping or other reasons. All 25 processed printed resources were converted into a digital form and edited. All 92 resources were converted into TBX format. A testing tool was created to test the converted data against data loss and structure errors. Over 1,551,000 terms (more than 584,000 entries) have been transferred from their original format to TBX and populated in ETB system database. The list of the available terminology resources and descriptions of these resources, including the resource holders and copyright status (public/proprietary), was updated on regular basis. University of Tartu converted six electronic resources to TBX format. These resources contain 92,000 terms.

Item No.	Tasks Title	List of activities and results
Task 4.5	Content integration	Database development was completed and all terminology resources imported in the database from TBX format. Over 1,551,000 terms (more than 584,000 entries) were imported in database. Various terminology resources from many different languages and different subject fields were integrated together in the ETB database. As resources come from different sources they often overlapped and described the same concept with many entries in database. This made database very fragmented. To solve this issue as far as it is possible a special compounding algorithm for terminology entries was implemented to merge equal concepts from different resources and languages in one entry to help the user to find translations easier.

3.6 WP5 - System development and implementation

The objective of this WP is development and implementation of fully operational database system, populated with sample data for testing, assessment and evaluation purposes.

WP leader - TILDE

Item No.	Tasks Title	List of activities and results
Task 5.1	Procurement, Supply and Installation	Tilde evaluated and selected the hardware and software necessary for the ETB system development and subsequent day-to-day use. The hardware necessary to establish the system development environment was acquired and configured. The potential development tools were also evaluated and selected. The main selection criteria were the experience of developers, suitability for a large-scale web-based database development, and support provided by the manufacturer. As a result, Microsoft Visual Studio 2005 Professional and Microsoft SQL Server 2005 were selected as the most appropriate tools for the ETB purposes. All other software necessary to start application development was also purchased and installed, and system development commenced.
Task 5.2	Application development	Tilde performed the process of converting the terminology resources received from ETB Partners into TBX format, as well as content digitalization. Tilde developed a framework, workflows, quality assurance criteria and procedures for resource conversion and digitalization. As each incoming terminology resource is in a different format a special converter was created for each resource. Tilde developed a generic

Item No.	Tasks Title	List of activities and results
		resource converter which can be customized to work with each particular resource. Tilde has also developed an automated resource quality, integrity and format checking utility. Content digitalization includes scanning, optical character recognition (OCR), manual editing and transformation to TBX format. Special digitalized terminology resource editing format was created to exchange data between data digitalization team and the editors. ETB system database was created according to Implementation Specification (Deliverable 3.2). Database tables, relations, indexes, triggers and access rights were created. The system database was created in SQL server environment with full XML support. Database indexes and full-text catalogues were set. The stored procedures required for the business logic layer were created. Appropriate user rights for secure data transmission on the tables and stored procedures were also set. The ETB System has 3-layer system architecture: database layer, business logic layer and user interface layer. Development of database and business logic layers was completed. The database management features and SQL stored procedures for the business logic layer were developed. Business layer was implemented as a Web service with more than 20 methods according to the system specification. A universal mechanism for communications with external terminology databases was developed. It is easily customizable so that additional external databases can be connected when they will be available. Various improvements in database and business layer structure and functionality were implemented. Connections with 3 external databases was established. ETB system has access to following external terminology databases: TermNet.lv (The official terminology database of Latvian Academy of Science), the Open Dictionary of Scientific Terminology of the Agricultural Academy in Szczecin, MoBiDictionary. System user interface was developed. ETB System has web based user interface. User interface is implemented as ASP.NET web application; it uses web services to access business logic layer. User interface of ETB system consists of 31 ASP.NET web pages and controls each implementing one or more system functions, such as home page, search, advanced search, discussions, information about available terminology resources, various administrative tasks etc. After usability tests user interface was improved according to user suggestions, user interface language switching mechanism was developed; user interface texts were translated by partners

Item No.	Tasks Title	List of activities and results
		in all languages and implemented in to the system. The objective of Task 5.2 was development and implementation of fully operational database system for testing, assessment and evaluation purposes. This goal was fully achieved. System was fully operational for testing, assessment and evaluation purposes. Under workpackage WP6 were made some additional development tasks.
Task 5.3	Implementation and Testing	Installation of the system in production environment and testing of the system was completed. All components of the system were installed on designated hardware. Integrity tests were performed to ensure that all components run as expected and all components work together. System for testing was published in Internet with address http://db.EuroTermBank.com. Consortium partners took part in discussions on user interface, localization of the interface, search options, classification system. The user interface and functional capabilities of the system where tested by partners. System performance tests were carried out to ensure that system is meeting specified performance criteria. System implementation reports and test protocols were created and submitted to the Commission (Deliverable D5.1).
Task 5.4	Population of Database with Sample Content	Along with the database development, representative development test data collection was created to verify the database structure and to perform unit testing. Development test data consisted of entries in different languages and with different description group tags to ensure both different encoding and different data structure correctness. Population of database with sample content was completed and tested. Administration part in the business logic layer finished. Database development was competed and all terminology resources were imported in database as they were ready and transformed to TBX format. To the end of the WP5 more than 155,000 terminology entries were imported in database. Partners contributed with practical and theoretical discussion to the task 5.4 at the project workshop held in Vilnius. ETB test version (beta) was made accessible for terminology resource owners, who have expressed their consent to transfer those resources for ETB implementation purposes, in order that they can test the database and express their opinions, remarks and comments. It was completed according to the schedule.

3.7 WP6 - Assessment, evaluation and system elaboration

The objective of this WP is assessment and evaluation of designed and implemented system and sample content by analysis of potential users and content resource owners recommendations and conclusions after system use in evaluation mode.

WP leader - TU - Tartu Ülikool (University Of Tartu)

Item No.	Tasks Title	List of activities and results, plans for next phase
Task 6.1	Surveys of potential system users and resource owners, evaluation of results	According to project schedule, WP6 activities started in June, 2006. Was given access to developed system prototype to the consortium partners. The survey methodology was developed and presented to the project partners. Partners took an active part in discussions about the survey and the outcomes of the surveys of potential system users and resource owners. All partners carefully selected the required number of users (translators, lexicographers, LSP experts) according to the Contract for evaluation of populated database. They executed the test samples prepared by Estonian partners and filled in questionnaires. As a result a two-stage usability study of ETB term base was conducted (a qualitative survey, followed by a quantitative survey). Results of the survey were discussed at the Polish national workshop in Warsaw, October 4 2006. Some survey results were presented also at the conference "Terminology and Society" in Antwerp, November 16-17 2006.
Task 6.2	User needs and requirements, technical specifications and system design adjustment (surveys of WP 6.1)	On the basis of T 6.1, partners took an active part in discussions about the adjustments necessary for the ETB system. Innovative approach defined by professor Klaus-Dirk Schmitz as compounding was presented during the ETB meeting in Warsaw. Afterwards it was the basis for further presentation "An analysis of compounding the ETB entries". Proposed design adjustments were discussed in the project meeting in Warsaw in October 1 and 2, 2006. Based on the Revised Design Document, system adjustments were made and the system was updated to comply with the technical specifications and system design. Based on the discussions about survey results, D6.2 Revised Design Document was created and submitted to the Commission.
Task 6.3	System Elaboration	In order to form a more solid knowledge basis with regard to making the right decisions on how to specify the user interface functionality in terms of search options, this topic was presented and discussed at the project workshops held in Vilnius in March 16-17, 2006 and in Tartu in June 15-16, 2006.

Item No.	Tasks Title	List of activities and results, plans for next phase
		In above mentioned workshops various issues were discussed in order to finalize the data structure specification of the EuroTermBank term database and to initiate the making of Writing Rules with respect to the future filling in of specific information type fields in the term database. All partners provided translations of user interface strings in their local languages. This activity included also translation of the huge "About.doc" and "Conditions.doc". Afterwards the translation was made available on-line for EuroTermBank users providing choice of the preferred interface language. Currently all project partner languages are available: Estonian, Danish, German, Hungarian, Latvian, Lithuanian and Polish. Hardware and software necessary for the ETB system development and subsequent day-to-day use were evaluated and selected. The hardware necessary to establish the system development environment was acquired, set up and configured. All other software necessary for application development was also purchased and installed. The business layer was implemented as a Web service with more than 20 methods according to the system specification. The final version of the system including all postponed functionality and multilingual user interface was implemented according to the project schedule. Errors found by internal system testing and partners were corrected. Revision to the database system was done to improve system performance. Installation of the ETB system in the production environment and system testing were completed. All components of the system were installed on the designated hardware. Integrity tests were performed to ensure that all components run as expected and all components work together.
Task 6.4	Population of Database with content and data link establishment	Tilde as the system developer performed the process of converting the terminology resources received from ETB Partners into the TBX format as well as content digitalization. Out of 92 resources received from ETB partners, 25 were in printed form. Majority of them (with exception of a few resources in poor quality) were converted into digital form and edited by consortium partners. A testing tool was created to test the converted data against data loss and structure errors. Over 1,551,000 terms (more than 584,000 entries) were transferred from their original format to TBX. The fully operational system is now available for operation in Internet at www.eurotermbank.com

Item No.	Tasks Title	List of activities and results, plans for next phase
Task 6.5	System testing	All necessary organizational activities to prepare for system testing were done. Before the final acceptance test, all partners took an active part in ETB user interface and system functionality testing and made valuable proposals for improvements. The International Network for Terminology (TermNet) by IIM was subcontracted for the external evaluation of ETB system. To complete this activity according to the defined tasks and goals, TermNet was provided with all necessary information and material for evaluation. Conclusions of EuroTermBank external evaluation will be provided together with other final deliverables. Final acceptance tests of the system were performed by Tilde with the conclusion that *EuroTermBank system fully complies with testing specification, with functionality and design elements working as expected*. The product was released.

3.8 WP7 - Awareness, dissemination, marketing and exploitation

The objectives of this WP are creation of user awareness, preparation of business, marketing and exploitation plans.

WP7 leader - LKI - Lietuvių Kalbos Institutas

Item No.	Tasks Title	List of activities and results, plans for next phase
Task 7.1	User and resource owner awareness creation	The following dissemination and awareness creation activities were performed by EuroTermBank project partners during the project. **Publications** In 2005 Tilde prepared a EuroTermBank Project handout, each Partner received 50 copies for dissemination. IIM together with the press office of the University of Applied Sciences Cologne prepared a press release about the project on the occasion of the Methodology development workshop held in Cologne, which was sent out on 3 March 2005. IIM published an article about the project in TermNet News 87 (June 2005). On 21 March 2005 Prof. Juris Borzovs gave an interview to Science Bulletin on the current situation of terminology work in Latvia and the EuroTermBank project. 2005 February – presented information about EuroTermBank project key features in the LKI Web site: www.lki.lt

Item No.	Tasks Title	List of activities and results, plans for next phase
		OPI prepared a 2 page of EuroTermBank description (Pol/Eng) for the brochure published by the e-Content NCP in Poland. On November 21, 2005, the "Science Bulletin" published an interview with Prof. J.Ekmanis, president of LAS on the Terminology work and problems in Latvia. The article contained information on the EuroTermBank project in general and on participation of LAS in the project. IIM published an article on ETB project and the Workshop in Copenhagen in Infoterm Newsletter (INL) 117 (September 2005). Dissemination of ETB leaflets by OPI: 14th International Seminar of cycle: Scientific and Technical Information in Countries of Central and Eastern Europe, Zakopane, September, 2005 Information Day – e-Contentplus, September 2005. LKI has written an article "The project of EU Commission "EuroTermBank" which has been published in annual scientific journal "Terminology" Nr.12, 2005. March 23, 2006 - Information article "Project of European Commission – EuroTermBank" prepared by Mrs. A. Mitkeviciene was published in the Web site of The European Languages Net Project (http://www.euro-languages.net/lithuania/index.php). April, 2006 - Broad informational campaign regarding the EuroTermBank project was conducted among terminology resources owners by OPI. April, 2006 - Comprehensive information on the ETB project was furnished to 6 commissions of the Council of the Polish Language, a body belonging to the Polish Academy of Sciences, by OPI. May, 2006 - Article by Tomasz Borkowski in Polish: Europejski program "EuroTermBank" – wspólne przesięwzięcie instytucji terminologicznych w rozszerzonej Europie (European Project EuroTermBank – Multilateral Project of Terminology Institutions in the Enlarged Europe) published in TEPIS Bulletin (Translegis Publishing). December, 2006 - Article in Polish: „EuroTermBank – nowoczesne narzędzie wyszukiwania specjalistycznej informacji terminologicznej" („EuroTermBank – advanced tool for retrieval of specialized terminological information", E. Gorzkoś, T. Borkowski in: Sprawy Nauki (Matters of Science: a scientific journal).

Item No.	Tasks Title	List of activities and results, plans for next phase
		Presentations Tilde presented EuroTermBank project to the representatives of different eContent program projects at the kick-off meeting in Luxembourg in January 2005. 2005 February – presentation of EuroTermBank project tasks and objectives for LKI and the Centre of Terminology personnel. On 22nd of March Tilde presented project key features for the personnel of Computer Linguistics Group at Informatics Methodology Department in the Institute of Mathematics and Informatics, University of Latvia. In April 2005 Prof. Juris Borzovs reported on the EuroTermBank project during plenary session of LAS Terminology Commission. 28th of April 2005 The Head of technical Committee "Terminology" Dr. A. Auksoriute presented a report about EuroTermBank project key features during the meeting of the Lithuanian Standardization Department Technical Committee "Terminology". 9th of June LKI meeting with the Head of the State Commission of the Lithuanian Language Dr. I. Smetoniene and other experts of this Commission. Presentation of EuroTermBank project key features. Presentation of Prof. V.Skujina "Current situation of terminology work in Latvia" was prepared for the Workshop at the 7th International Conference on Terminology and Knowledge Engineering TKE'2005. Presented to the participants of TKE'2005 in Copenhagen on August 19. During TKE 2005 conference in Copenhagen, August 17-19, ETB project was presented by several partners: CST, IIM, LKI, Tilde. OPI made the following presentations of EuroTermBank: - During KomputerExpo, Warsaw, 24 January 2005 - Presentation of EuroTermBank in OPI in April and June 2005 - Presentation of EuroTermBank for TEPIS Society, April 2005 - Presentation of EuroTermBank during the seminar in the Institute of Applied Linguistics of the Warsaw Univ., May 2005 - Public presentation at the workshop "Requirements of

Item No.	Tasks Title	List of activities and results, plans for next phase
		ETB" at the 7th TKE 2005 Conference, August 2005, Copenhagen. February 8, 2006 - Director of LKI Mrs. J. Zabarskaite presented ETB project for the members of Information Society Development Committee under the Government of Republic of Lithuania. February 22, 2006 - Mrs. A. Auksoriute participated in the presentation of the Five Languages Explanatory Dictionary of Metrology and had a discussion with the authors of the dictionary concerning cooperation with ETB project. February 22, 2006 - ETB project and topical issues of terminology work in Latvia were presented to a parliamentary fraction of Latvia's Saeima. March 2, 2006 - Ainars Blaudums from Tilde presented the ETB project and Tilde's activities in the EU-financed projects in general at the eTEN Programme Information Day organized by the e-Government Secretariat, eTEN information centre in Latvia (Data Media Group) and Latvian Information and Communication Technology Association. March 9, 2006 - During the meeting of technical committee "Terminology" in the Lithuanian Standardisation Department the Head of Committee A. Auksoriute presented a paper "Features of Development and current state of Lithuanian Terminology" in which the aims and current tasks of ETB project were presented. March 13, 2006 - LKI director Mrs. J.Zabarskaite and Mrs. A.Auksoriute have presented ETB project in the meeting with Chairman of Committee on European Affairs at Seimas of the Republic of Lithuania Mr. Vydas Gedvilas. March 17, 2006 - Andrejs Vasiljevs from Tilde presented the ETB project in Vilnius at the Lithuanian national seminar organized by the Institute of the Lithuanian Language. April, 2006 - Information on ETB was distributed during international conference "Information with no limits" organized by Institute of Librarianship and Information Science of the Warsaw University. May 24-26, 2006 - At the LREC conference in Genoa, CST gave a talk about the work done in Work package 1 and about the EuroTermBank project in general. After the presentation contacts were established with new and future member states of EU with respect to form some kind of future cooperation on terminology resources. August 21-25, 2006 - Klaus-Dirk Schmitz and Christian

Item No.	Tasks Title	List of activities and results, plans for next phase
		Galinski presented ETB project results in standardization working group meetings during ISO/TC37 meeting week, Beijing. August 25-26, 2006 - Klaus-Dirk Schmitz and Andrejs Vasiljevs as ETB project coordinator presented the project and the results in a separate presentation during the TSTT 2006 Conference, Beijing. September 4-8, 2006 - 2006 The school of Baltic countries' terminologists took place in the Lithuanian Language institute. A.Auksoriute made a presentation of the EuroTermBank project and had individual discussions with colleagues from other countries interested in ETB project. September 12, 2006 - Director of the Lithuanian Language Institute Mrs. J.Zabarskaite and terminologist A. Mitkeviciene presented LKI activities in ETB project for the Lithuanian Directorate of Lithuania 1000 years celebration. October 2-3, 2006 - Warsaw Partners' Meeting. Presentation on ETB in Polish was held by Tomasz Borkowski: "EuroTermBank – internetowe elektroniczne narzędzie pomocy dla tłumaczy specjalistycznych w rozszerzonej Europie" October 3, 2006 – CST, Mr. Andrejs Vasiljevs, Mr. Uldis Priede and Mr. Andris Liedskalnins from Tilde presented in the Warsaw National workshop October 11-13, 2006 - Aimed at disseminating experience and results of ETB project, LAS team members V.Skujina and I.Ilzinja prepared the presentation "Terminology standards in the aspect of Harmonization for International Term Database" for international conference "Terminology of national languages and globalization" to be held in Vilnius. During the conference, participants of the conference had a meeting and discussion with Mrs. A. Auksoriute and were informed about the activity of Terminology Center and EuroTermBank project. November 8-10, 2006 - Klaus-Dirk Schmitz presented aspects of the ETB project at tekom TechWriters Conference + Terminology Workshop in Wiesbaden, Germany November 16 – 17, 2006 - Klaus-Dirk Schmitz presented aspects of the ETB project at the International Conference on Terminology in Antwerp, Belgium November 16-17, 2006 - Andris Liedskalnins from Tilde participated in the international conference "Terminology and society" and demonstrated the ETB system. ETB brochures were distributed. November 26, 2006 - Project presentation in Polish at Warsaw

Item No.	Tasks Title	List of activities and results, plans for next phase
		University, Chair of Languages for Special Purposes, by Tomasz Borkowski: „EuroTermBank - Advanced Tool for LSP Translators", Warsaw. December 12, 2006 - Seminar at OPI: Presentation on ETB in Polish: „ETB Project – A Sum-up", E. Gorzkoś, T. Borkowski. **Conferences** On June 17-19 Prof. Valentina Skujina from LAS attended the AABS conference "The Baltic Way in Europe. Revolution and Evolution" in Valmiera, Latvia and delivered a report "One way of creating multilingual term databases". Tilde participated in the Second Baltic Conference on Human Language Technologies in Tallinn, April 4-5 (http://ioc.ee/hlt2005/). Andrejs Vasiljevs and Raivis Skadiņš presented EuroTermBank terminology database and cooperation network project at the conference. A paper on EuroTermBank was prepared, presented at the conference and published in conference printed materials. On April 21st 2005, Heiki-Jaan Kaalep from the Univ. of Tartu presented an overview of the EuroTermBank project at the annual meeting of ETER, the Estonian Terminology Association. Daiga Deksne from Tilde and Heiki-Jaan Kaalep from TU attended the EAMT conference in Budapest on May 30 and June 1, 2005, and presented EuroTermBank project in individual contacts. 22 of June 2005 during the seminar "The Lithuanian LanguDictionary – present and the future" the director of LKI J. Zabarskaite has delivered a report "The policy of Lithuanistic evolution and the future of the Dictionary of the Lithuanian Language" in which she has spoken about EuroTermBank project too. On 19 June 2005, Klaus-Dirk Schmitz gave a speech during the workshop held in conjunction with TKE 2005 conference in Copenhagen on "Terminology resource evaluation in new EU member countries". On 25 Nov, 2005, Tilde organised an information workshop "Terminology in the 21st century (Terminoloģija 21.gadsimtā)" in Riga, Latvia where a selected audience (mostly terminologists) were informed about the ETB project, its current achievements and future perspective. Speakers included Prof. J.Ekmanis (LAS); Prof. Klaus-Dirk Schmitz of IIM, Ms. Valentina Skujina of LAS, and Mr. Andrejs Vasiljevs of Tilde.

Item No.	Tasks Title	List of activities and results, plans for next phase
		December 8, 2005 – LKI Terminology Centre organised scientific conference "Normalisation and Regulation of Terms" during which the Head of Terminology Centre Mrs. A. Auksoriute has made presentation "Project EuroTermBank" describing aims and goals of the project, possibilities of Cupertino. Conference has been organised for terminology creators and users in the Institute of the Lithuanian Language. January 26-28, 2006 - Dissemination of ETB leaflets during EUROCOM EXPO fairs 2006 by OPI. March 17, 2006 - National seminar in Vilnius in the Lithuanian Language Institute was organised. Members of Standardisation Department, representatives of various Institutions, resources owners have participated. CST and Prof. Dr. Klaus-Dirk Schmitz from IIM give presentation about ETB issues. March, 2006 - Keynote speech at the Congress of the Hungarian Association of Applied Linguists. April, 2006 - Informational campaign on ETB was made by OPI during 1st International Seminar of cycle: Scientific and Technical Information in Defence Ministries of the Czech Republic, The Republic of Germany, and the Republic of Poland. May 22 – 15, 2006 - International Seminar of cycle: Scientific and Technical Information in Countries of Central and Eastern Europe, lecture by Elżbieta Gorzkoś and Tomasz Borkowski in English: EuroTermBank – a Product of Multilateral Cooperation of Terminology Institutions Entailing Sophisticated Technology Transfer, Kraków, Poland. May, 2006 - Inguna Skadina and Andrejs Vasiljevs participated at the LREC conference in Genova, Italy. June 5-6, 2006 - OPI participated in international Conference at the Jagiellonian University in Kraków, lecture in Polish by Tomasz Borkowski: (E-włączenie w process przepływu elektronicznej informacji terminologicznej (E-inclusion in the Process of Flow of Electronic Terminological Information. EuroTermBank from the Polish Perspective); article with the same title by Tomasz Borkowski published in conference materials on CD. August 23-25, 2006 - Warsaw International Forum of Court Interpreting and Legal Translation in the Enlarged Europe held by the Polish Society of Sworn and Specialized Translators TEPIS under the auspices of the International Federation of Translators, EuroTermBank – a Web-based Electronic Assistance Tool for LSP Translators in the Enlarged Europe, lecture in English by Tomasz Borkowski.

Item No.	Tasks Title	List of activities and results, plans for next phase
		October 5-7, 2006 - Klaus-Dirk Schmitz presented aspects of the ETB project at LICTRA Conference on Quality Management in Leipzig, Germany. November 9-10, 2006 - during the Conference on Language Planning and Terminology 2006 in Tallinn, Mrs. Albina Auksoriute presented a paper on terminology work in Lithuania in which EuroTermBank project was widely described. November 10, 2006 - Conference of International Organization for Specialized Terminology: „Polish Terminology 2006" – a presentation on ETB project in Polish: „Zbiory polskie w EuroTermBanku" („Polish resources in EuroTermBank"). November 13-14, 2006 - Andrejs Vasiljevs from Tilde participated in "Terminology summit" in Brussels where he held a speech about terminology issues and presented the ETB project. November 16-17, 2006 - Andrejs Vasiljevs from Tilde participated in the international conference "Terminology and society" in Antwerp and presented the ETB project. November 21-23, 2006 - Ainars Blaudums from Tilde participated in the IST 2006 international conference/exhibition, distributed ETB brochures and was involved in dissemination of ETB project outcome with interested parties. **Information on the Web** Tilde launched EuroTermBank Project Website (D7.3). www.eurotermbank.com Presentation: "EuroTermBank Project Overview" was published to project website's public section. LKI presented information about Eurotermbank project key features in the LKI Web site: www.lki.lt Development of OPI Eurotermbank website (in Polish) http://www.opi.org.pl/index.php?zmienna=cdt IIM provides information on ETB project and a link to the ETB homepage on the IIM website. http://www.fh-koeln.de LAS Terminology Commission website was added a new section "EuroTermBank" that gives general information about the project, its aims, tasks and results. At the CST homepage a description of the project in Danish has been made (see http://cst.dk/EuroTermBank for further information).

Item No.	Tasks Title	List of activities and results, plans for next phase
		July10-14 - IIM provided information about the ETB project and the ETB website during the TSS, Terminology Summer School, and Vienna. EuroTermBank service website launched. **Meetings** On 3d of March 2005 LKI had a meeting with the personnel of Information Technology Department of the Seimas of the Lithuanian Republic. On April 4 Tilde had an informal meeting with terminologists from European Central Bank informing about Eurotermbank and discussing possible cooperation. In May 2005, Tilde met with representatives of Official Language Commission of Latvia and informed them about the ETB project, its objectives and current progress. 20th of May 2005 LKI meeting with Kaunas University of Technology and presentation about Eurotermbank project for the Heads of University Departments has been made by LKI director J. Zabarskaite and Dr. A. Auksoriute. Sepember 20, 2005 – LKI meeting with the director of TEV publishing house E.Zalys ant the authors of several dictionaries Mr. V.Valiukenas and Mr. V.Zalkauskas. The EuroTermBank perspectives and goals of cooperation were presented by Mrs.A.Auksoriute and Mrs. A.Bieleviciene. OPI gave a presentation of the ETB project during the meeting of representatives of the Polish Committee for European Integration, Polish Standard Committee and Library of the Polish Parliament (Sejm) – November 2005. November 7, 2005 – LKI meeting with "Translation, documentation and Information Centre" director Mr. P.Papov and deputy director Mrs. E.Bangaitiene. ETB project was presented by A.Auksoriute and director of LKI Mrs. J. Zabarskaite. January 24, 2006 - Mrs. A. Auksoriute had a meeting with Head of Division of Filing of Legal Acts at the Information Technology Department Ausra Bodun concerning ETB project and possibility to use the Lithuanian version of Eurovoc for ETB project needs. March 3, 2006 - Andrejs Vasiljevs and Uldis Priede from Tilde met with a representative of Translation and Terminology Centre (TTC) to discuss the possibilities of connecting to TTC as an external database and testing of the ETB portal. March 17, 2006 - Andrejs Vasiljevs from Tilde, (with Klaus-

Item No.	Tasks Title	List of activities and results, plans for next phase
		Dirk Schmitz and Inke Raupach) visited Ms. Irena Smetoniene, Chairperson of the State Commission of the Lithuanian language (SCLL) to present the ETB project and discuss the possibility of connecting to the SCLL terminology bank as external database. March 17, 2006 - Raivis Skadins and Uldis Priede from Tilde met with representatives of the Mathematics Institute and discussed the possibility of connecting to their terminology bank as an external database. March 24, 2006 - Mrs. A. Auksoriute and Mrs. J.Zabarskaite visited "Science & Encyclopaedia Publishing Institute" and held negotiations with the director of Institute Mr. R. Kareckas and the Head of Science Publication and Dictionaries department Mrs. V. Bogusiene concerning publication of their dictionaries in ETB data base. June 16, 2006 - National Workshop on terminology was held in Tartu, organized by the University of Tartu in the framework of EuroTermBank where Andrejs Vasiljevs made presentation on ETB issues. July10, 2006 - Klaus-Dirk Schmitz, Christian Galinski, Inke Raupach, representatives from ISO, DIN, ON and Andrejs Vasiljevs, Uldis Priede as ETB project coordinators discussed about cooperation and access to existing terminological resources with standardized terminology during the meeting of ETB and Standardization Bodies in Vienna. August 18, 2006 - Meeting with two terminologists Jelena Palma and Henrik Nilsson from the Swedish Centre for Terminology was organised. H.Nilson also is a member of the Board of the European Association for Terminology (EAFT). Terminologists from LKI Terminology Center Asta Mickevičienė and Robertas Stunžinas had a wide discussion concerning LKI Terminology center activity in connection with EuroTermBank project. August, 2006 - A. Bielevičienė and A. Auksoriūtė had a meeting with the EC terminologist and translator Marius Daskus, had a wide discussion about ETB possibilities and a way the cooperation could start. November 15, 2006 – ETB Partner's Meeting, Antwerp.
Task 7.2	Establishing of content marketplace	The cooperation with the following networks and projects has been considered as preferable: Infoterm, IATE, INTERA, Enables, Lirics. Infoterm is involved in the project by the direct participation of its director, Christian Galinski, in the project.

Item No.	Tasks Title	List of activities and results, plans for next phase
		Representatives of all projects and networks were invited to participate in the Requirements determination workshop planned in conjunction with the TKE 2005 conference in August 2005 in Copenhagen to discuss cooperation issues. In the Requirements determination workshop During TKE 2005 conference in August 2005, in Copenhagen the ETB project partners have obtained official and personal contacts with representatives of other projects and various organisations, which would help in future popularisation of EuroTermBank aims. March 17, 2006, Raivis Skadins and Uldis Priede met with representatives of the Lithuanian Mathematics Institute and discussed the possibility of connecting to their terminology bank as external database. March 17, 2006, Mr. Andrejs Vasiljevs, Prof. Klaus-Dirk Schmitz and Inke Raupach visited Ms. Irena Smetoniene, Chairperson of the State Commission of the Lithuanian language (SCLL) to present the ETB project and discuss the possibility of connecting to the SCLL terminology bank as external database. May, 2006 Ms. Inguna Skadina and Mr. Andrejs Vasiljevs participated at the LREC conference in Genova, Italy. August 18 - meeting with two terminologists Jelena Palma and Henrik Nilsson from the Swedish Centre for Terminology was been organised. H.Nilson also is a member of the Board of the European Association for Terminology (EAFT). Terminologists from LKI Terminology Center Asta Mickevičienė and Robertas Stunžinas had a wide discussion concerning LKI Terminology center activity in connection with EuroTermBank project. November 16-17, 2006 ETB brochures were distributed in the international conference “Terminology and society”. November 21-23, 2006 Mr. Ainars Blaudums participated in the IST 2006 international conference/exhibition, distributed ETB brochures and was involved in dissemination of ETB project outcome with interested parties. Activities were performed to manage collaboration of ETB system with external databases. Connections with 3 external databases were established. By the end of the reporting period, the following connections between ETB system and external terminology databases are established: TermNet.lv (The official terminology database of Latvian Academy of Science), the Open Dictionary of Scientific Terminology of the Agricultural Academy in Szczecin, and the MoBiDictionary.

Item No.	Tasks Title	List of activities and results, plans for next phase
Task 7.3	Development and implementation of exploitation plan	All partners contributed to the making and writing of Deliverable 7.1 *Exploitation Plan*. The deliverable was submitted to the EC according to the project schedule. For the finding out of user targets and building community around EuroTermBank, LKI wrote a letter to European Council to Katelijn Serlet, General Secretariat, Terminology & Documentation, Chain of ICTI Terminology Coordination Team (TCT), inviting not only Lithuanian translators working in European Institutions to participate in ETB system testing but also stressing out the importance to involve translators especially from the countries participating in ETB project. IIM, with support from other partners, continued working on the Consortium Agreement in order to provide the legal basis for further operation and development of ETB, revised the document according to the lawyers' comments and suggestions. Consortium Agreement was revised together with the lawyers by each partner.
Task 7.4	Development of business plan	Deliverable D7.2 Business Plan was prepared and submitted to the Commission. Contents of the deliverable were discussed during project consortium meeting in Tartu and in more details in Warsaw. IIM and Tilde organized a workshop with representatives of ETB and standardization organizations to discuss cooperation possibilities and business models. IIM drafted a Consortium Agreement to be signed by the Project partners in order to provide the legal basis for the further operation and development of ETB. Partners contributed to the development of the business plan with processing of the following section focusing on: - further involvement of partners in the new Consortium; - ETB market position and competition; - ETB target users. Additionally LKI contributed the development of D7.2 "Business plan" with the SWOT analysis. Partners evaluated their possibilities to participate in further activities of EuroTermBank and considered potential financial resources to cover these activities.
Task 7.5	Preparation of Presentation material	In November, 2006, new ETB service booklet was prepared focusing on system exploitation. Decision was made by project partners to publish a book about EuroTermBank, including a collection of best project outcomes.

Item No.	Tasks Title	List of activities and results, plans for next phase
		Partner representatives participated in discussions about the contents of the ETB-book at the project meetings in Warsaw and, in more detail, in Antwerp on November 15. Majority of partners contributed to the development and revision of this book. As a result of these activities the ETB-book is in many ways the synthesis of all work done and experiences gained during the ETB project. Presentation material was prepared to be submitted together with the Final report according to the terms of the Contract. During the project, several Press releases were prepared and submitted for the purpose of informing society about EuroTermBank project. It is agreed between partners that, on national levels, similar activities will follow also after the end of the project.

3.9 WP8 - Project management

The objectives of this WP are:

- project coordination and management;
- ensuring achievement of the project objectives in time;
- project finance management;
- reporting and submission of deliverables to European Commission;
- quality management.

WP8 leader - TILDE

Item No.	Tasks Title	List of activities and results, plans for next phase
Task 8.1	Project coordination and management	Project workshops were held to monitor each partner's activity progress and the overall project progress. Reports are prepared by workpackage Leaders and Partner Leaders. Reports are collected by Tilde, published on project website and consolidated in summary reports. Supervision and coordination of activities in workpackages are made by respective workpackage leaders. Tilde provides overall supervision of the progress of each work package and task. For the purpose of monitoring the overall progress and planning activities, Tilde keeps a project timesheet up-to-date. During project meetings partners made agreements on tasks, deadlines and responsibilities. Allocation of resources to fulfil the task is the responsibility of the respective partner. 6 project meetings were organised during reporting period:

Item No.	Tasks Title	List of activities and results, plans for next phase
		– Kick-off meeting, 24 – 25 Jan 2005, Luxembourg: – Methodology development workshop, 17 – 18 March 2005, Cologne: – Progress meeting, 2 – 3 June 2005, Budapest – Progress meeting 18-19 Aug 2005, Copenhagen – Methodology workshop, 6-7 Oct, Riga – Progress meeting, 24-25 Nov 2005, Riga After every meeting agreed tasks, deadlines and meeting minutes were prepared. All relevant upcoming information as well as relevant reports and presentations is published in the project website. As additional Methodology workshop was held in Riga in October 2005, it was agreed by the partners during the November progress meeting in Riga to postpone next progress meeting in Vilnius until March 2006. All project partners were represented at the project kick-off meeting in Luxembourg. The project partner representatives consulted the Project Officer on various issues to ensure a successful launching of the Project. In the subsequent period, Tilde as the project coordinator contacted the Project Officer on behalf of project partners on project management and other issues. Eurotermbank project was presented to the representatives of different eContent program projects at the kick-off meeting in Luxembourg. Information exchange and coordination with Infoterm was achieved through participation of Infoterm director Mr. Galinski in the Cooperation Council. A number of negotiations, presentations, meetings and unofficial meetings with different institutions were made - the Hungarian Council of Terminology (a UNESCO body), European Central Bank, Estonian Terminology Association, TEPIS Society, IT Department of Lithuanian Parliament, and others. Partners who are leading a particular workpackage - Workpackage Leaders – have prepared detailed implementation plans of respective workpackage. These plans have been discussed and accepted at the project meetings and published on the project website. Status of tasks has been updated regularly on the project website. Progress of the tasks has been monitored by Workpackage leaders as well as the Project coordinator. Project partners agreed to invite local terminologists and other

Item No.	Tasks Title	List of activities and results, plans for next phase
		experts to project meetings. Several external experts are involved in Cooperation Council (e.g. Arvi Tavast from Estonian Terminology Society, Danuta Kierzkowska from Polish Society of Economic, Legal and Court Translators, Nijole Dudlauskiene from Lithuanian Standards Board). Several content providers and partners have been invited to participate at Eurotermbank Workshop in conjunction with TKE 2005 conference. Risk management is part of Quality plan that has been prepared. Preventive steps of risk management are being coordinated in project meetings. Leader of each WP monitors his own risks, and Tilde coordinates common project risks. Major risks are identified; the steps and conditions for reducing, preventing and tolerating the risks have been set up. Project workshops were held to monitor each partner's activity progress and the overall project progress. Reports are prepared by workpackage Leaders and Partner Leaders. Reports are collected by Tilde, published on project website and consolidated in summary reports. Supervision and coordination of activities in workpackages are made by respective workpackage leaders. Tilde provides overall supervision of the progress of each work package and task. For the purpose of monitoring the overall progress and planning activities, Tilde keeps a project timesheet up-to-date. During reporting period Tilde continued project progress monitoring according to project schedule and supervsed all main project activities. Main resources were allocated to the system development, content selection as well as to dissemination activities and preparation of exploitation and business plan. Accordingly those were the main discussion topics within project meetings. Four project meetings organised – in Vilnius (Lithuania), Tartu (Estonia), Warsaw (Poland) and Antwerp (Belgium). All project partners were represented in Vilnius, Tartu and Warsaw. Deliverables according to the project schedule and requested additional information to the EC submitted. Developed system prototype demonstrated to the European Commission as well as for wider public in Estonia during Estonian national seminar in Tartu. Developed system was presented in Warsaw and Antwerp. Local project group meetings were held to discuss the working plans and to prepare the materials for Vilnius, Tartu, Warsaw and Antwerp workshops. Vilnius Progress Meeting was held in March 16-17, 2006.

Item No.	Tasks Title	List of activities and results, plans for next phase
		Tartu Progress Meeting was held in June 15-16, 2006. Warsaw Progress Meeting was held in October 2-3, 2006. Antwerp meeting with emphasis to the Consortium agreement finalisation and exploitation of EuroTermBank system after EU financed EuroTermBank project is finished was held in November 15, 2006. Labour contracts and handing-over protocols were signed with terminology data suppliers and proof-readers.
Task 8.2	Contract Management	During the reporting period, project partners consulted the project Coordinator on various aspects of the Contract and Tilde provided explanations and interpretation based on its experience in EU co-financed projects. In case of uncertainty the Project Officer was consulted and his feedback conveyed to the Partners. Analysis of project budget execution was performed and plans for the next periods were drawn up. Changes into the project budget where introduced and agreed with project coordinator. Changes into the project budget where introduced and agreed with project officer where appropriate. Analysis of project budget execution was performed on the regular basis.
Task 8.3	Reporting	Tilde prepared a report template for project partners. Partners prepared their semestrial reports from two perspectives – partners contribution in all workpackages of the entire project, and progress report of each workpackage from partners in charge. Based on these reports Tilde prepared consolidated semestrial report D8.2 and interim report for 2005 D8.Y2005. Tilde managed preparation of the Financial Statements by each partner to submit them to the Commission with Year 2005 Interim report. Managed receiving and processing of financial statements from consortium partners. Interim Report and financial statements submitted to the European Commission. First year (interim) project results presented to the EC and experts in March 29, 2006. At the meeting representatives of EuroTermBank consortium gave presentations describing the work done in 2005. Partners conducted all required activities to allocate the resources and responsibilities, to attend all project meetings and to meet the reporting requirements. The following reports were drawn up:

Item No.	Tasks Title	List of activities and results, plans for next phase
		"Semestrial activities report by contractor" for the period 01-07-2005 to 31-12-2005 "Semestrial activities report by contractor" for the period 01-01-2006 to 30-06-2006 "Semestrial activities report by workpackages" for the period 01-01-2006-30-06-2006 "Semestrial activities report by workpackages" for the period 01-07-2005-31-12-2005 "Semestrial activities reports by workpackages" for the period 01-07-2006-31-12-2006; "Quarterly activities report by contractor" for the period 01-01-2006 to 31-03-2006. "Quarterly activities reports by contractor" for the periods 01-07-2006 to 30-09-2006 and 01-10-2006 to 31.12.2006; Cost statement for the year 2005; Cost statement for the first half-year 2006. University of Tartu prepared and presented report on user testing. Report was included in deliverable 6.1. According to the project schedule was prepared and submitted to the EC Second year semestrial report. Started preparation of second year interim report and final report with according financial statements to be submitted to the EC in two month after the end of the project.
Task 8.4	Quality Control and Assurance	Tilde has appointed a Quality Manager for the project, who has organized implementation of Quality plan and the quality procedures. Tilde prepared and submitted D8.1 EuroTermBank Quality Plan. During processing of financial statements minor inadequacies identified and appropriate corrective actions taken. Collaborating with Latvian Academy of Sciences plan of submitting terminology database content developed and implemented to ensure regular and continuous submission of resources Preparation of First year Activity report, preparation of financial forms E-1A Financial Statement and E-1A Cost Statement. Preparation of 2006 1Quarter Progress Activity reports by Contractor and by Workpackage.

4 Deliverables submitted to the EC

The following reports have been delivered to the Commission:

- D1.1 Current standards and best practices assessment report
- D1.2 Final methodology report
- D2.1 Current standards and best practices assessment report
- D2.1 Standard document templates and procedures
- D3.1 User Needs Consolidation – Requirements specification report
- D3.2 Implementation Specification (Design Document)
- D4.1 Report about acquired content resources and their copyright status
- D4.2 Prepared content for database population
- D5.1 Fully operational system, populated with limited content volume, implementation reports and test protocols
- D6.1 Revised User Needs Consolidation – Requirements specification report
- D6.2 Revised Design Document
- D6.3 Revised system, populated with all selected content volume and links , implementation reports and test protocols
- D7.1 Exploitation plan
- D7.2 Business plan
- D7.3 Project Web site
- D7.4 Presentation of project key features
- D7.5 Presentation material
- D8.Y2005 Interim progress report
- D8.Y2006 Interim progress report
- D8.1 Quality plan
- D8.2 First year semestrial report
- D8.3 Second year semestrial report
- D8.4 Final report (this document)

ANNEX I

Resources included in the EuroTermBank database

The following terminology resources were identified, evaluated, processed and included in the EuroTermBank database:

Poland:

- UKIE Terminology Data Base – 8733 entries;
- English–Polish Dictionary of Terms in the Field of Documentation and Patent Information – 151 entries;
- STEBIS - The system of thesauri of the Sejm Library – 10667 entries;
- POLTERM - Polish-English Legal Terminology Collection – 6906 entries;
- Lexicon of Industrial and Intellectual Property – 1446 entries;
- SYNABA Dictionary of key words – 38298 entries;
- Multilingual Thesaurus GEMET; Polish terms: Institute of Environmental Protection, Warsaw, Poland; English terms - Collection: General Multilingual Environmental Thesaurus. The 2001 version of GEMET of the European Environment Agency in Copenhagen – 5291 entries;
- Glossary of Terms Related to Audit in Public Administration – 177 entries;
- EU Treaties Terminology Glossary – 716 entries;
- Dictionary of Metallurgical Terminology – 980 entries;
- Polish–English and English–Polish Mathematical Dictionary – 4652 entries;
- Glossary of Terms and Concepts in the Field of Education – 16574 entries;
- English-Polish Terminological Dictionary of Regional Development Programmes – 1046 entries;
- Dictionary of Terminology in the Field of Ensuring Food Sanitary Safety – 103 entries;
- Dictionary of Renewable Energy Sources – 2155 entries.

Lithuania:

- Database of Translation, documentation and information centre – 21786 entries;
- Dictionary of Economic Terms – 1315 entries;
- EUROVOC thesaurus (v4.2) – 6638 entries;
- Dictionary of Plant Names – 7143 entries;
- Five Languages Explanatory Dictionary of Metrology – 7788 entries;
- Dictionary of Library science and bibliography terms (4 Volumes) – 1741 entries;
- Explanatory Dictionary of Telecommunication Terms – 4263 entries;
- Dictionary of Modern computer programs and networks – 5094 entries;
- Dictionary of Automatics terms – 8874 entries;
- English-Lithuanian Dictionary of computing Terms – 11680 entries.

Estonia:

- Dictionary of IT terminological standard ISO 2382 – 144 entries;
- Estonian-English-Russian Mathematics Dictionary – 6381 entries;
- Computer User Dictionary – 5200 entries;

- Art Lexicon: Painting, Sculpture, Graphics, Architecture and Industrial Artist in Estonian, English, French, German and Swedish – 2999 entries;
- English-Estonian-Russian Heat Engineering Dictionary – 5856 entries;
- Music Terms Dictionary In Foreign Languages – 6311 entries;
- EnTerm – 6994 entries;
- Metallography and Metal Technology. IV, Mechanical properties and testing. Non-destructive testing. Estonian-English-German-Russian terms and definitions – 1944 entries;
- English-Finnish-Estonian Constructor`s Dictionary – 2940 entries;
- English-Estonian dictionary of meat production – 2093 entries;
- Road motor vehicle operations terminology: English-Estonian – 4387 entries;
- English-Estonian-English Dictionary of Professions of Forest and Wood – 4323 entries;
- Term Base Of Estonian Legal Language Centre – 49114 entries.

Hungary:

- MSZ ISO 2382-1:1994 (computers) – 144 entries;
- MSZ ISO 2382-3 (computers) – 40 entries;
- MSZ ISO 2382-6 (computers) – 57 entries;
- MSZ ISO 9000 Quality management systems. Fundamentals and vocabulary (ISO 9000:2000) – 80 entries;
- MSZ ISO 13943 Fire safety – 183 entries;
- Official terminology of the European Union, English–Hungarian–French–German – 22889 entries;
- Marketing and Advertising Dictionary – 3445 entries;
- Marketing and Advertising Dictionary – 3429 entries;
- Russian-Hungarian Trading Dictionary – 7231 entries;
- Explanatory Dictionary of German Terms in Economics (1992) – 1472 entries;
- Dictionary of Public Administration – 2783 entries;
- Italian-Hungarian Dictionary of Public Administration – 944 entries;
- Fachwörterbuch Finanzen und Bank – 4600 entries;
- Dictionary of Trading, Finances and Banking – 4959 entries;
- Dictionary of Law – 6885 entries;
- English-Hungarian translator`s dictionary in information technology – 19926 entries.

Latvia:

- Latvian–English power engineering dictionary – 11214 entries;
- Explanatory dictionary of military terms – 1558 entries;
- Dictionary of forestry, the forest industry and the wood processing – 8100 entries;
- English–Latvian dictionary of European Union terms – 3175 entries;
- LVS EN ISO 9000:2003 Quality management systems - Fundamentals and vocabulary – 80 entries;
- LVS EN ISO 13943 Fire safety - Vocabulary – 182 entries;
- Explanatory dictionary of economics – 4550 entries;
- ISO/IEC 2382-1:1993 Information technology - Vocabulary - Part 1: Fundamental terms – 144 entries;
- LAS Terminology Card Files – 10478 entries;
- Dictionary of gymnastics – 4479 entries;
- Athletics dictionary – 665 entries;

- Sports games dictionary – 2275 entries;
- English–Latvian dictionary of customs terms – 12788 entries;
- English–Latvian tax dictionary – 5420 entries;
- Latvian–Russian dictionary of chemistry and chemical technology – 10443 entries;
- Russian–Latvian dictionary of building terms – 43452 entries;
- International civil aviation terminology, definitions and abbreviations – 4349 entries;
- Astronomy and geodesy. Terms draft for Latvian Soviet Encyclopedia – 834 entries;
- Mathematics. Terms draft for Latvian Soviet Encyclopedia – 875 entries;
- Dictionary of mechanical engineering – 4162 entries;
- Dictionary of mechanics terminology – 3355 entries;
- Explanatory dictionary of mechanics basic terms – 983 entries;
- Dictionary of economics, office work and management – 9959 entries;
- Dictionary of information science – 6478 entries;
- Medicine. Term draft for Latvian Soviet Encyclopedia – 1857 entries;
- Linguistics. Terms draft for Latvian Soviet Encyclopedia – 764 entries;
- Agriculture. Terms draft for Latvian Soviet Encyclopedia – 1308 entries;
- Chemistry. Terms draft for Latvian Soviet Encyclopedia – 2021 entries;
- Physics. Terms draft for Latvian Soviet Encyclopedia – 1644 entries;
- Technology. Terms draft for Latvian Soviet Encyclopedia (two volumes) – 4390 entries;
- Terminological dictionary of metal technology and machine parts – 1511 entries;
- Terminological dictionary of physics, mathematics and astronomy – 2096 entries;
- Scientific and technical terminology. Plant protection – 3102 entries;
- Terminological dictionary of linguistics – 2375 entries;
- Terminological dictionary of physics – 6717 entries;
- Terminological dictionary of pedagogy and education science – 7975 entries;
- Terminological dictionary of radioelectronics, communications, automatics and computing – 9299 entries.