



## LEAF - Linking and Exploring Authority Files

IST-2000-26323

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### Project Report

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# 1 Introduction

This document is a Progress Report number 3 prepared for the Project LEAF (Linking and Exploring Authority Files; project number IST-2000-26323). This document was produced under Work Package 1.1 (*Administration Management*) of the current project. This report covers months 7- 9 (September-November 2001) of the project.

The purpose of this document is to provide a report of the activities undertaken in this reporting period. A descriptive form and a spreadsheet with numerical reporting data are provided.

The intended audience of this document is all project personnel.

## 1.1 Reporting Procedures

LEAF partners are requested to submit quarterly reports indicating the number of man-hours that their respective personnel have worked on the project together with a description of the activities undertaken.

In preparing this report, the information provided by partners is analysed and a written description given by Work Package. The numbers of hours are also provided in a spreadsheet form resolved to Work Package and partner granularity.

## 1.2 Partner Acronyms

The following table lists the project partners who are actively involved in the project.

| Partner Name   | Acronym | Status                | Associated To | Country Code |
|--|---------|-----------------------|---------------|--------------|
| Staatsbibliothek zu Berlin   | SBB     | Co-ordinating Partner |               | DE           |
| Joanneum Research  | JRS     | Full Partner          |               | AT           |
| University of Bergen   | UoB     | Full Partner          |               | NO           |
| Crossnet Systems Ltd.  | CNS     | Full Partner          |               | UK           |
| Österreichische Nationalbibliothek   | ÖNB     | Full Partner          |               | AT           |
| Biblioteca Nacional  | BN      | Full Partner          |               | PT           |
| Biblioteca de Universidad Complutense de Madrid                            | UCM     | Full Partner          |               | ES           |
| Swiss National Library   | SNL     | Associated Partner    | SBB           | CH           |
| National and University Library, Ljubljana, Slovenia                       | NUK     | Full Partner          |               | SI           |
| Institut Mémoire de l'Édition Contemporaine                                | IMEC    | Full Partner          |               | FR           |
| Rijksarkivet   | RA      | Full Partner          |               | SE           |
| Deutsches Literaturarchiv  | DLA     | Associated Partner    | SBB           | DE           |
| British Library  | BL      | Associated Partner    | SBB           | UK           |
| Goethe- und Schiller-Archiv  | GSA     | Associated Partner    | SBB           | DE           |
| Forschungsstelle und Dokumentationszentrum für Österreichische Philosophie | FDÖP    | Associated Partner    | JRS           | AT           |

## 2 Summary of Activities in this Reporting Period

The project continued at a strong pace following the summer vacation period, however a number of difficult areas emerged concerning technologies and architectural aspects of the LEAF model. These difficulties originated from a proposal at the data provider meeting in Vienna (August) to use the OAI Open Archives Initiative within the LEAF model instead of the Z39.50 protocol as proposed in the Technical Annex.

It should be stated that neither JRS or Crossnet were present at that meeting to receive this proposal or have the opportunity to defend the criticisms made against Z39.50 at that time.

There followed a period of considerable debate over the email list, culminating to the point of open argument at the Caen meeting. SBB proposed a vehicle to address this situation by splitting the attendees of the Caen meeting (representing all partners) to a number of Working Groups, each with a different topic to discuss, and each focussing on requirements of the Model. This had the effect of temporarily diffusing the contentious issues and allowed some progress to continue for the requirements phase of the project. Nethertheless, the Caen meeting was somewhat disappointing in that there was generally very little progress at an opportunity that would otherwise usually be very constructive.

In the period that followed the Caen meeting, each Working Group continued with their group activities, and a Working Group meeting was scheduled in Graz to summarize and formulate proposals to the project team to formally take decisions on how to proceed.

Meanwhile, the debate concerning technologies of OAI/Z39.50 etc re-surfaced, and Crossnet/JRS had the opportunity to address the impact on using an alternative technology to that proposed in the TA in terms of cost and risk and certainly from the perspective of Crossnet, gauged the commercial implications of participating and contributing to alternative technologies.

SBB, BL and Crossnet met at the BL in October and had a meeting with Dr. Herbert Van de Sompel, (one of the two proponents of OAI). He stated that the OAI specification was going to be revised in 2002 to a new version, and that a standardisation process (eg, IETF, W3C, NISO etc) *might* be considered in 2002. He also stressed backward compatibility would be important for any changes.

The Working Group meeting was held in Graz in November, represented by one member from each of the Working Group teams to report on WG activities. Crossnet and JRS had ascertained the implications to the TA in terms of budget etc. resulting in a serious position for Crossnet who had ascertained that WP8 of the project would in effect be redundant and Crossnet had no desire to work (or contribute their corporate funds) to an OAI solution, to the point that Crossnet could see little point in remaining in the project.

It has to be stated that most other partners had not voiced their opinions by that time, and a project vote was established in December asking partners how they were willing to provide their data to the LEAF model, whereby a huge majority of partners expressed a preference of using conventional means such as ftp/email etc to submit their data.

Consequentially, the LEAF model requirements were considerably clarified, and more constructive discussion was exposed in terms of:

- real-time access to partners authority data vs. performance of the indexing/linking mechanism,
- consideration to selectivity of authority data entries from authority files pertaining to particular subjects;
- inclusion of partners who only wished to provide real-time distributed access to their data.

A so-called "hybrid" model was devised accommodating these key requirements, and this resulted in a broader set of requirements than stated in the TA, but these are requirements that can probably be realistically tested in the project.

In addition to the model discussions, considerable discussions took place concerning the design and linking of the authority records, exposing a considerably complicated set of requirements and linking mechanisms dealing with updates, annotations etc. These discussions were still in effect after the reporting period.

On the whole, the effect of introducing technologies to the project partners who are not involved in the project software development at the time where only project requirements should have been addressed had the impact of introducing a 2 month delay to the completion of the requirements tasks, and an overall severe risk to the project. However, the problems have now been resolved, and the delay can probably be recovered by addressing the timings of subsequent tasks.

## 3 Details of Activities in this Reporting Period

### 3.1 WP 1 - Management and Administration Management

#### 3.1.1 WP 1 – Events

There was a data providers meeting in Caen hosted by IMEC on 27, 28 September 2001.

There was a working group meeting in Graz hosted by JRS on 19, 20 November 2001.

SBB undertook a working visit to the BL on 22.-26 October 2001, including a visit to Crossnet on 26 October 2001.

#### 3.1.2 WP 1 – Activities

##### Task 1.1: Administration Management

BL, BN, DLA, SBB, GSA, IMEC, ÖNB, JRS, SNL FDÖP and UoB reported general administration and processing of the first cost claim and project reporting.

JRS, CNS, SBB reported discussions concerning the Consortium Agreement.

CNS held many internal discussions in considering whether Crossnet has a technical part to play in the project if the model and technical components are changed - e.g: impact on the compatibility/maintenance suite; to the extent whether Crossnet should consider pulling out of the project altogether.

SBB reported administration of all observing partners' needs. SBB also held intensive discussions with the project manager regarding the general progress of the project. Preparation and quality assurance of the first Management Report.

##### Task 1.2 Project Management

CNS reported significant project management and planning activities - ascertaining the impact that a potential change of technologies and the proposed models would have to the project budget and time-scales. CNS held many discussions with the co-ordinator in this respect.

JRS reported administration of the document store and the mailing list.

RA held internal management and contacts with their administrative division.

SBB undertook quality assurance and acceptance of the management deliverables.

##### Task 1.3: Meetings

All partners with the exception of GSA attended the Caen meeting on 27, 28 September 2001.

SBB, JRS, CNS, ÖNB, UCM and RA attended the Graz working group meeting.

CNS reported preparation and presentations at the Caen meeting and working group meeting in Graz on 19, 20 November 2001.

SBB reported preparation of and participation in the Caen meeting. SBB also prepared the minutes of the Caen working group meeting, including the summaries of individual working groups' results.

SBB undertook a working visit to the BL (22.-26.10.2001), and held meetings with various members of staff at the BL in order to raise awareness of the LEAF project; both within and outside the Department of Manuscripts. In addition, SBB had a meeting with Dick Sargant of the National Register of Archives and David Sutton of the National Register Project to discuss possibilities of co-operation. SBB prepared a report about the visit to the BL for project partners.

SBB reported preparation of and participation in the working group meeting in Graz; Austria (19.-20.11.2001).

UCM reported attendance at the PCC Meeting in Caen and attendance at the task meeting in Graz.

UoB reported planning and participating and reporting the PCC meeting in Caen.

#### **Task 1.4: Final report**

There was no activity on this task in the reporting period.

### **3.1.3 WP 1 – Output**

First cost claim.

Project report 2.

Minutes of meetings.

## **3.2 WP 2 - Dissemination and Concertation**

### **3.2.1 WP 2 – Events**

There were no project events for this WP in the reporting period.

### **3.2.2 WP 2 – Activities**

#### **Task 2.1: Creation and Administration of the Project Web site**

CNS reported supervision of the project web site and of the operations of the web questionnaire. CNS extracted the mySQL database containing the survey results and sent them to SBB and ONB. CNS provided various minor updates to the project web site. CNS generated a template for the project newsletter.

IMEC reported consultation and comments on the web site, including some testing of the web user questionnaire.

ÖNB provided input for the project web site in terms of meta-data.

SBB prepared a document about the project web site (D 2.1. Project Presentation), and undertook a quality check of the project web site's contents.

## Task 2.2 Dissemination of results

BN undertook various presentations of LEAF at local workshops.

DLA proof read the Dissemination and Use plan. DLA presented the LEAF model to their own manuscript department.

DLA prepared and held a presentation: "Kallias in the context of MALVINE and LEAF" at the ICLA (International Council of Literary Archives) meeting in Marbach.

IMEC undertook dissemination of the project to IMEC's partners.

ÖNB reported preparation and presentation of a LEAF Presentation at AG Normdateien.

RA attended a conference on archival standards for Belgian archivists at Brussels on 3 October. RA prepared a newsletter article for a conference for polish archivists 27-28 October.

SBB prepared an article for the first LEAF newsletter. SBB reported preparation and finalisation of the Dissemination and Use Plan.

UoB provided dissemination on LEAF among local colleagues at UoB.

### 3.2.3 WP 2 – Output

Revised pages for the LEAF web site.

The prepared Dissemination and Use Plan.

## 3.3 WP 3 - Standards Representation

### 3.3.1 WP 3 – Events

There were no project events for this WP in the reporting period.

### 3.3.2 WP 3 – Activities

#### Task 3.1: LEAF Maintenance Agency

There were no activities reported for this task in the reporting period.

#### Task 3.2: Meta-data

BN undertook an analysis of the local scenarios and meta-data descriptions.

IMEC undertook an analysis of existing meta-data formats.

JRS undertook a review and provided comments regarding meta-data information.

ÖNB undertook an analysis of meta-data including the preparation of LEAF meta-data tables.

SBB undertook further work on a draft version of an accumulated meta-data profile for the description of corporate bodies. SBB undertook finalisation of the LEAF Meta-data Tables Document.

### **Task 3.3: Partnerships and Co-operations**

BL arranged and held a series of Partnerships & Co-operations meetings in London with SBB/Crossnet/NRA/Reading University.

BN reported various relevant contacts with DELOS DCMI etc.

IMEC reported co-operation with a potentially new observing partner.

RA reported co-ordination and information for The Committee for Descriptive Standards of the International Council of Archives.

UoB reported co-operation with the standardization body for EAD (ISAAR) and co-operation initiatives at a national level.

### **3.3.3 WP 3 – Output**

LEAF Meta-data Tables Document.

## **3.4 WP 4 - Data Representation Study**

### **3.4.1 WP 4 – Events**

There were no events relating to this WP in the reporting period.

### **3.4.2 WP 4 – Activities**

DLA developed and refined a sample data export script for corporate bodies. DLA contributed several revisions of local meta-data documentation and sample data for corporate bodies.

GSA reported verification of meta-data tables.

IMEC reported analysis of XML formats related to the project.

UoB reported on the recommended name DTD, including delivery of the final report for this analysis.

UCM undertook a data extraction from the UCM system to convert them into potential LEAF formats.

### **3.4.3 WP 4 – Output**

Recommended name DTD report.

## **3.5 WP 5.1 - Model requirements analysis**

### **3.5.1 WP 5.1 – Events**

There were no events for this task in the reporting period.

### **3.5.2 WP 5.1 – Activities**

#### **Task 5.1.1: Analysis of input data**

BL reported contributions to the Model Requirements discussions (monitoring assessing and contributing towards discussions relating to the proposed model).

BN reported contributions to the Model Requirements discussions.

CNS reported considerable discussions to the LEAF model - preparing of rationale and arguments to the differences being raised between the original model in the contract and the model presented by BN to the meeting in Berlin.

DLA took part in the discussion of the LEAF model in the mailing list and at the Caen meeting. DLA contributed to the MRAD proposals and the proposals for working group integration of MALVINE-LEAF.

FDÖP participated in the discussion of the LEAF model and delivered input to the Model Requirements Analysis Document part 1 (detailed description of the local scenario at FDÖP: status of the FDÖP authority-file; updating-procedures and technical aspects of data providing and contractual matters).

JRS participated in the discussion of the LEAF model at the meeting in Graz.

NUK provided identification and definition of model user scenarios. NUK undertook an analysis and evaluation of their authority file material against the objectives of LEAF.

ÖNB undertook an analysis of the LEAF Model and prepared input for the MRAD-1.

RA participated in the debate about the LEAF model.

SBB organised various project internal working groups dealing with different aspects of the LEAF model. SBB undertook proof reading and commenting to the MRAD-1. SBB contributed to work on the Model Requirements Analysis Document (MRAD). part 1 - analysis and evaluation of input data.

SNL undertook meta-data mapping, reading reports and discussion of the LEAF model.

UCM undertook preparation of the activities in the working Group 2 during the Graz Task Meeting.

### **Task 5.1.2: Definition of User Groups**

BN contributed to the definition of user groups.

NUK provided identification and definition of possible user groups, including user scenario models for various user groups like archives, libraries, etc.

ÖNB undertook an analysis of user scenarios, providing input for WG3 - the annotation system, and input for LEAF WG2 and WG6.

ÖNB prepared input for and attended the LEAF WG Meeting in Graz.

SBB reported discussion and focus of the LEAF model according to partner and user group needs. SBB reported work on the Model Requirements Analysis Document (MRAD), part 2: - User Group Statements and Special User Scenarios.

### **Task 5.1.3: User Survey**

BN provided analysis and dissemination of the user survey.

NUK provided definitions of user needs at different levels for libraries and archives. NUK organised preparation and construction for installation of their database in co-ordination with the discussion and provided relevant samples. NUK undertook construction of the bibliographic NUK meta-data document for manuscripts.

ÖNB reported analysis of the user survey results.

SBB worked closely with ÖNB regarding the processing and the evaluation of the results of the user survey. SBB worked on the Model Requirements Analysis Document (MRAD), part 3: User Requirements.

#### **Task 5.1.4: Identification of Services**

NUK reported identification and definition of services to be provided to the defined user groups.

### **3.5.3 WP 5.1 – Output**

Various draft technical notes were produced, being intended as drafts for deliverables.

Various drafts for the MRAD deliverables.

## **3.6 WP 5.2 - Focussing the model with authority file data**

### **3.6.1 WP 5.2 – Events**

There were no events relating to this WP in the reporting period.

### **3.6.2 WP 5.2 – Activities**

RA and UoB undertook an analysis and studies of the current status quo in this area.

RA and UoB undertook preparations for an analysis of various practices in this area.

### **3.6.3 WP 5.2 – Output**

There was no output for this WP in the reporting period.

## **3.7 WP 6 - Functional Specifications of the Demonstrator**

### **3.7.1 WP 6 – Events**

There were no events relating to this WP in the reporting period.

### **3.7.2 WP 6 – Activities**

There were no activities reported for this task in the reporting period.

### **3.7.3 WP 6 – Output**

There was no output for this WP in the reporting period.

## **3.8 WP 7 - System Development and Preparation of Test Environment**

### **3.8.1 WP 7 – Events**

There were no events relating to this WP in the reporting period.

### **3.8.2 WP 7 – Activities**

There were no activities reported for this WP in the reporting period.

### **3.8.3 WP 7 – Output**

There was no output for this WP in the reporting period.

## **3.9 WP 8 - Test of the Demonstrator**

### **3.9.1 WP 8 – Events**

There were no events relating to this WP in the reporting period.

### **3.9.2 WP 8 – Activities**

There were no activities reported for this WP in the reporting period.

### **3.9.3 WP 8 – Output**

There was no output for this WP in the reporting period.

## **3.10 WP 9 - Model compatibility/ maintenance suite**

### **3.10.1 WP 9 – Events**

There were no events relating to this WP in the reporting period.

### **3.10.2 WP 9 – Activities**

There were no activities reported for this WP in the reporting period.

### **3.10.3 WP 9 – Output**

There was no output for this WP in the reporting period.

## **3.11 WP 10 - Assessment and Evaluation**

### **3.11.1 WP 10 – Events**

There were no events relating to this WP in the reporting period.

### **3.11.2 WP 10 – Activities**

There were no activities reported for this WP in the reporting period.

### **3.11.3 WP 10 – Output**

There was no output for this WP in the reporting period.

## **3.12 WP 11 - Technical Implementation Plan (Exploitation Planning)**

### **3.12.1 WP 11 – Events**

There were no events relating to this WP in the reporting period.

### **3.12.2 WP 11 – Activities**

There were no activities reported for this WP in the reporting period.

### **3.12.3 WP 11 – Output**

There was no output for this WP in the reporting period.

## 4 Project Activities by Recorded Time

This section contains information on budget and reported man hours.

The subsequent tables contain details of the Work Packages listing the budgeted man-hours, used man hours and remaining man hours for each partner.

In addition, there is an overall summary of budgeted, used and remaining WP hours represented in tabular and graphical formats.

Please note that the LEAF project is working at a rate of 17.5 productive person days per month.

Each partners monthly rate is shown.

| Work Package / Task                       | SBB    | DLA   | JRS   | FDOP  | UoB    | CNS   | ONB   | BN    | UCM   | SNL   | NUK    | IMEC  | BL    | GSA   | RA    |
|---|--------|-------|-------|-------|--------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|
| hours per month                           | 135    | 135   | 140   | 140   | 131    | 131   | 140   | 123   | 128   | 152   | 131    | 131   | 126   | 140   | 131   |
| <b>1 Mgmt. &amp; Admin Mgmt.</b>          |        |       |       |       |        |       |       |       |       |       |        |       |       |       |       |
| Budgeted hours                            | 3638   | 270   | 420   | 280   | 328    | 1050  | 350   | 306   | 319   | 305   | 328    | 327   | 252   | 280   | 328   |
| Booked to date                            | 1028.0 | 90.5  | 165.8 | 117.0 | 112.0  | 291.0 | 157.0 | 77.0  | 127.0 | 138.5 | 330.0  | 347.0 | 224.0 | 130.0 | 192.0 |
| Remaining                                 | 2610.3 | 179.0 | 254.2 | 163.0 | 216.1  | 759.0 | 193.0 | 229.3 | 192.4 | 166.0 | -1.9   | -19.8 | 28.0  | 150.0 | 136.1 |
| Overrun                                   | 0.0    | 0.0   | 0.0   | 0.0   | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 1.9    | 19.8  | 0.0   | 0.0   | 0.0   |
| <b>2 Dissemination &amp; Concertation</b> |        |       |       |       |        |       |       |       |       |       |        |       |       |       |       |
| Budgeted hours                            | 673.8  | 67.4  | 140.0 | 70.0  | 525.0  | 656.3 | 560.0 | 61.3  | 766.5 | 76.1  | 262.5  | 392.7 | 63.0  | 70.0  | 65.6  |
| Booked to date                            | 313.0  | 10.0  | 63.0  | 10.0  | 16.0   | 187.0 | 187.0 | 38.5  | 4.0   | 2.5   | 30.0   | 101.0 | 0.0   | 0.0   | 52.0  |
| Remaining                                 | 360.8  | 57.4  | 77.0  | 60.0  | 509.0  | 469.3 | 373.0 | 22.8  | 762.5 | 73.6  | 232.5  | 291.7 | 63.0  | 70.0  | 13.6  |
| Overrun                                   | 0.0    | 0.0   | 0.0   | 0.0   | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   |
| <b>3 Standards Representation</b>         |        |       |       |       |        |       |       |       |       |       |        |       |       |       |       |
| Budgeted hours                            | 808.5  |       | 140.0 |       | 459.4  | 328.1 | 630.0 | 428.8 | 63.9  |       | 65.6   | 65.5  |       |       | 262.5 |
| Booked to date                            | 404.0  |       | 65.3  |       | 219.5  | 0.0   | 196.0 | 161.0 | 16.0  |       | 200.0  | 43.0  |       |       | 116.0 |
| Remaining                                 | 404.5  |       | 74.7  |       | 239.9  | 328.1 | 434.0 | 267.8 | 47.9  |       | -134.4 | 22.5  |       |       | 146.5 |
| Overrun                                   | 0.0    |       | 0.0   |       | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   |       | 134.4  | 0.0   |       |       | 0.0   |
| <b>4 Data Representation Study</b>        |        |       |       |       |        |       |       |       |       |       |        |       |       |       |       |
| Budgeted hours                            | 539.0  | 67.4  | 70.0  | 70.0  | 2625.0 |       | 280.0 | 245.0 | 255.5 | 76.1  | 262.5  | 261.8 | 63.0  | 70.0  | 262.5 |
| Booked to date                            | 70.0   | 66.5  | 0.0   | 0.0   | 579.5  |       | 48.0  | 0.0   | 60.0  | 0.8   | 0.0    | 88.0  | 0.0   | 10.0  | 36.0  |
| Remaining                                 | 469.0  | 0.9   | 70.0  | 70.0  | 2045.5 |       | 232.0 | 245.0 | 195.5 | 75.4  | 262.5  | 173.8 | 63.0  | 60.0  | 226.5 |
| Overrun                                   | 0.0    | 0.0   | 0.0   | 0.0   | 0.0    |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   |

| Work Package / Task                      | SBB    | DLA   | JRS    | FDOP  | UoB    | CNS   | ONB   | BN    | UCM   | SNL  | NUK   | IMEC  | BL    | GSA   | RA    |
|--|--------|-------|--------|-------|--------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|
| <b>5.1 Model Requirements Analysis</b>   |        |       |        |       |        |       |       |       |       |      |       |       |       |       |       |
| Budgeted hours                           | 1347.5 | 67.4  | 280.0  | 70.0  | 262.5  | 262.5 | 840.0 | 490.0 | 63.9  | 76.1 | 262.5 | 65.5  | 63.0  | 70.0  | 262.5 |
| Booked to date                           | 1166.0 | 132.0 | 378.5  | 124.0 | 0.0    | 268.5 | 869.0 | 490.0 | 52.0  | 40.0 | 240.0 | 50.0  | 76.0  | 11.0  | 24.0  |
| Remaining                                | 181.5  | -64.6 | -98.5  | -54.0 | 262.5  | -6.0  | -29.0 | 0.0   | 11.9  | 36.1 | 22.5  | 15.5  | -13.0 | 59.0  | 238.5 |
| Overrun                                  | 0.0    | 64.6  | 98.5   | 54.0  | 0.0    | 6.0   | 29.0  | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   | 13.0  | 0.0   | 0.0   |
| <b>5.2 Focus the Model</b>               |        |       |        |       |        |       |       |       |       |      |       |       |       |       |       |
| Budgeted hours                           | 808.5  | 67.4  | 280.0  | 70.0  | 65.6   | 65.6  | 630.0 | 980.0 | 63.9  | 76.1 | 393.8 | 65.5  | 63.0  | 70.0  | 525.0 |
| Booked to date                           | 0.0    | 0.0   | 57.0   | 0.0   | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   | 0.0   | 9.0   | 0.0   |
| Remaining                                | 808.5  | 67.4  | 223.0  | 70.0  | 65.6   | 65.6  | 630.0 | 980.0 | 63.9  | 76.1 | 393.8 | 65.5  | 63.0  | 61.0  | 525.0 |
| Overrun                                  | 0.0    | 0.0   | 0.0    | 0.0   | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| <b>6 Functional Spec of Demonstrator</b> |        |       |        |       |        |       |       |       |       |      |       |       |       |       |       |
| Budgeted hours                           | 134.8  |       | 1400.0 |       | 131.3  | 131.3 | 140.0 | 122.5 | 127.8 | 76.1 | 131.3 | 130.9 |       |       | 131.3 |
| Booked to date                           | 0.0    |       | 228.3  |       | 64.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   |       |       | 0.0   |
| Remaining                                | 134.8  |       | 1171.8 |       | 67.3   | 131.3 | 140.0 | 122.5 | 127.8 | 76.1 | 131.3 | 130.9 |       |       | 131.3 |
| Overrun                                  | 0.0    |       | 0.0    |       | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0   | 0.0   |       |       | 0.0   |
| <b>7 System Development</b>              |        |       |        |       |        |       |       |       |       |      |       |       |       |       |       |
| Budgeted hours                           | 539.0  | 336.9 | 4060.0 | 350.0 | 1443.8 | 393.8 | 980.0 | 306.3 | 319.4 |      | 459.4 | 327.3 | 315.0 | 350.0 | 459.4 |
| Booked to date                           | 0.0    | 0.0   | 0.0    | 0.0   | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   |      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Remaining                                | 539.0  | 336.9 | 4060.0 | 350.0 | 1443.8 | 393.8 | 980.0 | 306.3 | 319.4 |      | 459.4 | 327.3 | 315.0 | 350.0 | 459.4 |
| Overrun                                  | 0.0    | 0.0   | 0.0    | 0.0   | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   |      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

| Work Package / Task                 | SBB   | DLA   | JRS   | FDOP  | UoB   | CNS    | ONB   | BN    | UCM   | SNL   | NUK   | IMEC  | BL    | GSA   | RA    |
|-------------------------------------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| <b>8 Test of the Demonstrator</b>   |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |
| Budgeted hours                      | 269.5 | 134.8 | 420.0 | 140.0 |       |        | 630.0 | 245.0 | 255.5 |       | 787.5 | 261.8 | 126.0 | 140.0 | 328.1 |
| Booked to date                      | 0.0   | 0.0   | 0.0   | 0.0   |       |        | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Remaining                           | 269.5 | 134.8 | 420.0 | 140.0 |       |        | 630.0 | 245.0 | 255.5 |       | 787.5 | 261.8 | 126.0 | 140.0 | 328.1 |
| Overrun                             | 0.0   | 0.0   | 0.0   | 0.0   |       |        | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| <b>9 Maintenance Suite</b>          |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |
| Budgeted hours                      | 202.1 | 202.1 | 280.0 | 210.0 | 196.9 | 1312.5 | 210.0 | 183.8 | 191.6 | 228.4 | 196.9 | 196.4 | 189.0 | 210.0 | 196.9 |
| Booked to date                      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Remaining                           | 202.1 | 202.1 | 280.0 | 210.0 | 196.9 | 1312.5 | 210.0 | 183.8 | 191.6 | 228.4 | 196.9 | 196.4 | 189.0 | 210.0 | 196.9 |
| Overrun                             | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| <b>10 Assessment and Evaluation</b> |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |
| Budgeted hours                      | 539.0 | 269.5 | 140.0 | 280.0 | 262.5 |        | 420.0 | 245.0 | 255.5 | 532.9 | 262.5 | 261.8 | 126.0 | 280.0 | 262.5 |
| Booked to date                      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |        | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Remaining                           | 539.0 | 269.5 | 140.0 | 280.0 | 262.5 |        | 420.0 | 245.0 | 255.5 | 532.9 | 262.5 | 261.8 | 126.0 | 280.0 | 262.5 |
| Overrun                             | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |        | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| <b>11 Exploitation Planning</b>     |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |
| Budgeted hours                      | 269.5 | 67.4  | 70.0  | 70.0  | 65.6  | 262.5  | 280.0 | 61.3  | 63.9  | 76.1  | 65.6  | 65.5  | 63.0  | 70.0  | 262.5 |
| Booked to date                      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Remaining                           | 269.5 | 67.4  | 70.0  | 70.0  | 65.6  | 262.5  | 280.0 | 61.3  | 63.9  | 76.1  | 65.6  | 65.5  | 63.0  | 70.0  | 262.5 |
| Overrun                             | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

**Totals by Work  
Package**

|   | <b>Budget<br/>Totals</b> | <b>Used</b>   | <b>Percentage<br/>Used</b> |
|---|--------------------------|---------------|----------------------------|
| <b>1 Mgmt. &amp; Admin Mgmt.</b>              | 8781.5                   | 3526.8        | 40.2                       |
| <b>2 Dissemination &amp;<br/>Concertation</b> | 4450.1                   | 618.0         | 13.9                       |
| <b>3 Standards<br/>Representation</b>         | 3252.2                   | 951.5         | 29.3                       |
| <b>4 Data Representation<br/>Study</b>        | 5147.8                   | 822.3         | 16.0                       |
| <b>5.1 Model Requirements<br/>Analysis</b>    | 4483.3                   | 2120.5        | 47.3                       |
| <b>5.2 Focus the Model</b>                    | 4224.3                   | 9.0           | 0.2                        |
| <b>6 Functional Spec of<br/>Demonstrator</b>  | 2657.0                   | 64.0          | 2.4                        |
| <b>7 System Development</b>                   | 10640.0                  | 0.0           | 0.0                        |
| <b>8 Test of the<br/>Demonstrator</b>         | 3738.2                   | 0.0           | 0.0                        |
| <b>9 Maintenance Suite</b>                    | 4206.5                   | 0.0           | 0.0                        |
| <b>10 Assessment and<br/>Evaluation</b>       | 4137.2                   | 0.0           | 0.0                        |
| <b>11 Exploitation Planning</b>               | 1812.8                   | 0.0           | 0.0                        |
| <b>Totals:</b>                                | <b>57530.9</b>           | <b>8112.0</b> | <b>14.1</b>                |

**Totals by Partner**

| <b>Partner</b> | <b>Total Budget<br/>(hours)</b> | <b>Budget Used to<br/>Date (hours)</b> |
|----------------|---------------------------------|--|
| SBB            | 9769                            | 2981                                   |
| DLA            | 1550                            | 299                                    |
| JRS            | 7700                            | 958                                    |
| FDÖP           | 1610                            | 251                                    |
| UoB            | 6366                            | 991                                    |
| CNS            | 4463                            | 747                                    |
| ÖNB            | 5950                            | 1457                                   |
| BN             | 3675                            | 767                                    |
| UCM            | 2747                            | 259                                    |
| SNL            | 1523                            | 182                                    |
| NUK            | 3478                            | 800                                    |
| IMEC           | 2422                            | 629                                    |
| BL             | 1323                            | 300                                    |
| GSA            | 1610                            | 160                                    |
| RA             | 3347                            | 420                                    |

### Graphical Representation of Total and Used Effort

