European Commission

INFORMATION SOCIETY TECHNOLOGIES (IST) PROGRAMME

Contract for:

Combined RTD & Demonstration project

Annex 1 - "Description of Work"

Project acronym: **REGNET**
Project full title: **Cultural Heritage in Regional Networks**
Proposal/Contract no.: **IST-2000 - 26336**
Related to other Contract no.:

Date of preparation of Annex 1: 2000-09-29

Operative commencement date of contract:

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1. Project summary

The REGNET Project will deliver a system which provides a service infrastructure (technical & legal framework) to service centres supporting cultural institutions and industries. The REGNET system offers a portal to different services like data entry, search and retrieval, and e-business. It can be accessed with mobile devices via de facto standard protocols (such as wireless application protocol ,WAP etc). The project is divided in an implementation and demonstration phase. Technical work is related to: content engineering, platform engineering and business engineering and based on emerging technologies like XML, and distributed search mechanisms based on Dublin Core metadata. Business processes involved in the area of publishing will be the basis for the implementation of a publishing system which enables small and medium organizations the generation of electronic publications. The demonstration phase is performed in four European regions.

2. Project objective(s)

Objectives:

The **objectives** of REGNET are:

- Development of a **service infrastructure** which enables business to business (B2B) transactions as well as business to consumer (B2C) transactions,
- Development and use of existing - locally held - **electronic catalogues** (OPACS: Online Public Access Catalogues) referring to cultural & scientific objects contained in libraries, museums, archives, and galleries, as well as to goods and services.
- Integration of a **distributed search and retrieval** system to achieve a 'virtual union' catalogue of all OPACS and product/service catalogues held locally ,
- Definition of **Information Products and Services** including necessary 'supply chains' and the connected business processes and functions to deliver digital and physical goods (to provide high quality services an editorial committee will be installed),
- Setup of a **legal framework** necessary for all business transaction on the B2B and B2C level (containing payment features, copyright systems, authentication control, etc),
- **Integration and test** of existing components, standards, and methods in the field of distributed search and retrieval and e-commerce,
- **Access** to the REGNET-WEB services with mobile devices via de facto standard protocols (such as wireless application protocol ,WAP etc).
- Run a **trial service** (demonstration phase) which should be followed by a regular service.

The **technical (research and development) objectives** of REGNET are:

- Development of the ‘REGNET building blocks (nodes)’ which are necessary to build up an appropriate infrastructure to access to catalogues (containing cultural & scientific data, product & service descriptions, etc) in the Cultural Heritage domain.

Access to the ‘REGNET System’ via wired communication lines as well as via wireless mode (e.g. using the wireless application protocol WAP).

The building blocks (nodes) of the REGNET system consist of:

- **REGNET – Portal** (access to remote data entry, distributed search, e-business)
- **REGNET – Cultural Heritage Data Management** (search over distributed meta data repositories connected to stores containing digital content)
- **REGNET – eBusiness Data Management** (e-commerce system allowing access to distributed product/service catalogues)

- **REGNET – Ontology (Metadata) Subsystem** (containing the specifications of all metadata needed in the Cultural Heritage domain as well as in the e-business domain; this subsystem also stores specifications of workflows and process related metadata)
- **REGNET – Electronic Publishing Subsystem** (allowing the production of personalised digital products based on standardised meta data and workflows)

The **demonstration objectives** of REGNET are:
- Test the technical (hardware/software) infrastructure of the REGNET system,
- Validate the developed services offered to end users and content providers,
- Test the operation of at least three Cultural Service Centres.

Achievements.
REGNET aims to set up a functional network of service centres in Europe which provides IT-services dedicated to Cultural Heritage organisations. It will integrate multi media industries enabling the production of electronic publications. REGNET will be an enabler of eBusiness activities for CH organizations. It will provide access and use of digital data (scientific and cultural) as well as of physical goods as provided by museum shops. The achievements will be done on different levels:
Content providers:
- Will provide access (via wired and wireless communication) to their digital contents, services and products and offer them to their clients (B2C),
- Can use the REGNET facilities for multi media productions and data base management,
- Can cooperate with other partners during the creation of data bases, generation of multi media products or creation of a virtual exhibition (B2B).

Service Centre operators:
- Will generate income by providing the technical infrastructure (software/hardware) to content providers and other partners within the REGNET network,
- Can offer additional IT-services and consultancies

System developers:
- Will be able to sell the REGNET system to Cultural Service Centres and Content Providers,
- Will have the possibility to implement additional components for the REGNET software system (additional ‘nodes’ like an ‘exhibition creator’, etc)
- Will have income via licence fees for the REGNET system.

The end user of the system will be able to:
- have easy and wide access to cultural data and services,
- invoke the production of personalized goods (e.g. CDROM) and services,
- do internet shopping.

Description of work:
Content Engineering:
- Digitisation of 2- and 3-dimensional objects using data capturing systems already on the market
- Use of Dublin Core Metadata to enable Cross Domain searches within the 'virtual union' catalogue (generation via an available Metadata Editor or Harvester)
- Use of documentation standards in the different domains (UNIMARC, CIDOC, ISAD(G), ...)
- Use or modification of existing Document Type Definitions (XML-DTDs) to describe objects and collections (e.g. AMICO, or CIMI-based) as well as products

- Storage of XML (Extensible Markup Language) structured data in data bases at the content provider's site
- Development of Style sheets (XSL) for data presentation in online or printed form (eg. dedicated and personalized catalogues)

Platform Engineering:

- Implementation of a B2B-commerce system based on XML-data transfer, following existing and emerging standards as specified by the ebXML community.
- Implementation of a B2C-commerce system including an 'internet auction' system
- Integration of a distributed search and retrieval (S&R) component based on Z39.50 standard or similar methodologies based on XML and http protocol, for accessing distributed Cultural Heritage related catalogues as well as product/Service catalogues in the eBusiness environment.
- Integration of a customer management system based on relational data base management supporting customer relationships.
- Use of an appropriate integration environment for all the middleware components (B2B, B2C, S&R, RDBMS. Metadata Management, …)
- Usage of Open Software Standards and Software available preferable in the public domain (e.g. LINUX)
- Usage of low cost hardware
- Integration of WAP access to the REGNET System

Enterprise Engineering:

- Definition of Core Processes for REGNET, comprising at least: 1) access and data entry to *distributed catalogues*, 2) a *shopping cart* system, 3) creation of a *personalized catalogue* based on retrieved data from the 'virtual catalogue' (in printed and electronic form), 4) an *auction system* (e.g. duplicates of posters), and 5) a *delivery system* for physical goods (e.g. goods from museum stores)
- Use of XML/EDI (e.g.: Simple-eCo Elements like: Order, Invoice, Despatch, Report, ...) for exchange of business data (based on ebXML recommendations)
- Definition of the workflow connected with the creation of a electronic publication (e.g.: storyboard development, content management, compilation of data, production, delivery) as reference model for electronic publishing
- Definition of appropriate 'business profiles' evolved from different functions and processes (e.g.: 'content manager') for the involved personnel (following the recommendations to the European Parliaments just being worked out).

3. Participant list

List of Participants

Partic. Role*	Partic. no.	Participant name	Participant short name	Country	Date enter project	Date exit project
C	1	Angewandte Informations-technik Forschungsgesellschaft mbH	AIT	A	Start of project	End of project
A	2	Österreichische Nationalbibliothek	ONB	A	Start of project	End of project
A	3	Salzburg Research Forschungsgesellschaft m.b.H.	SR	A	Start of project	End of project
P	4	IMAC Information & Management Consulting e.K.	IMAC	DE	Start of project	End of project
P	5	Stockholms universitet	SUL	SE	Start of project	End of project
A	6	Länsmuseet pa Gotland	LMG	SE	Start of project	End of project
A	7	Naturhistoriska riksmuseet	NRM	SE	Start of project	End of project
A	8	Kungl. Vetenskapsakademien	KVA	SE	Start of project	End of project
P	9	TARX nv	TARX	BE	Start of project	End of project
A	10	Stad Mechelen	MECH	BE	Start of project	End of project
A	11	Stichting Museon (Museum vorr het Onderwijs)	MUS	NL	Start of project	End of project
P	12	Motorola S.p.A.	MOT	I	Start of project	End of project
P	13	SPACE S.r.l.	SPAC	I	Start of project	End of project
P	14	Fratelli Alinari I.D.E.A. S.P.A.	ALI	I	Start of project	End of project
P	15	Consorzio Civita	CC	I	Start of project	End of project
P	16	Instituto Andaluz de Tecnologia	IAT	ES	Start of project	End of project
A	17	Ajuntament de Granollers	GRAN	ES	Start of project	End of project
P	18	Institute of Computer and Communication Systems, Bulgarian Acadamy of Sciences	ICCS	BUL	Start of project	End of project
P	19	Zeus Consulting SA	ZEUS	EL	Start of project	End of project
A	20	Systema Informatics S.A.	SI	EL	Start of project	End of project
A	21	Centre for Research and Technology Hellas	CERT	EL	Start of project	End of project
P	22	VALTECH	VALT	F	Start of project	End of project
A	23	Terra Incognita Europa Limited	TINC	UK	Start of project	End of project

*C = Coordinator (or use C-F and C-S if financial and scientific coordinator roles are separate)
P - Principal contractor
A - Assistant contractor

4. Contribution to programme/key action objectives

REGNET provides a system which should enable European workers and enterprises, in particular libraries, museums, archives, galleries, and SMEs to increase their competitiveness in the global marketplace. The REGNET System is based mainly on integration work using components from the field of distributed searches, (cultural) data management, e-business, etc. To provide new ways of access to digital libraries REGNET integrates the WAP (wireless application protocol) enabling users to use mobile telephones for their communication needs. REGNET extends the traditional access facilities to distributed heterogeneous catalogues by integration of product and service catalogues managed by e-business systems. Because of the large REGNET consortium real world tests covering 6 European regions (a dozen states) are possible. Tests are carried within the demonstration phase of the REGNET Project. The REGNET-test bed covers both the Development and the trading of goods and services, in particular in the electronic marketplace, and takes into account the different requirements and capabilities of the individual worker (e.g. curator, librarian, archivist, artist, journalist,...), consumer (public, tourists,...) and of businesses and organisations, by modelling and reengineering core business processes in the field of Cultural Heritage (CH). Especially the needs involved when accessing CH-related data and using it in personalised way will be addressed. The technical system is based on sound European developments (especially in the field of accessing digital goods using for example the Search & Retrieval Protocol Z39.50 involved in a series of projects within FP4-Telematics for Libraries) and will implement a 'Digital Libraries' concept which is targeted to provide income to all participating organisations (e.g.: royalties for dedicated expertises and high quality images, charges for reproduction services, consulting, physical goods, IT-services, etc). REGNET is based on the application of current technologies and provides integration of state-of-the-art components. It will enable the co-operation between SMEs and organisations related to the domain of Cultural Heritage. The implementation of REGNET is built on customisable systems focussing to business-led standardisation work. The project will observe and take into account the ongoing and recent work of CEN/ISSS (Electronic Commerce Workshop) but will also look into recent activities like RosettaNet, eCo-Framework, OBI, etc. With respect to the Cultural Heritage domain recent activities in the field of Metadata (Dublin Core) and interoperability of catalogues (referring to Cultural & Scientific Data as well to 'business' related data) will be taken into account. The model developed for the REGNET-Test bed demonstrates tools and systems and a legal framework for a dynamic networked and virtual organisation - centred around 'Service Centres', facilitating co-operation and the inter-operation of business processes (Business To Business). REGNET will evaluate a networked organisation model (comparable to the Art Museums Image Consortium/AMICO in the United States) and the integration possibilities of tools and systems for co-operative working. The project will enable especially European SMEs (IT-Provider, media enterprises, etc) becoming participants in global business networks by taking advantage of opportunities provided by the latest technologies and business practices in this area (CH). Because of the involvement of different types of organizations (libraries, museums, archives, ...) which have already a wide clientele and different users types (expert, public, tourists, etc) REGNET is well suited to demonstrate the effectiveness and efficiency of the services and products supported by the technical system. The REGNET-network consists mainly not of large organisations but involves especially institutions of local and regional importance. REGNET also contributes to the meta data development which provides the basis for interoperability of systems and data exchange. The project extends the recent works by adding descriptions of business process, work flow, etc to this standards framework. REGNET considers meta data as part of an ontology related to the field of Cultural Heritage.

5. Innovation

REGNET addresses several 'hot' topics in actual research and development activities: **interoperability** of data stores (catalogues), **content creation and management** in a standardised way, and **electronic business**. The consequence is the reorganisation of existing processes and introduction of computerised functions which makes it worth while making transactions for low money goods (e.g. small copyright fees for digital images). Within the REGNET system there are three building blocks which can be considered as vertical functions: 1) **content creation and management** is based on actual standards efforts in the field of the different organisations involved. To provide interoperability of catalogues held in museums, libraries, and archives the semantics for the descriptions of collections and the collection items have to be harmonised. The inclusion of so called 'Dublin Core' meta data is as well an actual topic as the Z39.50-related standardisation work is, which is targeted to a harmonised search and retrieval facility across different domains. REGNET may influence the development of a so called Z39.50-application profile: the Bath-Profile. This technique, to make Online Public Access Catalogues (OPACs) interoperable, is essential to REGNET, since by this way the catalogue of the REGNET shopping system is generated dynamically according to the request of a user. It is foreseen within REGNET to provide digitisation of 2- and 3-dimensional objects. 2) The **platform management** is based on latest internet technology and is the basis for the middle ware being the agent between content and service supplier and the requester (user). It is expected that during the implementation of REGNET the first large trials of systems following the OBI reference architecture will deliver results (RosettaNet). 3) The **enterprise engineering** will focus on some selected business processes and functional units: access to ***distributed catalogues***, a ***shopping cart*** system, creation of a ***personalised catalogue*** based on retrieved data from the 'virtual catalogue' (in printed and electronic form), an internet ***auction system*** (e.g. offering duplicates of posters), and a ***delivery system*** for physical goods (e.g. goods from museum stores).
On a 'horizontal' basis the XML/XSL-technology is used to structure data semantically and physically. This affects the creation of meta data, describing real (primary) objects (artefacts, naturefacts,...), media objects (photos, videos, ...) or bibliographic type objects (literature in the broadest sense). On the other hand all information within business transactions is wrapped within XML structures: Order, Invoice, Despatch, Report, ...). The recent developments in the field of XML/EDI standardisation will be used (ebXML). Another topic will be the definition of information products by appropriate document type definitions and style sheet. This should enable the 'non-media-professional' end user to generate catalogues or even CD-ROMs on demand. This might be the first step into the direction to create virtual exhibitions on demand by users themselves.
Detailed issues regarding the innovative aspects within REGNET can be found in the attachment.

6. Community added value and contribution to EU policies.

In view of the large degree of dispersion of pieces of art within Europe and the highly fragmented knowledge and management of the collections, REGNET offers the services to create a global view based on a contextual and thematic approach. Further more the high level of accessibility combined with various levels of consultation of the information will suit the requirements of the occasional visitor, educational institutions and scientists/researchers. The different views of the same information will range from a quick referential search towards educational purposes.

The easy access and availability of this global information will boost the cross-cultural knowledge within European regions and stimulate Europeans to visit the objects in situ they discovered via the REGNET-service. This will substantially increase the culture stimuli of the citizen and at the same time contribute to a multicultural and more European awareness and feeling.
REGNET intends to reach some basic aims:

- The dissemination of the European Culture Heritage facilitating to European citizens the access to catalogues of intellectual, cultural and scientific heritage stored in archives, libraries and museums and galleries
- Integration of e-business into the information systems used in Cultural Institutions
- The development of new and exploitation of existing cultural infrastructures
- The use of standards in the field of information structure, retrieval and e-business
- The interoperability between systems (interoperable access to distributed resources/catalogues: cultural & scientific content and products & services) based on the complementarities of the capabilities of each partner (group).
- The establishment of a service infrastructure which allows to develop a network of (cultural) service centres throughout Europe.

Besides the relevance to EC policies in the area of science and research some initiatives are mentioned in the attachment:

1. "eEurope - An Information Society For All".
2. "Draft Recommendation No. R(98) ... on cultural work within the information society - New professional profiles and competencies for information professionals and knowledge workers operating in cultural industries and institutions".
3. Structural Funds (EFRE)
4. Culture 2000

7. Contribution to Community social objectives.

Introduction (as outlined within the framework of the IST-Accompanying Measure “Cultivate-EU”; http://www.cultivate-eu.org/about/about_activities.html) :
"*The great strength of the cultural heritage industry is its ability to provide content for educational purposes, for leisure and entertainment, enhancing the quality of life. In Europe, the diversity of its cultural heritage content makes it an enormously rich content provider. A strong European content industry improves competitiveness in this field, creating jobs.”*
REGNET addresses several of the major social issues included in the IST programme and other initiatives (like the recommendation to the European Parliament, outlined in the previous section):

1. Quality of life in addressing some of the key actions of IST Programme:

Quality of life is the major theme in the 5th FP of the EU to create ‘a user-friendly information society’, to improve the accessibility, relevance and quality of services, to build a true multilingual and multicultural information society. In the IST Programme some of key actions defined are specially relevant for REGNET, *Systems and services for the citizen* and *Multimedia content and tools*

REGNET has the aim of meeting the needs and expectations of European citizens, enabled by Internet, to access the catalogues, (cultural, intellectual and scientific, business oriented) contained in cultural institutions like archives, libraries and museums. REGNET will focus specially in the field of access to digital and cultural content and enabling business based on that data. This will also have strong influence in further applications in the field of education and training, and, above all, in self-education or long-life education, beside the effects on democratisation of the access to culture and information.

2. Employment:

Information society is the place where employment will come from in the future. So, any contribution to advances of the Information society will contribute to employment. In addition, there are specific factors that contribute to employment as far as REGNET is concerned:

- European Information Competitiveness: improving information society technologies to compete in the global information market, supplying information not easily accessed and using standards and technologies that are considered of great impact in immediate future: REGNET will provide access to cultural heritage related repositories by offering a search engine enabling searches across different domains and distributed data bases.
- European Cultural Competitiveness: Contributing to make visible the potential of European culture and creativity as well as cultural diversity:
  REGNET provides access to cultural information assets which can be reused and contributed to new products, eventually related to a broader context or personal needs.
- Implementation and extension of information processing standards
  REGNET is committed to standards as far as possible. This enables for example different users to connect their systems to the REGNET network as well as to integrate their information objects into the REGNET repositories due to the usage of standardized metadata.

3. The structural challenge:

"*Public powers, cultural industries and cultural institutions need to react to the tendency towards a conversion of traditional cultural agents beyond established sector-specific boundaries. The future professional model for the digital sector will be the 'interface manager' who has responsibility for the co-ordination of different steps in the production chain from the idea to the (digital or physical) product. So far, cultural industries and institutions subcontracted many of the tasks fulfilled by such profiles to external parties*". If they want to take up the challenge offered by the information society, they should now look for new models for cooperation or perform internally different business processes. The technical infrastructure provided by REGNET will support both possibilities and enable especially the cultural institutions to take over an active part within the supply chain delivering digital (or physical) products and services.

8. Economic development and S&T prospects

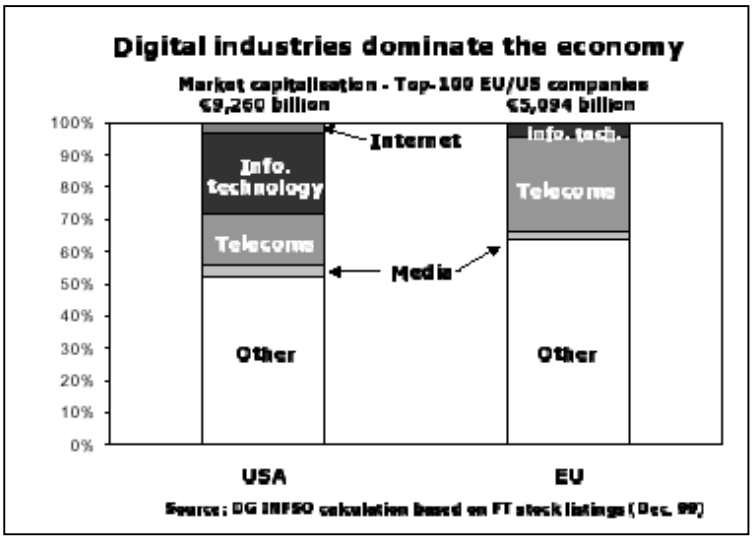
One of the main reasons to run a project like REGNET is based on the concept of new e-economy applied to the operations of cultural heritage institutions. Since there are different types of organisations there are also different possibilities to exploit the potentials of the REGNET project. The different types of organisations are:

- Content providers (cultural institutions like libraries, museums, archives, etc)
- Service suppliers (cultural industries like IT-enterprises, new media company, internet service providers, etc)
- Business access points (organisations which provide access to the REGNET system (e.g. cultural institutions, local administrations, tourist offices, information brokers, etc)

REGNET is relevant to all types of organisations: content providers are enabled to sell digital or physical goods as well as services (experts, exhibition planning, etc) and products (museum shop, copies of real objects, etc) using the REGNET e-business subsystem; service supplier are able to sell their services (e.g. running a REGNET System) and products to a broader community in the field of cultural heritage (the exploitation of the REGNET System itself is dependent on a consortium agreement); business access points are able to sell

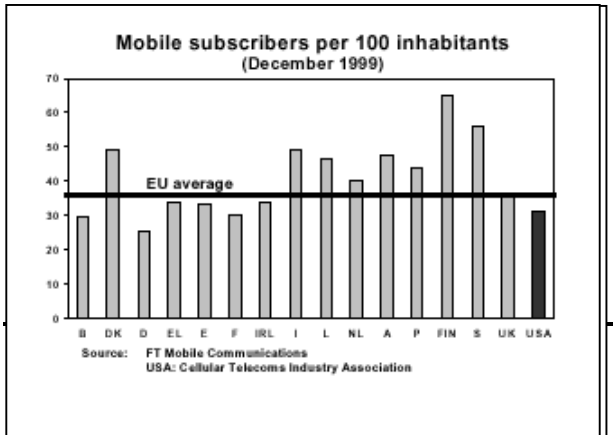
consultancy work or can even offer services (e.g. distributed searches) using the REGNET System.

The market for REGNET systems and services can be estimated roughly by the number of museums, libraries and archives in Europe. Based on studies like MAGNETS (Museum & Galeries New Technology Study) the number of cultural organisations might be at 100.000 throughout Europe. (e.g.: MAGNETS: 15.000 museums & galleries with over 500 mio visitors each year). From an German publication (Institut für Museumskunde) of 1998 the percentage of museums having a WEB presence is estimated by 25%. Following the overall trend for 2000 the WEB presence of cultural institutions might have been doubled to over 50%. Another indicator related to trend of WEB-presence of cultural institutions is VLMP (Virtual Library Museums Pages). In 1997 there have been 630 museums listed in the vlmp-data base (http://www.s-keene.dircon.co.uk/infoage/articles/market/wrlsmkt.htm). An evaluation of the vlmp-data base in 2000 (September) delivered 4.872 museums. Regarding museum shops there is a US-figure available from 1999 (“Museums and the Web 1999”): it was stated that 34% of museum homepages have a museum shop for selling goods (http://www.archimuse. com/mw99/papers/bowen/bowen.html). Having these figures in mind a rough estimation would deliver a potential number of 3.000 (15% of 20.000 museums) museum shops throughout Europe being candidates to be partner of the REGNET network. The adventure of joint ventures like Antenna/MuseumShop.com in the United States (approx. 50 museum shops connected) underpins the potential for eBusiness in the Cultural Heritage domain (http://www.archimuse.com/mw2000/papers/tellis/tellis.html). The Progress Report (eEurope; An Information Society For All, Lisbon, 23 and 24 March 2000) includes some figures and statements about e-commerce:



“In addition to transforming existing businesses, the Internet has been creating new services and hence new jobs in the economy. Electronic commerce, notably business to business e-commerce, is booming and world-wide e-commerce sales are expected to grow 40 times between 1998 and 2003 by which time they will become over 15% of all sales.12 Predictions of market researchers, which often tend to be optimistic, have even been surpassed.

The Internet and e-commerce are also leading to a surge in new company creation. Confirmation of this can be found in the market capitalisation of Internet companies. The US stock markets, especially the NASDAQ on which many ‘high-tech’ companies are quoted, has experienced exceptional growth. Similar developments are taking place in Europe where markets for fast growth companies have also been established – e.g. Neuer Markt, Nouveau Marché, EASDAQ – although the number of companies listed and the volumes traded are still relatively small compared to NASDAQ.”



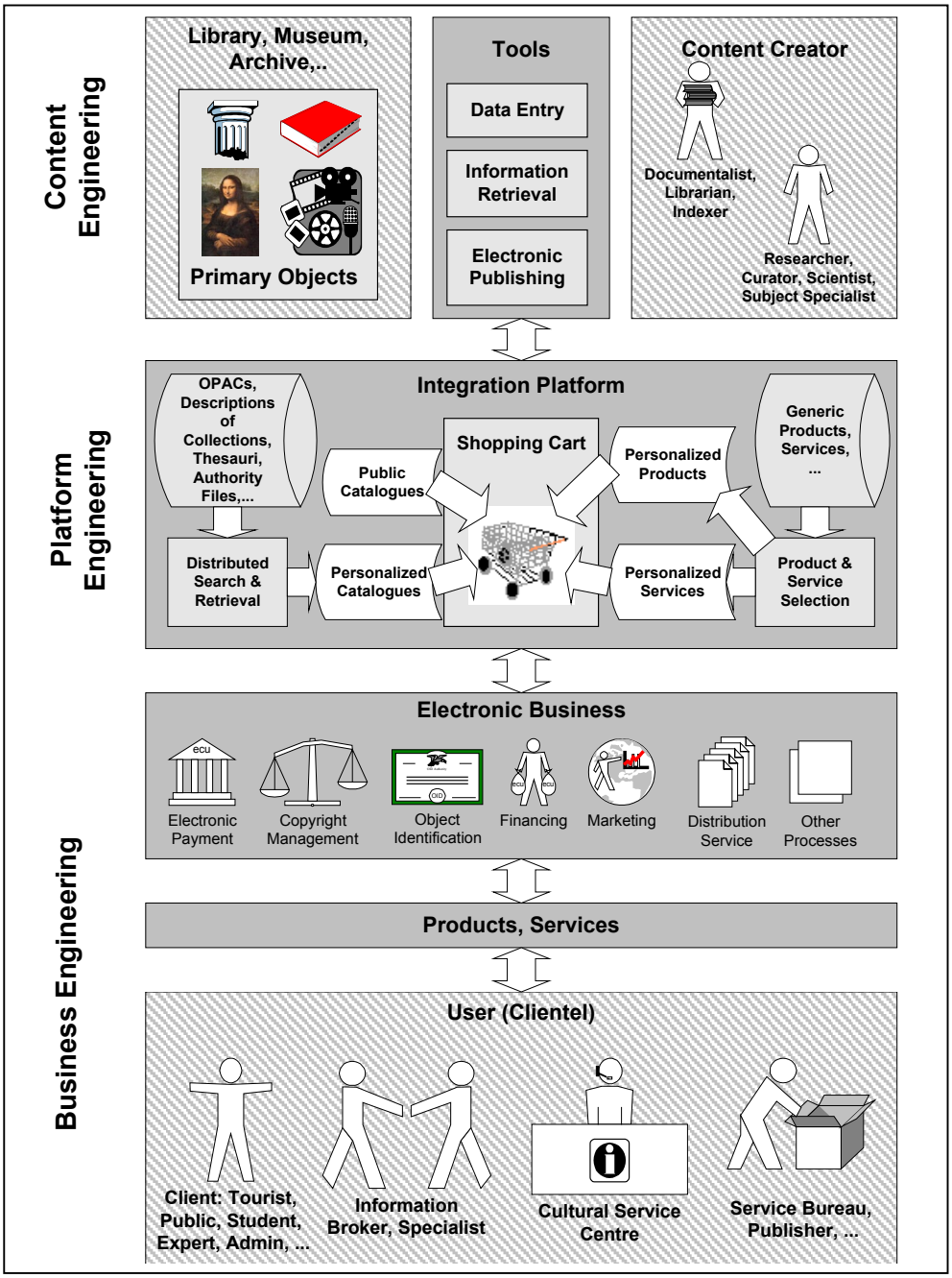
Since REGNET provides wireless access to the network of service centres the Mobile phone penetration is also very important. Figures from 1999 also included in the eEurope Progress Report look like this:

An outline how REGNET partners intend to exploit the REGNET system can be found in the attachment section.

9. Workplan:

9.1 General description

The REGNET Project is developing building blocks to set up a service infrastructure for organisations and users in the field of Cultural Heritage. These blocks which constitute the REGNET-System are supporting access to cultural & scientific information as well as to product & service information offered by different organisations. (See attachment).
The baseline concept behind the REGNET project is laid down in following figure:



The main areas to be investigated are: content, platform and business engineering.

It is not by accident that the shopping cart is located in the centre of the figure: it is the entry point for all services supported by a REGNET infrastructure

The shopping cart is not only filled by CH related data, but also by services and eventually real goods (museum shops). Some scenarios are outlined in the annex.

To achieve the objectives of the REGNET Project the project is divided in two Phases:

Phase I is dedicated to the development and implementation phase to set up the service infrastructure which is build upon the REGNET ‘building blocks’ (nodes) and consists of three work packages (WP1, WP2, WP3). During this phase the first version of the REGNET

demonstrator will be developed. The development of an second version is foreseen in parallel with the validation and preparation (demo) activities (Work Package 3 - Demonstration).

Phase II includes the trial service and is defined as part of the Demonstration Phase (WP4).

Other activities include information dissemination, exploitation and project management (WP5, WP6, WP7) and will last during the whole project life time covering both phases.

Since the trial service is integral part of the REGNET project Phase II is not separated from the rest of the project; this means that WP3+WP4 (demonstration) is part of an overall and unique project structure.

Work packages are broken down in different **tasks** each of them having a responsible task manager. The content and targets of each task is contained in a 'task brief' which will be elaborated before a task starts by the responsible task manager according to the descriptions included in the work packages. The subdivision of tasks into subtasks has by intention not worked out in the overall project plan. It is open to the work package leader in consens with the technical coordinator (SR) to develop a short term project plan dedicated to a predefined work load. This might be useful in work area B which covers the system development. Subtasks dedicated to nodes (system components) can be a means for stronger project controlling.

Due to the complexity of the project the **work plan** identifies three **work areas (A, B, C)** in Phase I and two **work areas (D,E)** in Phase II.

Work Area A refers to the content creation and content management,
Work Area B refers to the platform engineering (integration of middleware components) and the development of the REGNET building blocks (nodes), and
Work Area C covers the enterprise engineering (business process engineering, definition of work flow) and the set up of a legal framework.
Work Area D covers the domain specific aspects of the REGNET-System.
Work Area E contains the management of the demonstration assessment and evaluation phase. The demonstration is carried out in four European regions with a possible extension to two other regions.

The different **Work Packages** contain:

- **WP1-(R&D)**
  Analysis of the State of the Art and Development of Concepts
  Definition of content to be provided, development of a documentation and digitalisation plan for content creation and management (Work Area A).
  Identification of standards to be used, development of the user requirements and system requirements & specifications (Work Area B).
  Development of the legal framework and partnership model, definition of supported business functions, identification of market (Segments) and user groups (Work Area C)

- **WP2-(R&D)**
  Implementation of the System and Preparation of Services and Product Generation
  Preparation of content and products (Work Area A).

System implementation; development of the building blocks; integration into the REGNET-System (Work Area B).
Settlement of the legal framework, business process (re-) engineering, market preparation (Work Area C).

- **WP3-(R&D)**
  Validation of the REGNET-Demonstrator and preparation of the Demonstration Phase
  Validation of the REGNET-demonstrator; preparation of the demonstration phase.

- **WP4-(Demo)**
  Demonstration, Assessment and Evaluation
  The REGNET-System will be used in a trial services which includes an initial testing phase (selected users). The REGNET-demonstration part of the project includes: execution of the demonstration phase (trial service); refinement of system and services where appropriate and necessary; analysis of the trial service.

- **WP5-(R&D-Demo)**
  Development of a technological implementation plan
  Development of an exploitation plan on different levels (content providers, service providers, business access points). The plan has to include new models of co-operations and partnerships.

- **WP6-(R&D-Demo)**
  Information Dissemination
  Information dissemination will be done using different types of dissemination channels: Project WEB-Site, conferences, seminars, printed and electronic publications. Special attention will be drawn to the participation of project members in relevant standardisation committees and workshops. Due the multisiciplinarity (cultural institutions: museums, libraries, archives etc, cultural industries: new media enterprises, ASPs, etc) REGNET addresses different target groups: individuals, organizations, enterprises, associations.

- **WP7-(R&D-Demo)**
  Project Management
  This work package includes management, reporting, quality assurance, etc. The management activities are split up into contractual and technical matters and are covered by two different partners.

The Demonstration Phase of the project consists of Work Package 4.
This work package will be based on the 35% funding option.
Work Package 1, 2 and 3 are qualified as Research & Development activities for which the 50% funding option will be applied.
Work Packages 5, 6, and 7 are covering both, Research & Development and Demonstration activities. They will be considered as being 2/3 R&D and 1/3 Demo leading to an overall 45%.

Risk Analysis
Risk Analysis and related management issues are outlined in the attachment. It affects in different way work area A and B. Work area A is sensitive to the critical mass of content being available, and work area B is dedicated do standard soft development processes. In this area risk will be minimized by introducing standards as far as possible. The work in work area

C will also be based on proofed developments which reduces the risk in finding not applicable or adequate procedures in this area.

The partners of the REGNET project are grouped in:

Group-1:	**Content Providers**:	ONB, LMG, NRM, KVA, ALI, MECH, GRAN, MUS
Group-2:	**Developers:**	SR, SI, CERT, VALT, TINC, MOT
Group-3:	**Regional Poles:**	SUL, CC, IAT
Group-4:	**Developers/Poles:**	AIT, IMAC, TARX, SPAC, ZEUS, ICCS

Members of group-4 have two roles combined. Regional Poles are providing the technical infrastructure to run a REGNET-System and the necessary coordinating facilities within a region and can be considered as 'nodes' of the REGNET-service network.
REGNET will set-up service infrastructure in 4 European regions with a potential of an extension into 2 additional regions. Due to the real European dimension of the REGNET partners this project has the potential to be the kernel of a fully functioning network of service centres in the field of Cultural Heritage. The partners are coming from following countries: Austria, Belgium, Bulgaria(Russia), France, Germany, Greece, Netherlands, Italy, Spain, Sweden, UK. The regions which will be covered by a REGNET system are:

Region 1 - Middle and Northern Europe:
AIT, ONB (Austria), IMAC (Germany), SUL, LMG, NRM, KVA (Sweden)
Technical Infrastructure provided by **AIT** and **IMAC**
Coordination done by **AIT** and **SUL**

Region 2 - Western Europe:
TARX, MECH (Belgium), MUS (Netherlands)
Technical Infrastructure provided by **TARX**
Coordination done by **TARX**

Region 3 - Southern Europe-1:
SPAC, ALI, CC (Italy)
Technical Infrastructure provided by **SPAC**
Coordination done by **CC**

Region 4 - Southern Europe-2:
ZEUS, CERT, SI (Greece), IAT, GRAN (Spain)
Technical Infrastructure provided by **ZEUS**
Coordination done by **ZEUS** and **IAT**

The possible extensions are:

Region 5 - Southern Europe 3: (separation of Greece and Spain)
IAT, GRAN (Spain)
Technical Infrastructure provided by **IAT**
Coordination done by **IAT**

Region 6 - Eastern Europe:
ICCS (Bulgaria), SUSU (Russia; subcontractor to ICCS)
Technical Infrastructure provided by **ICCS**
Coordination done by **ICCS**

The Technologies used within the REGNET Project is outlined in the Attachment.

9.2 Workpackage list

Workpackage list

Work-package No[1]	Workpackage title	Lead contractor No[2]	Person-months[3]	Start month[4]	End month[5]	Phase[6]	Deliv-erable No[7]
WP 1	Analysis of the State of the Art and Development of Concepts	ZEUS (19)	125	0	5	R	D1 D2 D3
WP 2	Implementation of the System and Preparation of Services and Product Generation	VALT (22)	136,5	6	11	R	D4 D5 D6
WP 3	Validation of the REGNET-Demonstrator and preparation of the Demonstration Phase	IMAC (4)	85	12	14	R	D7 D8
WP 4	Demonstration, Assessment and Evaluation	TARX (9)	81	15	23	D	D9 D10 D11
WP 5	Development of a technological implementation plan	MOT (12)	20	6	23	R	D12
WP 6	Information Dissemination	SPAC (13)	17	0	23	R	D13
WP 7	Project Management	AIT (1)	71	0	23	R	D14 D15
	TOTAL (without AC-own contribution)		535,5 (**499.2**)				

[1] Workpackage number: WP 1 – WP n.
[2] Number of the contractor leading the work in this workpackage.
[3] The total number of person-months allocated to each workpackage.
[4] Relative start date for the work in the specific workpackages, month 0 marking the start of the project, and all other start dates being relative to this start date.
[5] Relative end date, month 0 marking the start of the project, and all ends dates being relative to this start date.
[6] Only for combined research and demonstration projects: Please indicate R for research and D for demonstration.
[7] Deliverable number: Number for the deliverable(s)/result(s) mentioned in the workpackage: D1 - Dn.

9.3 Workpackage descriptions

Workpackage 1 **Analysis of the State of the Art and Development of Concepts**

Workpackage number :	1		**Start date or starting event:**						Month 1			
Participant number:	AIT	ONB	SR	IMAC	SUL	LMG	NRM	KVA	TARX	MECH	MUS	MOT
Person-months per participant:	*8*	*4*	*7*	*10*	*3*	*1*	*1*	*1*	*6*	*1*	*3*	*11*
Participant number:	SPAC	ALI	CC	IAT	GRAN	ICCS	ZEUS	SI	CERT	VALT	TINC	
Person-months per participant:	*3*	*1*	*4*	*5*	*1*	*7*	*15*	*8*	*6*	*14*	*5*	

Objectives
Analysis of the State of the Art and Development of Concepts (Phase I)

Work Area A:
Task 1.1: Definition of content to be provided.
To provide high quality digital assets and services it is necessary to analyse the available content at partner sites. The important decision to take consists in defining what objects or surrogates might attract potential users or could be a basis for follow up added value processing. The nature of data will not only be of cultural & scientific type; goods available in museum shops have to be documented too to provide internet access to the museum shop. It might be useful not only store “primary” goods immediately for use of further processing, but also “eye catcher” suited to invoke a on demand process eventually doing a painting according to a theme offered in the REGNET – store (“painting on demand”). It should also be investigated if real goods, or replicates thereof will be offered. This means that the necessary logistics has to be set up properly (e.g. framing a painting). Having the world wide market in mind, even a mineral collection which was eventually a candidate for disposal might raise value via an auction over the internet.

Task 1.2: Development of a documentation and digitisation plan for content creation and management.
The objects to be used within REGNET differ in type, size, quality and quantity. In general two streams of actions have to be considered: retrospective digitisation and day to day cataloguing work. The first baseline for this task will be to differentiate the object type:
Real objects (found in museums), Bibliographic objects (library, archives), Media objects (surrogates like images, films, etc), The documentation and digitisation plan should recognize the possibilities (financial, personnel support available) of a cultural institution as well as latest technology. During this task it should be investigated, if the establishment of a digitisation centre might be useful to serve a region using the REGNET service infrastructure.

Work Area B:
Task 1.3: Identification of standards to be used
To enable the usage of low cost hardware and reuse of available components (either hard- and software) a study work will be done at the early beginning of the project. The standards to be investigated relate on one hand to the system development, on the other hand to the storage and exchange of cultural heritage related data. As a starting point the CIMI standards framework developed in the 90’s is still a good basis. Emerging standards in the field of meta data, data formats (logical/physical), and eBusiness will be of great interest. Important measures for later on decisions will be the availability of high quality tools. With respect to the publishing component, standards in the area of multimedia authoring, storyboards and multimedia document models including Zyx, HyTime, SMIL are of importance.

Task 1.4: Development of the System Specifications
System specifications will elaborated using state of the art and well proofed methods. The method

used within REGNET are outlined in the annex. There will be five main – server side - components (REGNET-Portal, REGNET-Cultural Heritage Data Management, REGNET-eBusiness Data Management, REGNET-Ontology Checker, REGNET-Electronic Publisher) located on different nodes. This will imply a n–tier architecture with interoperable components like protocol gateways, (multi media) data management, data exchange facilities, etc. An outline of the methodologies used is given in the annex. Standard notations (e.g. UML) will be used as applicable.

Work Area C:
Task 1.5: Setup of the Legal Framework and Partnership Model.
To set up a operational eBusiness network the future cooperation has to be based on sound agreements among the stakeholders doing business in the Cultural Heritage field. Existing networks will be investigated in the light of the experience made in practice. The AMICO project carried out in the USA might be a model to start. A big issue will be the mixture of profit- and non for profit enterprises. REGNET intends to introduce a layer between content holders and distribution and service channels.
Task 1.6: Definition of supported Business Functions.
To enable a wide range of services by a REGNET based service centre all relevant core and support business processes and functions related to a cultural organization will be investigated. To integrate B2B processes related to industrial production of digital goods also workflows of media enterprises have to be investigated carefully. The core processes contain (museums, archives, library): acquisition, registration, inventarisation, cataloguing, disposal, etc. Such processes are already described by different associations, like MDA (Spectrum) or IFLA. Support processes include e.g. Payment systems, watermarking and copyright management, etc. The knowledge gained in this task will be input to the knowledge base located at the ontology subsystem.
Task 1.7: Identification of Market (Segments) and User Groups.
The REGNET network will address a wide range of users ranging from individuals, CH organizations to media industry or publishing enterprises. The segments envisaged comprise: Education, (Cultural) Tourism, Science and Research, Recreational Economics, Administration (Multimedia) SMEs & Industries, Arts, etc. To tailor the services of a REGNET based CSC (Cultural Service Centre) to the need of a (world) wide clientele it will be necessary to make in depth analyses of different user groups.

Description of work
Work Area A:
Task 1.1: Analysis of collections and items located in libraries, museums, archives, research centres, etc in a participating region.
This is done by the methods outlined in the annex. The interviews should be done using multimedia equipment if possible. E.g. oral description of the collection and rare objects by a curator. All collected data should be carefully documented and electronically stored for eventual reuse. Since a commercial business should follow the REGNET demo-phase it is essential to have complete and correct data available. Another important factor will be that data later on stored will be representative for the whole CH domain. It will be not sufficient to have only a few high quality images available. The assets should fit to the envisaged clientele. For that reason it is also important that the content providers cooperate and try to achieve some critical mass by complementing their different offerings. One option is to prepare thematic offerings; e.g. Information about the Habsbourg area. At least three partners in the consortium (ONB, ALI, MECH) could provide relevant data (e.g. 1.5 mio images of the ONB collection) about the Habsburgs.
Task 1.2: Development of a documentation and digitisation plan based on sound methods and standards, following best practice models.
Once it is clarified what material is going into the REGNET repositories concrete guidelines based

on best practice experiences have to be developed. For example the keyboarding of 50.000 catalogue cards may take person years. Modern technology (scanning, OCR recognition, etc) could reduce this work into weeks. For cataloguing recent acquisitions it should be investigated if a remote cataloguing might be more efficient, including quality checks at the server side and avoiding expensive equipment at the curator/librarian/archivists side. The recommendations and guidelines to be worked out should be based on two basic principles: efficiency and cost effectiveness.

Work Area B:
Task 1.3: Review of existing standards and methods relevant to REGNET
To review existing standards mainly desk research will be necessary. There is a lot of repositories even available in the internet and there are also many projects which have already done similar studies (e.g. COVAX) . The critical area for REGNET is the eBusiness and the workflow domain. There are already standards available but not settled like for example SGML/XML. These both areas should be carefully looked into. This task has to be done in close cooperation with other tasks like T1.2, T1.4 and T1.6.

Task 1.4: Definition of the Functional Requirements; development of the REGNET- Architectural Design; identification of Software Components; detailed System Design; definition of hardware, system, and network requirements; identification of tools.
The work carried out within this task is close to standard software development. For that reason the methodologies (ESA, UML) outlined in the annex are quite important. It is very important to collect user requirements which reflect as much as possible the real needs so the functional requirements are based on solid ground. The transformation into use cases might be in the very beginning difficult. As basis the CIMI standard framework could act as reference. On the technical basis it should be considered that the REGNET technical infrastructure should be portable to different locations and by no means propriarity or dependent on a few vendors. But the system should be scalable so a high qualified processing centre (e.g. multi media production) could evolve out of the REGNET generic structure.

Work Area C:
Task 1.5: Setup of a legal framework; development of Partnership Models; (stakeholders at regional, national, and international levels, service providers); development of a "Virtual Enterprise Concept"
As basis and starting point for this task the AMICO and MOSAIC approach might be appropriate. It is essential that contracts and agreements will be available on a national and international basis. Different type of relationships (member ship agreement, licences, contracts, etc) will eventually co-exist. As thumb rule some type of subscription might provide a small basis income; but this makes commitment and high quality work necessary on which a potential customer always can rely on.
Task 1.6: Definition of supported business Functions.
Analysis of existing and required business processes and business functions (including supply chains); development of a business model regarding the marketing and procurement of digital goods with reference to following market segments: Education, (Cultural) Tourism, Science and Research, Recreational Economics, Administration, Arts. (Multimedia) SMEs & Industries The definition of business processes might follow proven methodologies like IDEF0 (integrated definition; http://www.idef.com); normally data modelling (requiring e.g. relational methodology) is quite close connected to this process. Within REGNET UML will be used, so it is advisable to start as soon as possible with the creation of classes which might be to some extent domain independent. E.g. ordering processes for archival information could be based on a function also usable for libraries. To be able to get the necessary information it will be required that the analyst has to interview different potential users. The methodology outlined in the Annex should be followed as far as possible.

Task 1.7: Collection of available market information according to the requirements outlined in task 1.6.
Before actual market research is done which may turn into a mass of paper work, baselines for all marketing activities have to be set up (Nearly person and a wide range of organizations/industries might be member of the market). So a small market engineering phase has to be introduced beforehand. If possible the marketing data base could be turned into the basis of a customer base. Special attention will be paid to market possibilities based on ‘micro payment’.

Deliverables
D1: Report: "Content Creation and Content Management"
D2: Report: "The REGNET - System: Specifications and State of the Art"
D3: Report: "REGNET - Enterprise Engineering and Market Analysis".

Milestones and expected result
M1: Review of the Analysis of the State of the Art and Development of Concepts.
It is expected that:

- the content providers have prepared their documentation plans and are ready for the preparation of contents
- the service providers and system integrators are ready to start the preparation of the necessary infrastructure in their organisations to run a trial service and are in the position to develop the system and the services.
- All partners agree to the legal framework which has to follow national and international laws; contacts have been established to potential partner organisations.

Workpackage 2 **Implementation of the System and Preparation of Services and Product Generation**

Workpackage number :	2		**Start date or starting event:**						Month 7			
Participant number:	AIT	ONB	SR	IMAC	SUL	LMG	NRM	KVA	TARX	MECH	MUS	MOT
Person-months per participant:	*10*	*4*	*6*	*9*	*3*	*2*	*2*	*2*	*6*	*2*	*2*	*10*
Participant number:	SPAC	ALI	CC	IAT	GRAN	ICCS	ZEUS	SI	CERT	VALT	TINC	
Person-months per participant:	*6*	*2*	*5,5*	*3*	*4*	*12*	*12*	*6*	*6*	*14*	*8*	

Objectives

Implementation of the System and Preparation of Services and Product Generation

(Phase I)

The REGNET Support System will be developed based mainly on Open Software products. It will be based on a common system architecture which enables porting to different platforms (UNIX, Windows, ...). The system will be configurable by the users (experts at different CH related sites e.g. museums, archives, libraries, etc) which offer services (e.g. search services, shopping facilities, cooperative work, etc.) to their respective end users or users coming from other CH related sites.

Work Area A:

Task 2.1: Preparation of content and products

According to the plans and the guidelines elaborated in Task 1.2 digital content available at the content providers side has to be prepared to be available for the REGNET demonstration phase. The museum shops connected to a museum have to prepare product catalogues in electronic form. The type of loading data into the REGNET system (exchange format) will be elaborated within the components (repository/catalogue management).

Work Area B:

Task 2.2: System Implementation (1.Version).

As designed under T4.1, the system will be implemented. Because of the complexity of the development Team, Project Team Groups which are coordinated by the work area B manager will do the implementation. This task will deliver a first version of the REGNET demonstrator.

Work Area C:

Task 2.3: Setup of the legal framework.

To operate the REGNET virtual enterprise contracts have to be prepared and signed between different stakeholders in the network (e.g., content owner <–> REGNET-Cultural-Service Centre, REGNET-CSC <-> end user/dealer, …) The contract should allow an easy extension of the network by integrating different type of partners. Especially the creation of user groups has to be facilitated.

Task 2.4: Business process (re-) engineering.

To provide services to different users access points to the REGNET network have to be installed. This requires appropriate technical or human resources related measures (installation of hardware, training, etc). Museum shops, have to be integrated into the internet based communication flow (stock control, billing and accounting system). In case a production process can be invoked either internal or external orders have to be generated and a control workflow will be instantiated. All this might dramatically change the way how the cultural organization has done the business up to now. The work to be done is based on the result of task 1.6.

Task 2.5: Market preparation.

To address the user groups identified under T1.7 appropriate measures have to be undertaken to inform a wide range of clientel that the REGNET network is running and delivers services and goods to the customer.

Description of work

Work Area A:

Task 2.1: Preparation of existing content and products; creation of new content and products; preparation of guidelines and handbooks.

Appropriate tools (cataloguing systems, conversion tools, etc) have to be introduced to prepare the loading of REGNET repositories and catalogues. Since some partners of the consortium have already developed such data entry systems no specific development has to be undertaken. The usage of appropriate metadata as outlined in the attachment has to be strengthened. Doing qualified data entry (including authority control, use of thesauri, etc) it might be necessary to have the relevant staff trained.

Work Area B:

Task 2.2: System development; system tests and verification of system functions; Establishment of services, test of production and service processes

According to the baseline design outlined in the attachment the team groups dedicated to the development of the REGNET nodes starts with the development activities based on the work done by the groups under 1.4. It might be advisable – already at the beginning of T1.4 - to do a detailed fine planning for all the development activities. The Work Area manager has to take a decision on this and how the detailed structure looks like (subtasks related to nodes ore components). It is essential that at this stage that the technical coordination and the work area manager have a strong control over all activities. At the beginning of that activity the technological infrastructure on which all the components are based on, has to be commonly agreed by all team groups. At the end of this task integration work has to be scheduled to bring all subsystems (nodes) alive. The final product will be version 1 of the REGNET demonstrator. In addition to the general remarks included in the attachment special attention will also be paid to the Implementation (resp. integration) of suitable server-side components for multimedia data management (repository) to create template based multimedia representations out of the REGNET repository Implementation (resp. integration) of multimedia authoring tools for template based authoring. Implementation (resp. integration) of client-side presentation components for REGNET target platforms (WWW, WAP, etc) will be done, including the provision of facilities for customisation according to user preferences. with respect to the underlying REGNET system architecture.

Work Area C:

Task 2.3: Sign of contracts and partnership agreements.

The contracts and agreements prepared in the previous work package (T1.5) have to be signed. The content providers have to assure that all contents and services will be available. The partners providing the technical infrastructure have to commit that all services developed can be accessed through appropriate technical equipment (server, network, etc.) Special user groups should be granted free access or low rated access to force a high usage of the system as soon as possible.

Task 2.4: Introduction or revision of business processes; (change management); training of REGNET-system administrators.

The necessary business processes have to be introduced; partner hosting a REGNET system must be trained in adapting the system to specific needs and be able to set-up and maintain the system on their own.

Task 2.5: Marketing, preparation of advertising material (in electronic and printed form).

Distribution of advertising material has to be done using electronic (list server, etc) or conventional channels. A group of initial users should be set up and asked to report their experiences to the service centre.

Deliverables
D4: Status Report: "Available Content and Products"
D5: Prototype: "The REGNET - System: Version 1"
D6: Status Report and Guidelines: "System Services and Business Processes"

Milestones and expected result
M2: Review of the implemented system and the preparatory work.
It is expected that:

- Content (catalogues) and products are ready
- System is internally tested and running and services are available
- All contracts and agreements have been signed; market activities have been started
- REGNET system administrators are trained; The overall organisation and all business processes are documented
- Responsibilities are clear

Workpackage 3 **Validation and Preparation**

Workpackage number :	3		**Start date or starting event:**						Month 13			
Participant number:	AIT	ONB	SR	IMAC	SUL	LMG	NRM	KVA	TARX	MECH	MUS	MOT
Person-months per participant:	*5*	*2*	*3*	*5*	*4*	*2*	*2*	*2*	*6*	*2*	*2*	*3*
Participant number:	SPAC	ALI	CC	IAT	GRAN	ICCS	ZEUS	SI	CERT	VALT	TINC	
Person-months per participant:	*6*	*2*	*0*	*4*	*2*	*4*	*9*	*3*	*3*	*14*	*0*	

Objectives

Validation of the REGNET-Demonstrator and Preparation of the Demonstration Phase

(Phase I)

Task 3.1: Validation of the REGNET-Demonstrator

The REGNET system has to be tested by selected users and the consortium itself to detect eventual misbehaviour. Besides the involvement of selected users it is foreseen to have professional associations included in the evaluation process, namely national library and documentation associations (Austria: VÖB & ÖGDI).

Task 3.2: Preparation of the Demonstration Phase

All necessary actions to be able to start the demonstration phase have be undertaken (data base loading, simulation of a real time operation, etc).

Task 3.3: Implementation of the version 2 of the REGNET system.

Integration of additional functions and services, eventually based on the feedback got during the validation process.

Description of work

Task 3.1: Using the REGNET-Demonstrator and data developed and prepared in course of WP2 the system will be validated. Test users coming from different domains (library, museum, ...) and at different levels (end users, experts) have to be identified and will do experimental operations which cover the whole functionality of the system. If necessary the system and involved business processes have to be refined.

Task 3.2: The Service Supplier will set up the necessary infrastructure for running the demonstration phase. The Content and Service Providers will do the necessary training of staff for establishing 'business access points' within their organisations. Information brochures for potential users and questionnaires have to be developed. The legal framework has to be checked.

Task 3.3: The system will be finalized to version 2 and shipped to the service centres as basis for the demonstration phase. The decision about difference in functionality of version 1 and 2 has to be done already under T1.4. It is anticipated that the pressure to go fast on the market will make this stepwise introduction of the REGNET system necessary.

Deliverables

D7: Technical Report: "Validation of the REGNET System operation & Preparation of the REGNET - Demonstration Phase "

D8: Prototype: "The REGNET - System: Version 2"

Milestones and expected result

M3: End of System Validation and Preparation of the Demonstration Phase.

It is expected that:

- System validation was successful: system functions and business processes fulfil user needs.
- Necessary infrastructure at service centres is set up and working properly. Content Providers are ready to provide access to their (digital and real) goods; service access points (virtual as 'portals' - real as 'service desks') are prepared; staff has been trained.

Workpackage 4 **Demonstration, Assessment and Evaluation**

Workpackage number :	4		**Start date or starting event:**						Month 16			
Participant number:	AIT	ONB	SR	IMAC	SUL	LMG	NRM	KVA	TARX	MECH	MUS	MOT
Person-months per participant:	*1*	*5*	*1*	*4*	*6*	*3*	*3*	*3*	*5*	*3*	*3*	*1*
Participant number:	SPAC	ALI	CC	IAT	GRAN	ICCS	ZEUS	SI	CERT	VALT	TINC	
Person-months per participant:	*5*	*3*	*0*	*4*	*3*	*6*	*5*	*1*	*1*	*14*	*1*	

Objectives

Demonstration (Phase II)

The REGNET-System will be used in a trial services which constitutes with an initial testing phase (selected users) the REGNET-Demonstration part of the project. In addition to this an assessment will take place and a final evaluation (including in depth analysis) of the system will be undertaken.

Task 4.1: Execution of the demonstration phase (trial service)

Under real live conditions at least a number of three service centres should start offering their services on a regular basis. The user group should be extended by taking appropriate marketing efforts prepared under T2.5. The system itself and the user behaviour have to be monitored.

Task 4.2: Refinement of system and services where appropriate and necessary.

In case that there is a need for further development this task provides the necessary resources to do so. Especially in the start-up phase fast reactions to user requests is important in case the service has to be improved.

Task 4.3: Analysis of the trial service, assessment and evaluation of the system.

Based on feedback directly gained by the users (questionnaire, inbuilt feedback facilities, log files, etc) an assessment will be done as well as an analysis of the system operations. There will be at least two measures: access rate and access duration, and orders or requests for services and products. Exact figures and thresholds to measure the success of the system will be laid down at the beginning of the trial phase. At different levels following achievements will be evaluated:

Content providers:

- Will provide access (via wired and wireless communication) to their digital contents, services and products and offer them to their clients (B2C),
- Can use the REGNET facilities for multi media productions and data base management,
- Can cooperate with other partners during the creation of data bases, generation of multi media products or creation of a virtual exhibition (B2B).

Cultural Service Centres:

- Will be able to manage and operate the technical infrastructure (software/hardware) for content providers and other partners within the REGNET network. End users of the system will be able to:
- have easy and wide access to cultural data and services,
- invoke the production of personalized goods (e.g. CDROM) and services,
- do internet shopping.

Description of work

Task 4.1: Initialisation of the service and maintenance; documentation of the system behaviour and performance; documentation of user responses.

All available services have to be offered and should be used at least by selected user groups. User interactions should be logged and different marketing actions should be undertaken to test user reactions on new or changed offers. Selected user groups are invited to test special functionalities while the ‘normal’ user should offered the whole system in a unique way. Services should in general be offered in a unique way regardless the way of access (wireless, fixed line). The user

reactions will be grouped into classes of services which already can be distinguished in the portal design (data entry, search, eBusiness).
Task 4.2: System modifications.
This task continues the development work if necessary and to adapt the system according to the user need. During the trial phase it is anticipated that the UMTS test will take place. This might be a great chance to test the acceptance of wireless access to facilities offered by cultural institutions. At the end of this task the system should be stable and itself ready for being marketed.
Task 4.3: Analysis of system behaviour and user responses, recommendation for the future service; development of a financial plan for regular operations.
All user and system reactions which have been logged or received during the trial phase will be analysed. If possible user profiles should be derived from available data being a basis to tailor the services and goods to such profiles. Especially the acceptance of having the chance to generate personalized products should be investigated. A SWOT analysis should help to detect weak points within the operation. A business plan should be established having in mind a rapid extension of the network in case the trial has turned out being successful. As basis for the evaluation the results of tasks 3.1 (user group) and task 3.2 (defined infrastructure and services) will be taken for benchmarking the REGNET system. The socio-economic objectives will be tested by the development of ‘acceptance test plans’ related to different system functions offered to the content providers and users. Special plans will be developed for operators of the service centres to deliver feedback to the developers on a technical basis. The evaluation will be done by professional evaluators.

Deliverables
D9: Technical Report: "REGNET System operation"
D10: Report: "REGNET - Demonstration (Trial Service)"
D11: Evaluation Report: "REGNET trial service and recommendations"

Milestones and expected result
M4: End of trial service and Decision concerning the introduction of REGNET as regular service network
It is expected that:
- The trial service was successful: services and products have been used and purchased
- Frequency of system usage is increasing
- Income has been generated
- The service can be operated on a regular basis and is based on a solid financial plan;
- There will be income within short and medium (3 years maximum) period;
- Demand will be raised for extension of the network (regional and service related);
- REGNET will be established as an own legal entity or taken over by one ore more of the partner organisation(s);
- The REGNET system itself can be sold.

Workpackage 5 **Development of a technological implementation plan**

Workpackage number :	5		**Start date or starting event:**						Month 7			
Participant number:	AIT	ONB	SR	IMAC	SUL	LMG	NRM	KVA	TARX	MECH	MUS	MOT
Person-months per participant:	*1*	*1*	*0*	*1*	*0*	*0*	*0*	*0*	*1*	*0*	*1*	*2*
Participant number:	SPAC	ALI	CC	IAT	GRAN	ICCS	ZEUS	SI	CERT	VALT	TINC	
Person-months per participant:	*1*	*0*	*4*	*1*	*0*	*1*	*1*	*0*	*0*	*4*	*1*	

Objectives

Development of a technological implementation plan

The development of a Technology Implementation Plan which has to be included at the conclusion of the project in the final report starts within REGNET at an early stage due to the high potential of further exploitation of the product to be developed. There will be a first draft available after the first project year at the occasion of having available the first prototype of the REGNET system. This plan will be revised and delivered at the end of the project.

Due to the character of REGNET and its n tier architecture the REGNET nodes as part of the whole system can also be subject to exploitation (e.g. the publishing subsystem). Since the development of business functions is also an issue of REGNET even new ways of producing multi media assets may be subject to exploitation too.

Task 5.1: Development of a technological implementation plan (draft)

Task 5.2: Development of a technological implementation plan (final)

Description of work

Task 5.1: Development of an exploitation plan on different levels (Content providers, Service Providers, Business Access Points). The plan has to include new models of co operations and partnership.

Task 5.2: Refinement of the exploitation plan in light of the results of the experience made in course of the demonstration phase and the user feedback.

Deliverables

D12: Report: "Technology Implementation Plan"

Milestones and expected result

M5: End of the project.

It is expected that:

- REGNET has become a regular service
- Maintenance and further enhancements are granted.

Workpackage 6 **Information Dissemination**

Workpackage number :	6		**Start date or starting event:**						Month 1			
Participant number:	AIT	ONB	SR	IMAC	SUL	LMG	NRM	KVA	TARX	MECH	MUS	MOT
Person-months per participant:	*1*	*1*	*1*	*1*	*1*	*0*	*0*	*0*	*1*	*0*	*1*	*1*
Participant number:	SPAC	ALI	CC	IAT	GRAN	ICCS	ZEUS	SI	CERT	VALT	TINC	
Person-months per participant:	*1*	*0*	*2*	*1*	*0*	*1*	*1*	*0*	*0*	*2*	*1*	

Objectives
Information Dissemination
Task 6.1: Information Dissemination

Description of work
Task 6.1: Information Dissemination will be done using different types of dissemination channels: Project WEB-Site (see attachment), conferences, seminars, printed and electronic publications. Special attention will be drawn to the participation of project members in relevant standardisation committees (e.g. CEN/ISS) and workshops. A special event will be a conference which will be held in Vienna in Autumn 2002 and organized by the Austrian National Library (see also attachment). REGNET will also provide input into the Cultivate Interactive journal. In close cooperation with the Austrian node of the Cultivate Network (CSC-Cultural Service Centre Austria) the project will be presented on several occasions and also be reported on the cultivate elist. The target groups addressed are coming from two domains: Cultural Heritage and New Economy. In the field of CH the addressees are professional at CH organizations as well as the relevant clientele and the organizations themselves. There will also be information dissemination to national and international organizations like ICOM, CIMI or ICA. The second domain covers the evolving new media industries and internet and application services providers. REGNET will seek the cooperation of these organizations for common workshops as well as for the organization of special seminars (digitisation, eBusiness, etc). All these activities might also rise the potential of having new customers to the REGNET network.

Deliverables
D13: Report: "REGNET - Information Dissemination Activities"

Milestones and expected result
M5: End of the project.
It is expected that:
- REGNET is well known and established on the market place

Workpackage 7 **Project Management**

Workpackage number :	7		**Start date or starting event:**						Month 1			
Participant number:	AIT	ONB	SR	IMAC	SUL	LMG	NRM	KVA	TARX	MECH	MUS	MOT
Person-months per participant:	*12*	*1*	*12*	*6*	*2*	*0*	*0*	*0*	*4*	*0*	*0*	*9*
Participant number:	SPAC	ALI	CC	IAT	GRAN	ICCS	ZEUS	SI	CERT	VALT	TINC	
Person-months per participant:	*4*	*0*	*0*	*2*	*0*	*2*	*5*	*2*	*2*	*6*	*2*	

Objectives

This work package comprises several activities . objectives are:

- to provide an efficient project management (administrative/financial, technical)
- to provide efficient quality assurance procedures
- to provide high quality information about the project and connected activities

Project Management:

The project management is outlined in detail under par. 9.7. Due to the size of the project having over 20 partners the administrative/financial coordination has been separated from the technical management. To achieve efficient development work the group of developers have arranged to Project Team Groups which consist of 2-5 members having a dedicated mission (implementation a clearly defined software component (REGNET node).

Quality Assurance:

QA procedures are included in a separate task.

Project Presentation:

A fact sheet on project objectives will be developed shortly after the REGNET kick-off. This fact sheet will be updated every 6 months and provides information about project objectives, consortium, contact details, public deliverables, results, etc. This fact sheet is designed to be hosted on a WEB site, which in addition provides a package of copyright free material, multimedia information etc. To popularise the project objectives an editorial prepared by a professional journalist will be available and also placed on the project WEB Site. There are two deliverables dedicated to these activities (D16 & D17).

Deliverables:

Deliverables will be provided on paper, electronic media, or any other media. Guidelines and/or installation handbooks will accompany the deliverables to avoid malfunction in the presentation of a deliverable if appropriate. If any special equipment is needed it will be announced in due time.

This work package consists of two tasks:

Task 7.1: Project Management
Task 7.2: Quality Assurance

Description of work

Task 7.1: Project Management, including:

- Contract Management
- Reporting
- Organization of Meetings

There will be two management areas: administrative and technical management covered by partners from different organisations.

Technical management of the REGNET project will comprise the following subtasks:

- Participation in the relevant project management bodies, i.e. Project Control Group (PCG), Project Management Group (PMG), with a reporting function towards especially the technical team members.

- Participation in the Technical Board of the Cluster Committee (CC-technical Board) established to create synergy with the Open Heritage project.
- Acting as a moderator and supervisor in the technical discussion process within the developer group: In case of conflicts the technical coordinator will take appropriate measures to solve differences in technical issues either by establishing a consensual solution or by handing on the decision to a neutral expert.
- Technical solutions will be observed with respect to their compliance of overall REGNET design criteria (usage of standard, open source development, scalability. integration aspects)
- A special focus will be laid on a proper design of the components and their interfaces. Because the size of the technical group it is very important that no issues are left open in the design face about which partner will develop what part of the components‘ functionality.
- The technical management team has direct access to the project web server to moderate and inform the developer group.

Task 7.2 Quality Assurance includes both, the development of an appropriate QA-plan and the definition of QA-procedures valid throughout the project life time, as well as the regular QA process. The QA-System has to be approved and accepted by all partners; QA-procedures shall be well defined and transparent to all partners.

Deliverables
D14: Report: "REGNET - Quality Assurance System"
D15: Final Report
D16: Project Presentation (WEB Presence)
D17: Project Presentation (Fact Sheet)

Milestones and expected result
M5: End of the project.
it is expected that:
- The REGNET-Project has been successfully finished.

The distribution of workload in total and a breakdown in six months units can be taken from the following pages.

Effort Breakdown per task (Person/Months) Month: 1 - 24

	WP/Task	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	TOTAL		Cost		
	Coord.	AIT	ONB	SR	IMAC	SUL	LMG	NRM	KVA	TARX	MECH	MUS	MOT	SPAC	ALI	CC	IAT	GRAN	ICCS	ZEUS	SI	CERTH	VALT	TINC	TASK	%	KEURO	Del.	Fund.
WP1	**Analysis of the State**	**ZEUS**	**8**	**4**	**7**	**10**	**3**	**1**	**1**	**1**	**6**	**1**	**3**	**11**	**3**	**1**	**4**	**5**	**1**	**7**	**15**	**8**	**6**	**14**	**5**	**125**	**23%**	**1117**		
T1.1	Definition of content to	**IMAC**	1	1		2	2	1	1	1	1	1	1		1	1	2	1	1	2	1					21	4%	188	D1	50%
T1.2	Development of a docur	**IMAC**	1	1		2	1			1		1					2	1		2	1					13	2%	116	D1	50%
T1.3	Identification of standar	**IAT**			1								1					2			1			2		7	1%	63	D2	50%
T1.4	Development of the Sys	**VALT**	4	1	6	2					4		10	2							12	8	6	10		65	12%	581	D2	50%
T1.5	Setup of the Legal Fran	**AIT**	1															1		1					1	4	1%	36	D3	50%
T1.6	Definition of supported I	**VALT**	1			2						1								1				2	2	9	2%	80	D3	50%
T1.7	Identification of Market	**TINC**		1		2														1					2	6	1%	54	D3	50%
WP2	**Implementation of th**	**VALT**	**10**	**4**	**6**	**9**	**3**	**2**	**2**	**2**	**6**	**2**	**2**	**10**	**6**	**2**	**5,5**	**3**	**4**	**12**	**12**	**6**	**6**	**14**	**8**	**136,5**	**25%**	**1220**		
T2.1	Preparation of Content	**IMAC**	1	4		3	3	2	2	2	2	2	1		1	2	5,5	2	4	6						42,5	8%	380	D4	50%
T2.2	System Implementation	**ZEUS**	7		6	2					4			10	5						12	6	6	12		70	13%	626	D5	50%
T2.3	Setup of the legal frame	**AIT**	1															1		2					2	6	1%	54	D6	50%
T2.4	Business process (re-)	**VALT**	1			2						1								2				2	3	11	2%	98	D6	50%
T2.5	Market preparation	**TINC**				2														2					3	7	1%	63	D6	50%
WP3	**Validation of the REG**	**IMAC**	**5**	**2**	**3**	**5**	**4**	**2**	**2**	**2**	**6**	**2**	**2**	**3**	**6**	**2**	**0**	**4**	**2**	**4**	**9**	**3**	**3**	**14**	**0**	**85**	**16%**	**760**		
T3.1	Validation of the REGN	**IMAC**		1		1	1	1	1	1	1	1	1		1	1	1	1	1	1	1			3		18	3%	161	D7	50%
T3.2	Preparation of the Dem	**VALT**	1	1		3	3	1	1	1	3	1	1		3	1	1	3	1	3	3			3		33	6%	295	D7	50%
T3.3	Implementation of the v	**ZEUS**	4		3	1					2			3	2						5	3	3	8		34	6%	304	D8	50%
WP4	**Demonstration, Asses**	**TARX**	**1**	**5**	**1**	**4**	**6**	**3**	**3**	**3**	**5**	**3**	**3**	**1**	**5**	**3**	**0**	**4**	**3**	**6**	**5**	**1**	**1**	**14**	**1**	**81**	**15%**	**724**		
T4.1	Execution of the demor	**TARX**		5		3	5	3	3	3	3	3	3		3	3		3	3	6	3			3		55	10%	492	D9	35%
T4.2	Refinement of system s	**VALT**	1		1						1			1	1						1	1	1	11	1	20	4%	179	D10	35%
T4.3	Analysis of the trial ser	**IAT**				1	1				1				1			1			1					6	1%	54	D11	35%
WP5	**Development of an e**	**MOT**	**1**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**2**	**1**	**0**	**4**	**1**	**0**	**1**	**1**	**0**	**0**	**4**	**1**	**20**	**4%**	**179**		
T5.1	Development of a Techr	**MOT**	1											1	1		2	1			1			2	1	10	2%	89	D12	45%
T5.2	Development of a Technology impleme			1			1				1		1	1			2			1				2		10	2%	89	D12	45%
WP6	**Information Dissemin**	**SPAC**	**1**	**1**	**1**	**1**	**1**	**0**	**0**	**0**	**1**	**0**	**1**	**1**	**1**	**0**	**2**	**1**	**0**	**1**	**1**	**0**	**0**	**2**	**1**	**17**	**3%**	**152**		
T6.1	Information Disseminati	**SPAC**	1	1	1	1	1				1		1	1	1		2	1		1	1			2	1	17	3%	152	D13	45%
WP7	**Project Management**	**AIT**	**12**	**1**	**12**	**6**	**2**	**0**	**0**	**0**	**4**	**0**	**0**	**9**	**4**	**0**	**0**	**2**	**0**	**2**	**5**	**2**	**2**	**6**	**2**	**71**	**13%**	**635**		
T7.1	Project Management	**AIT**	12	1	12	6	2				4			3	4			2		2	5	2	2	6	2	65	12%	581	D15-17	45%
T7.2	Quality Assurance	**MOT**												6												6	1%	54	D14	45%
	Total Person Months		**38**	**18**	**30**	**36**	**19**	**8**	**8**	**8**	**29**	**8**	**12**	**37**	**26**	**8**	**15,5**	**20**	**10**	**33**	**48**	**20**	**18**	**68**	**18**	**535,5**	**100,0%**	**4786**		

This figure contains the overall effort in Person Months (PM) distributed to all partners. The total number of 535,5 PMs includes the own contributions (=36,3 PMs) of the partners which follow the Additional Cost (AC) funding model. To be consistent with the CPF figure, an amount of 36,3 PMs has to be deducted which delivers **499,2** PMs.

The own contributions of AC-partners are:

SUL	10,0 PM
NRM	4,0 PM
GRAN	4,3 PM
ICCS	18,0 PM
Total	**36,3 PM**

	Effort Breakdown per task (PersonMonth) Month: 1 - 6																													
		WP/Task	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	TOTAL		Cost		
		Coord.	AIT	ONB	SR	IMAC	SUL	LMG	NRM	KVA	TARX	MECH	MUS	MOT	SPAC	ALI	CC	IAT	GRAN	ICCS	ZEUS	SI	CERTH	VALT	TINC	TASK	%	KEURO	Del.	Fund.
WP1	**Analysis of the State**	**ZEUS**	**8**	**4**	**7**	**10**	**3**	**1**	**1**	**1**	**6**	**1**	**3**	**11**	**3**	**1**	**4**	**5**	**1**	**7**	**15**	**8**	**6**	**14**	**5**	**125,0**	**23,3%**	**1117**		
T1.1	Definition of content to	**IMAC**	1	1		2	2	1	1	1	1	1	1		1	1	2	1	1	2	1					21,0	3,9%	188	D1	50%
T1.2	Development of a docur	**IMAC**	1	1		2	1				1		1				2	1		2	1					13,0	2,4%	116	D1	50%
T1.3	Identification of standar	**IAT**			1									1				2			1			2		7,0	1,3%	63	D2	50%
T1.4	Development of the Sys	**VALT**	4	1	6	2					4			10	2						12	8	6	10		65,0	12,1%	581	D2	50%
T1.5	Setup of the Legal Fran	**AIT**	1															1		1					1	4,0	0,7%	36	D3	50%
T1.6	Definition of supported I	**VALT**	1			2							1							1				2	2	9,0	1,7%	80	D3	50%
T1.7	Identification of Market	**TINC**		1		2														1					2	6,0	1,1%	54	D3	50%
WP2	**Implementation of th**	**VALT**	**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**		
T2.1	Preparation of Content	**IMAC**																								0,0	0,0%	0	D4	50%
T2.2	System Implementation	**ZEUS**																								0,0	0,0%	0	D5	50%
T2.3	Setup of the legal frame	**AIT**																								0,0	0,0%	0	D6	50%
T2.4	Business process (re-)	**VALT**																								0,0	0,0%	0	D6	50%
T2.5	Market preparation	**TINC**																								0,0	0,0%	0	D6	50%
WP3	**Validation of the REG**	**IMAC**	**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**		
T3.1	Validation of the REGN	**IMAC**																								0,0	0,0%	0	D7	50%
T3.2	Preparation of the Dem	**VALT**																								0,0	0,0%	0	D7	50%
T3.3	Implementation of the v	**ZEUS**																								0,0	0,0%	0	D8	50%
WP4	**Demonstration, Asses**	**TARX**	**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**		
T4.1	Execution of the demor	**TARX**																								0,0	0,0%	0	D9	35%
T4.2	Refinement of system a	**VALT**																								0,0	0,0%	0	D10	35%
T4.3	Analysis of the trial ser	**IAT**																								0,0	0,0%	0	D11	35%
WP5	**Development of an e**	**MOT**	0,25	0,25	0	0,25	0	0	0	0	0,25	0	0,25	0,5	0,25	0	1	0,25	0	0,25	0,25	0	0	1	0,25	**5,0**	**0,9%**	**45**		
T5.1	Development of a Techr	**MOT**	0,25											0,25	0,25		0,50	0,25			0,25			0,50	0,25	2,50	0,5%	22	D12	45%
T5.2	Development of a Technology impleme		0,25		0,25						0,25		0,25	0,25			0,50			0,25				0,50		2,50	0,5%	22	D12	45%
WP6	**Information Dissemin**	**SPAC**	0,25	0,25	0,25	0,25	0,25	0,00	0,00	0,00	0,25	0,00	0,25	0,25	0,25	0,00	0,50	0,25	0,00	0,25	0,25	0,00	0,00	0,50	0,25	**4,25**	**0,8%**	**38**		
T6.1	Information Disseminati	**SPAC**	0,25	0,25	0,25	0,25	0,25				0,25		0,25	0,25	0,25		0,50	0,25		0,25	0,25			0,50	0,25	4,25	0,8%	38	D13	45%
WP7	**Project Management**	**AIT**	3,00	0,25	3,00	1,50	0,50	0,00	0,00	0,00	1,00	0,00	0,00	2,25	1,00	0,00	0,00	0,50	0,00	0,50	1,25	0,50	0,50	1,50	0,50	**17,75**	**3,3%**	**159**		
T7.1	Project Management	**AIT**	3,00	0,25	3,00	1,50	0,50				1,00			0,75	1,00			0,50		0,50	1,25	0,50	0,50	1,50	0,50	16,25	3,0%	145	D15-17	45%
T7.2	Quality Assurance	**MOT**												1,50												1,50	0,3%	13	D14	45%
	Total Person Months		11,50	4,75	10,25	12,00	3,75	1,00	1,00	1,00	7,50	1,00	3,50	14,00	4,50	1,00	5,50	6,00	1,00	8,00	16,75	8,50	6,50	17,00	6,00	**152,00**	28,4%	1358		

Effort Breakdown per task (PersonMonth) Month: 7 - 12

		WP/Task	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	TOTAL		Cost		
		Coord.	AIT	ONB	SR	IMAC	SUL	LMG	NRM	KVA	TARX	MECH	MUS	MOT	SPAC	ALI	CC	IAT	GRAN	ICCS	ZEUS	SI	CERTH	VALT	TINC	TASK	%	KEURO	Del.	Fund.
WP1	**Analysis of the State**	**ZEUS**	**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**		
T1.1	Definition of content to	**IMAC**																								0,0	0,0%	0	D1	50%
T1.2	Development of a docur	**IMAC**																								0,0	0,0%	0	D1	50%
T1.3	Identification of standar	**IAT**																								0,0	0,0%	0	D2	50%
T1.4	Development of the Sys	**VALT**																								0,0	0,0%	0	D2	50%
T1.5	Setup of the Legal Fran	**AIT**																								0,0	0,0%	0	D3	50%
T1.6	Definition of supported I	**VALT**																								0,0	0,0%	0	D3	50%
T1.7	Identification of Market	**TINC**																								0,0	0,0%	0	D3	50%
WP2	**Implementation of th**	**VALT**	**10**	**4**	**6**	**9**	**3**	**2**	**2**	**2**	**6**	**2**	**2**	**10**	**6**	**2**	**5,5**	**3**	**4**	**12**	**12**	**6**	**6**	**14**	**8**	**136,5**	**25,5%**	**1220**		
T2.1	Preparation of Content	**IMAC**	1	4		3	3	2	2	2	2	2	1		1	2	5,5	2	4	6						42,5	7,9%	380	D4	50%
T2.2	System Implementation	**ZEUS**	7		6	2					4			10	5						12	6	6	12		70,0	13,1%	626	D5	50%
T2.3	Setup of the legal frame	**AIT**	1															1		2					2	6,0	1,1%	54	D6	50%
T2.4	Business process (re-)	**VALT**	1			2							1							2				2	3	11,0	2,1%	98	D6	50%
T2.5	Market preparation	**TINC**				2														2					3	7,0	1,3%	63	D6	50%
WP3	**Validation of the REG**	**IMAC**	**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**		
T3.1	Validation of the REGN	**IMAC**																								0,0	0,0%	0	D7	50%
T3.2	Preparation of the Dem	**VALT**																								0,0	0,0%	0	D7	50%
T3.3	Implementation of the v	**ZEUS**																								0,0	0,0%	0	D8	50%
WP4	**Demonstration, Asses**	**TARX**	**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**		
T4.1	Execution of the demor	**TARX**																								0,0	0,0%	0	D9	35%
T4.2	Refinement of system a	**VALT**																								0,0	0,0%	0	D10	35%
T4.3	Analysis of the trial ser	**IAT**																								0,0	0,0%	0	D11	35%
WP5	**Development of an e**	**MOT**	0,25	0,25	0,00	0,25	0,00	0,00	0,00	0,00	0,25	0,00	0,25	0,50	0,25	0,00	1,00	0,25	0,00	0,25	0,25	0,00	0,00	1,00	0,25	**5,00**	**0,9%**	**45**		
T5.1	Development of a Techr	**MOT**	0,25											0,25	0,25		0,50	0,25			0,25			0,50	0,25	2,50	0,5%	22	D12	45%
T5.2	Development of a Technology implemer		0,25		0,25						0,25		0,25	0,25			0,50			0,25				0,50		2,50	0,5%	22	D12	45%
WP6	**Information Dissemin**	**SPAC**	0,25	0,25	0,25	0,25	0,25	0,00	0,00	0,00	0,25	0,00	0,25	0,25	0,25	0,00	0,50	0,25	0,00	0,25	0,25	0,00	0,00	0,50	0,25	**4,25**	**0,8%**	**38**		
T6.1	Information Disseminati	**SPAC**	0,25	0,25	0,25	0,25	0,25				0,25		0,25	0,25	0,25		0,50	0,25		0,25	0,25			0,50	0,25	4,25	0,8%	38	D13	45%
WP7	**Project Management**	**AIT**	3,00	0,25	3,00	1,50	0,50	0,00	0,00	0,00	1,00	0,00	0,00	2,25	1,00	0,00	0,00	0,50	0,00	0,50	1,25	0,50	0,50	1,50	0,50	**17,75**	**3,3%**	**159**		
T7.1	Project Management	**AIT**	3,00	0,25	3,00	1,50	0,50				1,00			0,75	1,00			0,50		0,50	1,25	0,50	0,50	1,50	0,50	16,25	3,0%	145	D15-17	45%
T7.2	Quality Assurance	**MOT**												1,50												1,50	0,3%	13	D14	45%
	Total Person Months		13,50	4,75	9,25	11,00	3,75	2,00	2,00	2,00	7,50	2,00	2,50	13,00	7,50	2,00	7,00	4,00	4,00	13,00	13,75	6,50	6,50	17,00	9,00	**163,50**	**30,5%**	**1461**		

Effort Breakdown per task (PersonMonth) Month: 13 - 18

		WP/Task	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	TOTAL		Cost		
		Coord.	AIT	ONB	SR	IMAC	SUL	LMG	NRM	KVA	TARX	MECH	MUS	MOT	SPAC	ALI	CC	IAT	GRAN	ICCS	ZEUS	SI	CERTH	VALT	TINC	TASK	%	KEURO	Del.	Fund.
WP1	**Analysis of the State**	**ZEUS**	**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**		
T1.1	Definition of content to	**IMAC**																								0,0	0,0%	0	D1	50%
T1.2	Development of a docur	**IMAC**																								0,0	0,0%	0	D1	50%
T1.3	Identification of standar	**IAT**																								0,0	0,0%	0	D2	50%
T1.4	Development of the Sys	**VALT**																								0,0	0,0%	0	D2	50%
T1.5	Setup of the Legal Fran	**AIT**																								0,0	0,0%	0	D3	50%
T1.6	Definition of supported I	**VALT**																								0,0	0,0%	0	D3	50%
T1.7	Identification of Market	**TINC**																								0,0	0,0%	0	D3	50%
WP2	**Implementation of th**	**VALT**	**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**		
T2.1	Preparation of Content	**IMAC**																								0,0	0,0%	0	D4	50%
T2.2	System Implementation	**ZEUS**																								0,0	0,0%	0	D5	50%
T2.3	Setup of the legal frame	**AIT**																								0,0	0,0%	0	D6	50%
T2.4	Business process (re-)	**VALT**																								0,0	0,0%	0	D6	50%
T2.5	Market preparation	**TINC**																								0,0	0,0%	0	D6	50%
WP3	**Validation of the REG**	**IMAC**	**5**	**2**	**3**	**5**	**4**	**2**	**2**	**2**	**6**	**2**	**2**	**3**	**6**	**2**	**0**	**4**	**2**	**4**	**9**	**3**	**3**	**14**	**0**	**85,0**	**15,9%**	**760**		
T3.1	Validation of the REGN	**IMAC**		1		1	1	1	1	1	1	1	1		1	1		1	1	1	1			3		18,0	3,4%	161	D7	50%
T3.2	Preparation of the Dem	**VALT**	1	1		3	3	1	1	1	3	1	1		3	1		3	1	3	3			3		33,0	6,2%	295	D7	50%
T3.3	Implementation of the v	**ZEUS**	4		3	1					2			3	2						5	3	3	8		34,0	6,3%	304	D8	50%
WP4	**Demonstration, Asses**	**TARX**	**0,5**	**2,5**	**0,5**	**1,5**	**2,5**	**1,5**	**1,5**	**1,5**	**2**	**1,5**	**1,5**	**0,5**	**2**	**1,5**	**0**	**1,5**	**1,5**	**3**	**2**	**0,5**	**0,5**	**7**	**0,5**	**37,5**	**7,0%**	**335**		
T4.1	Execution of the demor	**TARX**		2,5		1,5	2,5	1,5	1,5	1,5	1,5	1,5	1,5		1,5	1,5		1,5	1,5	3	1,5			1,5		27,5	5,1%	246	D9	35%
T4.2	Refinement of system a	**VALT**	0,5	0	0,5						0,5			0,5	0,5						0,5	0,5	0,5	5,5	0,5	10,0	1,9%	89	D10	35%
T4.3	Analysis of the trial ser	**IAT**																								0,0	0,0%	0	D11	35%
WP5	**Development of an e**	**MOT**	0,25	0,25	0,00	0,25	0,00	0,00	0,00	0,00	0,25	0,00	0,25	0,50	0,25	0,00	1,00	0,25	0,00	0,25	0,25	0,00	0,00	1,00	0,25	**5,00**	**0,9%**	**45**		
T5.1	Development of a Techr	**MOT**	0,25											0,25	0,25	0,00	0,50	0,25			0,25			0,50	0,25	2,50	0,5%	22	D12	45%
T5.2	Development of a Technology implemer		0,25		0,25						0,25		0,25	0,25			0,50			0,25				0,50		2,50	0,5%	22	D12	45%
WP6	**Information Dissemin**	**SPAC**	0,25	0,25	0,25	0,25	0,25	0,00	0,00	0,00	0,25	0,00	0,25	0,25	0,25	0,00	0,50	0,25	0,00	0,25	0,25	0,00	0,00	0,50	0,25	**4,25**	**0,8%**	**38**		
T6.1	Information Disseminati	**SPAC**	0,25	0,25	0,25	0,25	0,25				0,25		0,25	0,25	0,25		0,50	0,25		0,25	0,25			0,50	0,25	4,25	0,8%	38	D13	45%
WP7	**Project Management**	**AIT**	3,00	0,25	3,00	1,50	0,50	0,00	0,00	0,00	1,00	0,00	0,00	2,25	1,00	0,00	0,00	0,50	0,00	0,50	1,25	0,50	0,50	1,50	0,50	**17,75**	**3,3%**	**159**		
T7.1	Project Management	**AIT**	3,00	0,25	3,00	1,50	0,50				1,00			0,75	1,00			0,50		0,50	1,25	0,50	0,50	1,50	0,50	16,25	3,0%	145	D15-17	45%
T7.2	Quality Assurance	**MOT**												1,50												1,50	0,3%	13	D14	45%
	Total Person Months		9,00	5,25	6,75	8,50	7,25	3,50	3,50	3,50	9,50	3,50	4,00	6,50	9,50	3,50	1,50	6,50	3,50	8,00	12,75	4,00	4,00	24,00	1,50	**149,50**	**27,9%**	**1336**		

Effort Breakdown per task (PersonMonth) Month: 19 - 24

		WP/Task	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	TOTAL		Cost		
		Coord.	AIT	ONB	SR	IMAC	SUL	LMG	NRM	KVA	TARX	MECH	MUS	MOT	SPAC	ALI	CC	IAT	GRAN	ICCS	ZEUS	SI	CERTH	VALT	TINC	TASK	%	KEURO	Del.	Fund.
WP1	**Analysis of the State**	**ZEUS**	**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**		
T1.1	Definition of content to	**IMAC**																								0	0,0%	0	D1	50%
T1.2	Development of a docur	**IMAC**																								0	0,0%	0	D1	50%
T1.3	Identification of standar	**IAT**																								0	0,0%	0	D2	50%
T1.4	Development of the Sys	**VALT**																								0	0,0%	0	D2	50%
T1.5	Setup of the Legal Fran	**AIT**																								0	0,0%	0	D3	50%
T1.6	Definition of supported I	**VALT**																								0	0,0%	0	D3	50%
T1.7	Identification of Market	**TINC**																								0	0,0%	0	D3	50%
WP2	**Implementation of th**	**VALT**	**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**		
T2.1	Preparation of Content	**IMAC**																								0	0,0%	0	D4	50%
T2.2	System Implementation	**ZEUS**																								0	0,0%	0	D5	50%
T2.3	Setup of the legal frame	**AIT**																								0	0,0%	0	D6	50%
T2.4	Business process (re-)	**VALT**																								0	0,0%	0	D6	50%
T2.5	Market preparation	**TINC**																								0	0,0%	0	D6	50%
WP3	**Validation of the REG**	**IMAC**	**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**		
T3.1	Validation of the REGN	**IMAC**																								0	0,0%	0	D7	50%
T3.2	Preparation of the Dem	**VALT**																								0	0,0%	0	D7	50%
T3.3	Implementation of the v	**ZEUS**																								0	0,0%	0	D8	50%
WP4	**Demonstration, Asses**	**TARX**	**0,5**	**2,5**	**0,5**	**2,5**	**3,5**	**1,5**	**1,5**	**1,5**	**3**	**1,5**	**1,5**	**0,5**	**3**	**1,5**	**0**	**2,5**	**1,5**	**3**	**3**	**0,5**	**0,5**	**7**	**0,5**	**43,5**	**8,1%**	**389**		
T4.1	Execution of the demor	**TARX**		2,5		1,5	2,5	1,5	1,5	1,5	1,5	1,5	1,5		1,5	1,5		1,5	1,5	3	1,5			1,5		27,5	5,1%	246	D9	35%
T4.2	Refinement of system a	**VALT**	0,5		0,5						0,5			0,5	0,5						0,5	0,5	0,5	5,5	0,5	10	1,9%	89	D10	35%
T4.3	Analysis of the trial ser	**IAT**				1	1				1				1			1			1					6	1,1%	54	D11	35%
WP5	**Development of an e**	**MOT**	0,25	0,25	0,00	0,25	0,00	0,00	0,00	0,00	0,25	0,00	0,25	0,50	0,25	0,00	1,00	0,25	0,00	0,25	0,25	0,00	0,00	1,00	0,25	**5,00**	**0,9%**	**45**		
T5.1	Development of a Techr	**MOT**	0,25											0,25	0,25		0,50	0,25			0,25			0,50	0,25	2,50	0,5%	22	D12	45%
T5.2	Development of a Technology implemer		0,25		0,25						0,25		0,25	0,25			0,50			0,25				0,50		2,50	0,5%	22	D12	45%
WP6	**Information Dissemin**	**SPAC**	0,25	0,25	0,25	0,25	0,25	0,00	0,00	0,00	0,25	0,00	0,25	0,25	0,25	0,00	0,50	0,25	0,00	0,25	0,25	0,00	0,00	0,50	0,25	**4,25**	**0,8%**	**38**		
T6.1	Information Disseminati	**SPAC**	0,25	0,25	0,25	0,25	0,25				0,25		0,25	0,25	0,25		0,50	0,25		0,25	0,25			0,50	0,25	4,25	0,8%	38	D13	45%
WP7	**Project Management**	**AIT**	3,00	0,25	3,00	1,50	0,50	0,00	0,00	0,00	1,00	0,00	0,00	2,25	1,00	0,00	0,00	0,50	0,00	0,50	1,25	0,50	0,50	1,50	0,50	**17,75**	**3,3%**	**159**		
T7.1	Project Management	**AIT**	3,00	0,25	3,00	1,50	0,50				1,00			0,75	1,00			0,50		0,50	1,25	0,50	0,50	1,50	0,50	16,25	3,0%	145	D15-17	45%
T7.2	Quality Assurance	**MOT**												1,50												1,50	0,3%	13	D14	45%
	Total Person Months		4,00	3,25	3,75	4,50	4,25	1,50	1,50	1,50	4,50	1,50	2,00	3,50	4,50	1,50	1,50	3,50	1,50	4,00	4,75	1,00	1,00	10,00	1,50	**70,50**	**13,2%**	**630**		

9.4 Deliverables list

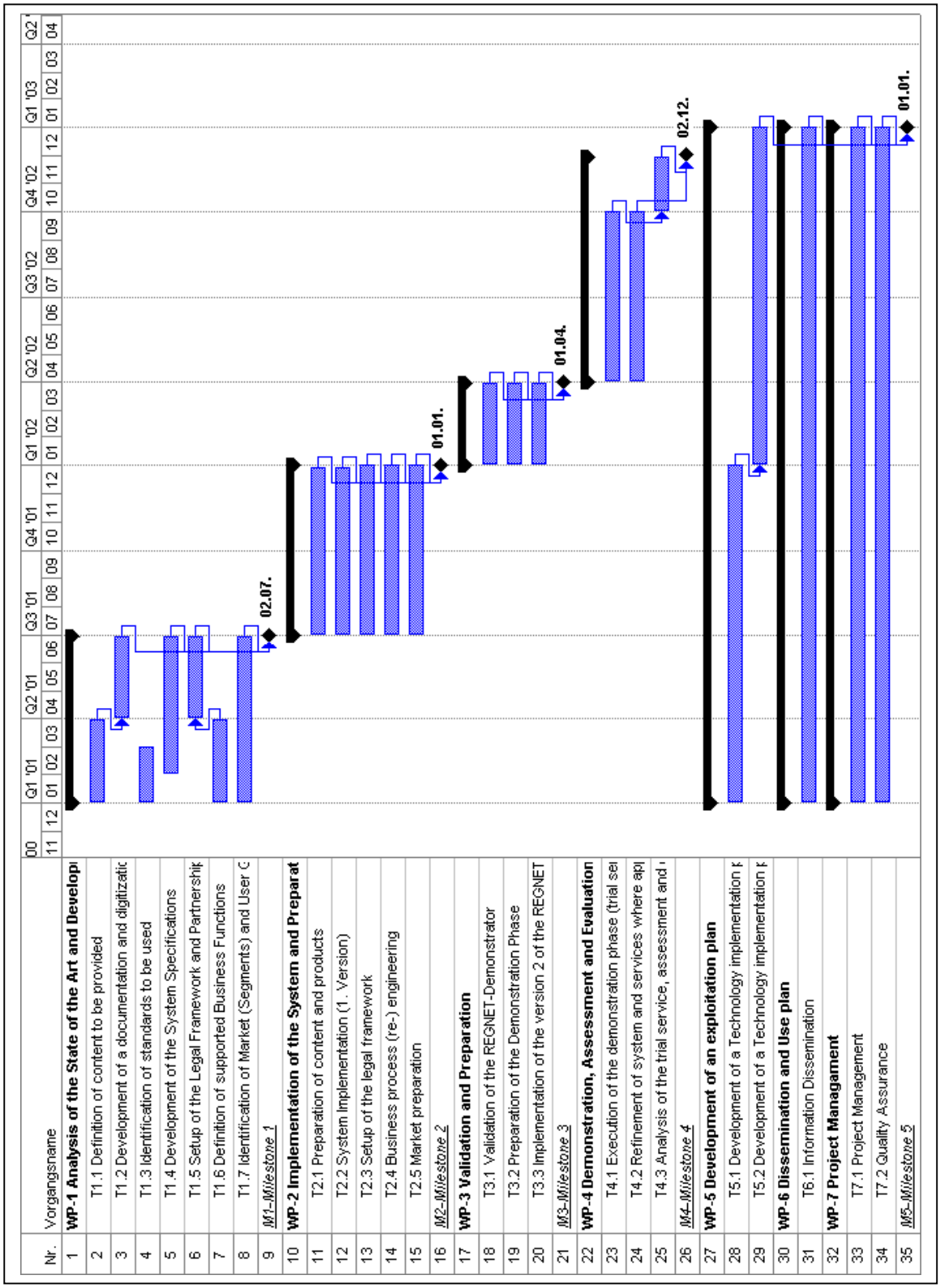
Deliverables list

Del. no.	Deliverable name	WP no.	Lead particip-ant	Estimated person-months	Del. type*	Security**	Delivery (proj. month)
D1	Content Creation and Content Management	WP1	IMAC	34	report	Rest.	6
D2	The REGNET – System: Specifications and State of the Art	WP1	ZEUS	72	report	Pub.	6
D3	REGNET - Enterprise Engineering and Market Analysis	WP1	VALT	19	report	Pub.	6
D4	Available Content and Products	WP2	IMAC	42,5	report	Rest.	12
D5	REGNET-System: Version-1	WP2	ZEUS	70	prototype	Rest.	12
D6	System Services and Business Processes	WP2	VALT	24	report	Pub.	12
D7	Validation of the REGNET System operation & Preparation of the REGNET - Demonstration Phase	WP3	IMAC	51	report	FP5	15
D8	The REGNET-System: Version-2	WP3	VALT	34	prototype	Rest.	15
D9	REGNET System operation	WP4	TARX	55	report	Rest.	24
D10	REGNET – Demonstration (Trial Service)	WP4	VALT	20	prototype	Rest.	24
D11	REGNET trial service and recommendations	WP4	IAT	6	report	Pub.	24
D12	Technology Implementation Plan	WP5	MOT	20	report	Rest.	24
D13	REGNET – Information Dissemination Activities	WP6	SPAC	17	report	Pub.	5
D14	REGNET - Quality Assurance System	WP7	MOT	6	report	Rest.	6
D15	Final Report	WP7	AIT	6	report	Pub.	24
D16	Project Presentation (WEB Presence)	WP7	AIT	6	WEB-Site	Pub	3
D17	Project Presentation (Fact Sheet)	WP7	AIT	3	Fact sheet	Pub	3

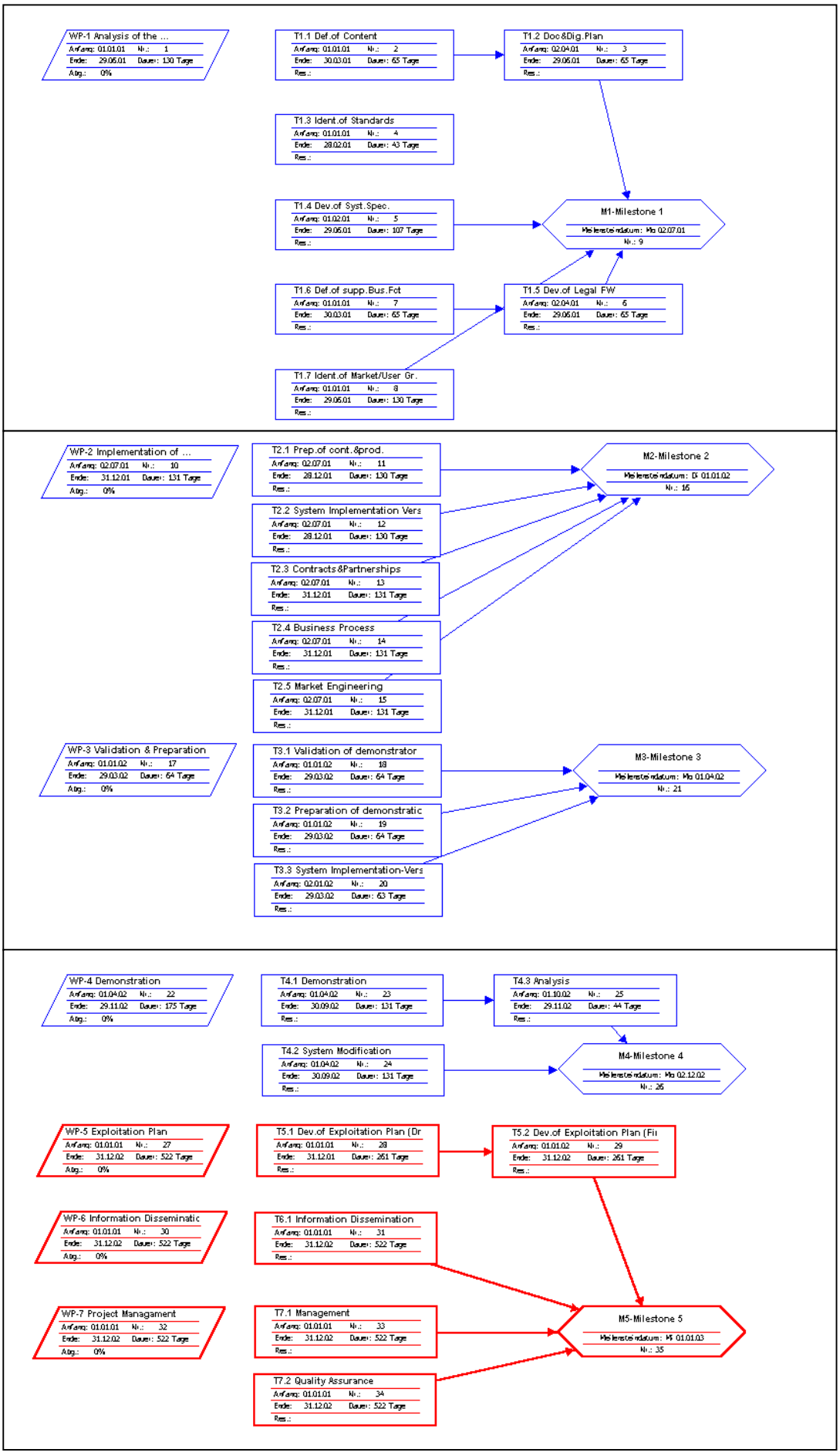
** A short, self-evident description e.g. report, demonstration, conference, specification, prototype…*

***Int. Internal circulation within project (and Commission Project Officer if requested)*
Rest. Restricted circulation list (specify in footnote) and Commission PO only
IST Circulation within IST Programme participants
FP5 Circulation within Framework Programme participants
Pub. Public document

9.5 Project planning and timetable



9.6 Graphical presentation of project components



9.7 Project management

The management structure, techniques and procedures to apply in the project have the following objectives:

- To manage and control the project's resources, schedules and activities.
- To ensure the integration of the business and software related tasks.
- To check the consistency between the developments and the strategic objectives of the partners.
- To ensure the overall quality of all systems results.
- To coordinate the REGNET-network on a European scale.

The management structure will be based on a small number of committees and members, with the objective of improving the overall flexibility and swiftness of the decision processes:

- **Project Control Group (PCG)**. - Formed by the co-ordinator (AIT) and the Project Manager (SR). These two partners are responsible for the Administrative Procedures as well as for the Technical Management of the REGNET Project.
- **Project Management Group (PMG)**.- Formed by the Project Control Group and five Work Area Managers (WA-A: Content Engineering (AIT); WA-B: Platform Engineering (ZEUS); WA-C: Enterprise Engineering (VALT); WA-D: Domain Management (IMAC); WA-E: Region Management (TARX)) plus two Technical Group Managers (Interface/End User Devices: MOT; Object/Catalogue Management (SI)). It will be responsible for the overall management (co-ordinating legal and ethical issues), technical management (major decisions regarding work contents, configuration & change control, QA & self-assessment), revision of internal documentation and dissemination, and relationship with EU officers and third-party organisations. PMG will join at least every 3 months.
- **Extended Project Management Group (EPMG). -** Formed by the PMG plus all other contractors of the REGNET Project (that means one management representative from each partner). This group convenes on the occasion of main project events (kick-off, milestones, contingency, etc). It is possible to delegate a voting right to another partner in advance and written form to the co-ordinator.
- **Project Team Group (PTG)**. - Formed by partners working together on task level either within the development phase (I) or demonstration phase (II). These meetings - if necessary - are announced by the Work Area Managers on request by work package or task managers, who will be responsible for the organisation of meetings.
- **Exploitation Committee**.- Formed by one management or marketing representative from the commercial partners, and will be responsible for exploitation plan and approval of dissemination activities. Other partners will occasionally participate in the meetings.
- **Users Group**.- Formed by partners acting as Content Providers or Regional Poles. Other partners can be nominated on request. It is intended to extend the group by partners external to the project to enable the growth of the network.
- **Task Leaders**.- Each Task will have a responsible of its specific actions (controlled by task briefs) and results. For each work package, one of the Task Leaders will also act as **Workpackage Leader** for common WP issues.

A Steering Committee composed by one senior representative of the partners could be settled for decisions in case of problems at lower levels. A Consortium Agreement will be signed by the partners not later than two months from the start of the project, detailing management, responsibility and exploitation issues, including intellectual property and commercialisation rights.

Quality assurance procedures

The following quality assurance procedures will be implemented:

- A **project electronic repository** will be accessible to the consortium members, where all common project information and shareable code of the project will be stored and updated. The Coordinator, Project Manager and the Task Leaders will provide and maintain all information at the project, task and deliverables levels. All project documentation will be prepared and stored in the Electronic Repository by the corresponding responsible in a common format. All generic documents (deliverable, minutes, common reports, . . .) will be normalised to maintain homogeneity in the project. The deliverables will be issued by the Task Leaders after a QA revision procedure, and released by the Project Manager.
- The **meetings** will be organised by the concerning group, committees or Task Leaders, according to the needs of the project, and will require pre-agenda and the meeting minutes, for comments and approval of the attendants. All project milestones will produce a meeting with the EPMG and the involved Task Leaders.
- A collection of **software engineering** (Change Management, Configuration Management and application program interfaces standards) will be agreed in order to ensure the correct integration of the modules developed by the different partners. A support responsible will be identified to provide the necessary support to the users. The **validation of the Designs, the Integration and Validation plans and the results of the tests** are key issues of the QA, so there will need to be formally approved by the PMG.
- A document detailing contact data, responsibilities nomination and related information (e.g. escalation procedure for problem resolution) will be issued at the project kick-off meeting and maintained by the Coordinator (AIT).

Allocation of management responsibilities

Angewandte Informationstechnik Forschungsgesellschaft mbH (AIT) as Co-ordinator and responsible for the **Administrative Management** will delegate responsibility for the **Project Management** to Salzburg Research (SR). Both partners form the **Project Control Group**.

The **Project Control Group** will be responsible of the performance of the following tasks:

- Production & consolidation of periodic progress reports, and co-ordination of the project final ones. Cost statements consolidation, and financial co-ordination.
- Scheduling of project resources and surveillance of resources and work-content deviations.
- Interfacing with EC officers and external reviewers. Co-ordination of the periodic progress reviews.
- Internal storage and dissemination of the information (communication strategy), plus any other common effort related to project co-ordination.

Each **Deliverable** and **Task** will have a **Leader (TL)**, nominated by the corresponding partner (see part B). He/She will have technical responsibility for:

- Task specific actions and results and the adequate progress towards its functional and quality goals.
- Co-ordinate task level meetings and compile all required information from the Task participants and produce/review/approve the final Deliverables and reports for the Management Groups.

TL will define the structure and overall index of the Task deliverables, complying with the management guidelines and set up 'task briefs' which lay down the work to be done within a task. TL will distribute the responsibilities required to adequately accomplish the Task between the participant partners considering their profile, experience and assigned manpower.

Each partner will also nominate a person (a member of the EPMG or a Task Leader), responsible of recording and reporting the partners' details regarding spent resources, changes in the key persons, . . . **Internal Reporting** will include the management and exploitation

reports produced by the **PMC** and the **ExC,** plus a Partner Monthly report including for each partner or cluster consortium:

- Partners and involved Tasks identifications
- Achievements & deliverables in the reported period
- Status of any conflict affecting the task
- Deviations & team changes from original plan
- Resources spent in the reported activity
- Technical and resources forecast for the next period
- Percentage of technical advance of each task

External Reports and Reviews

External reports will be produced by the Project Control Group and reviewed by the PMG according to the EC contract rules, including:

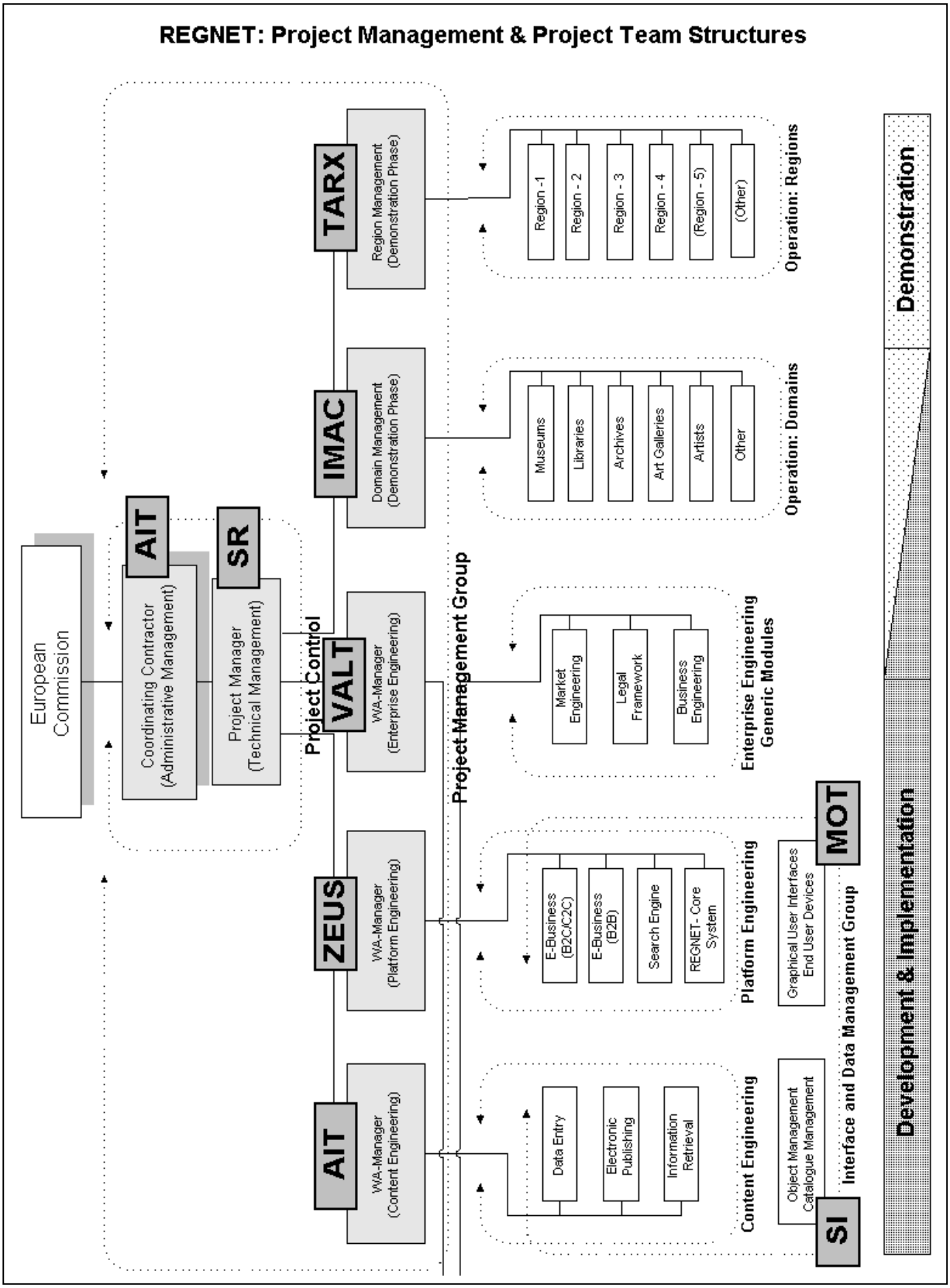
- The **Bimonthly Management reports** will include a brief summary of the internal monthly reports.
- The **Progress reports** (6-month periods) will include more detailed summaries of the monthly reports, overall project status plus the cost-statement reports from each partner.
- The **Final report** will include summaries of all points above mentioned, plus summaries of technical works, achieved objectives and conclusions.

The Consortium will propose periodic Six-Months Review Meetings with the EU officers and external experts, but will be open to any other schedule proposed by the Commission.

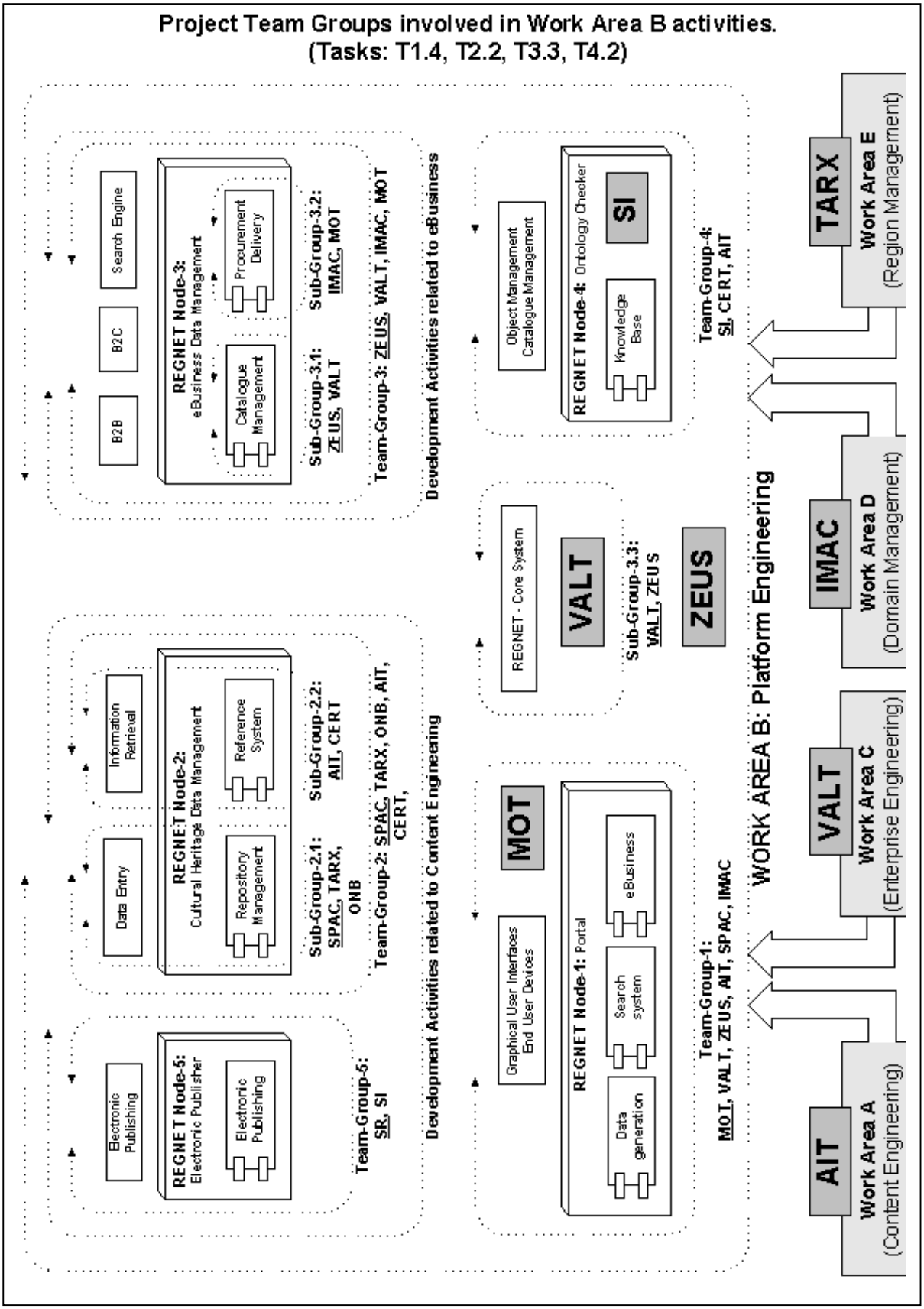
To support management procedures MS-Project will be used. As far as graphical charts have to be produced the software package VISIO will be used.

Quality Assurance (QA) will be included in an own task (T7.2) and described in a separate deliverable (D14). One partner (MOT) will be responsible for this and has to work out at a QA-procedure at the beginning of the project.

The image of the overall management structure can be taken from the next figures:
The five Work Areas have clear responsibilities (Work Area Mangers). The practical work is carried out in Project Team Groups. During the development phase (dedicated to Area B) there will be 5 Team-Groups related to the five main components (building blocks, nodes; see Annex) . Each Team Group has a group leader (underlined short name). Three other team groups are dedicated to the other four work areas. One group consist of system implementers extended by developers. One group is dedicated to Enterprise engineering only. Finally one group consists of the content providers. The relation between groups and tasks are clearly defined in the work package/task description.


REGNET: Project Management & Project Team Structures
European Commission
AIT
Coordinating Contractor (Administrative Management)
SR
Project Manager (Technical Management)
Project Control
Project Management Group
TARX
Region Management (Demonstration Phase)
IMAC
Domain Management (Demonstration Phase)
VALT
WA-Manager (Enterprise Engineering)
ZEUS
WA-Manager (Platform Engineering)
AIT
WA-Manager (Content Engineering)
SI
MOT
Region - 1
Region - 2
Region - 3
Region - 4
(Region - 5)
(Other)
Operation: Regions
Museums
Libraries
Archives
Art Galleries
Artists
Other
Operation: Domains
Market Engineering
Legal Framework
Business Engineering
Enterprise Engineering Generic Modules
E-Business (B2C/C2C)
E-Business (B2B)
Search Engine
REGNET- Core System
Platform Engineering
Graphical User Interfaces End User Devices
Data Entry
Electronic Publishing
Information Retrieval
Content Engineering
Object Management Catalogue Management
Interface and Data Management Group
Development & Implementation
Demonstration

Project Team Groups involved in
Work Area A, C, D, E activities.
AIT
Definition of Content
Documentation and Digitisation Plan
Team-Group-6 (Implementors):
IMAC, AIT, TARX, SPAC, ZEUS, IAT, ICCS
Definition of Content
Documentation and Digitisation Plan
Team-Group-7 (Content Providers) :
SUL, ONB, LMG, NRM, KVA, MECH, MUS, ALI, GRAN (+CC)
WORK AREA A: Content Engineering
VALT
Legal Framework
Marketing (Engineering)
Team-Group-8.1
AIT, IAT, ICCS, TINC
Team-Group-8.2
TINC, ONB, IMAC, ICCS
Business Engineering
Team-Group-8.3
VALT, AIT, IMAC, MUS, ICCS, TINC
WORK AREA C: Enterprise Engineering
IMAC
Validation of Demonstrator
Validation of Demonstrator
Team-Group-6 (-AIT+VALT)
Team-Group-7
Preparation of Demonstration
Preparation of Demonstration
Team-Group-6 (+VALT):
Team-Group-7
WORK AREA D: Domain Management
TARX
Demonstration
Demonstration
Team-Group-6 (-AIT+VALT)
Team-Group-7
Analysis
Analysis
Team-Group-6 (-AIT-ICCS):
SUL
WORK AREA E: Region Management


Project Team Groups involved in Work Area B activities.
(Tasks: T1.4, T2.2, T3.3, T4.2)
WORK AREA B: Platform Engineering
AIT
Work Area A
(Content Engineering)
VALT
Work Area C
(Enterprise Engineering)
IMAC
Work Area D
(Domain Management)
TARX
Work Area E
(Region Management)
Team-Group-1:
MOT, VALT, ZEUS, AIT, SPAC, IMAC
Team-Group-2: SPAC, TARX, ONB, AIT, CERT,
Team-Group-3: ZEUS, VALT, IMAC, MOT
Team-Group-4:
SI, CERT, AIT
Team-Group-5:
SR, SI
Development Activities related to Content Engineering
Development Activities related to eBusiness
Sub-Group-2.1:
SPAC, TARX, ONB
Sub-Group-2.2:
AIT, CERT
Sub-Group-3.1:
ZEUS, VALT
Sub-Group-3.2:
IMAC, MOT
Sub-Group-3.3:
VALT, ZEUS
REGNET Node-1: Portal
Data generation
Search system
eBusiness
Graphical User Interfaces End User Devices
REGNET - Core System
REGNET Node-2:
Cultural Heritage Data Management
Repository Management
Reference System
Data Entry
Information Retrieval
REGNET Node-3:
eBusiness Data Management
Catalogue Management
Procurement Delivery
B2B
B2C
Search Engine
REGNET Node-4: Ontology Checker
Knowledge Base
Object Management
Catalogue Management
REGNET Node-5:
Electronic Publisher
Electronic Publishing
Electronic Publishing
MOT
VALT
ZEUS
SI

10. Clustering

The project will be clustered with another parallel 3rd Call project (IST-2000-25136 OPENHERITAGE, OH) in order to leverage the synergies that exist between the two projects and to avoid possible redundancies of work.
As detailed in the Attachment an in-depth comparative analysis of the two projects has been carried out.

In the light of this check and of the resulting remarks, the areas needing express coverage in the formulation of the TAs of OH and REGNET (RN) have been identified to be the following ones:

- Integration of technical tools, e.g. in the collections management area. REGNET will clarify the extent of the cooperation desired in this area;
- Legal framework. REGNET will focus on its development and *OpenHeritage* on its validation and implementation;
- TSCs: each project will have to focus on its own peculiarities, with support functionality clearly belonging to *OpenHeritage*, tourism functionality developed by *OpenHeritage*, meta-collections access clearly carried out by REGNET, workflow and e-business models and practices clearly belonging to REGNET and e-commerce carried out by both but distinguished in focus and target;
- Portals: *OpenHeritage* will clearly specialise in providing community services and media brokering services for professional operators.

Many other minor improvements will also result from the implementation in both TAs of the many remarks made in the analysis of Attachment 6.

As a result of the above analysis, a number of main additions have been made to the *OpenHeritage* Annex 1 in the direction of clustering, as follows.

- **The specification and development/integration of collections management solutions**. In this area there has been a better orientation of activities, with *OpenHeritage* focusing on the definition and integration of core technologies for collections management at the object and catalogue levels, and REGNET focusing on the ontology (metadata) topics and on data entry/harvesting themes. The use of the *OpenMuseum* technology for physical museums in the REGNET consortium will be favoured by the *OpenHeritage* team;
- **The definition of the legal framework for the establishment of relationships between memory institutions and commercial services/initiatives**. This activity has been dropped by *OpenHeritage* and will be carried out by REGNET only, while manpower effort will be devoted in *OpenHeritage* to integrating the socio-economic models developed here with the results of the research on the legal framework carried out within REGNET.
- **The definition and prototyping of a technical infrastructure for the Territorial Service Centres**. In this area a few main sub-activities have been identified:
    - *System & network management and other technology-based support functions* (CRM, remote assistance, etc.). These are specifically carried out by *OpenHeritage*;

- *Client access and tourism-oriented representation functionality*. Work in this area, including 3D large-scale virtualisations of art cities and places, will be carried out specifically by *OpenHeritage*;
- *Union catalogue, network-wide access to meta-collections, data exchange, meta-search functionality*. This will be based on activities carried out by REGNET. The integration between *OpenHeritage* and REGNET will be assured by the introduction of *Index+* as one of the enabling technologies the REGNET architecture will rely on. This will make the TSCs perfectly compatible with the core collections management technology established by *OpenHeritage* for use at the local level;
- *Workflow and e-business models and practices* (e.g., for on-demand electronic publishing): these belong exclusively to REGNET;
- *E-commerce functionality*: in its general aspects both projects will apply e-commerce solutions to the cultural domain, but in the case of *OpenHeritage* there will be a clear finalisation towards the provision of B2B brokering services for the trading of cultural images and other rich media to professional operators (TV channels, portals, educational actors, publishers, etc.).

- **The definition and prototyping of a global portal for the delivery of community services and for the trading of cultural rich media through the implementation of B2B functionality**. Both projects acknowledge the importance of defining and implementing a facility of this kind, through which the underlying components of the architecture ('local' systems and service centres feeding the media pipeline) can find a suitable exploitation channel. The activities related to this component will therefore be shared between the two projects (with *OpenHeritage* playing a leading role) and will be harmonised through the supervision of the Cluster Committee (se below). *OpenHeritag*e's portal will also be more focused on the brokerage services described above.
- Moreover OH will make the economic models available for use in REGNET;
- Since both projects refer to leading standards and practices, they will ensure a viable correspondence of the base technical choices. The Attachments detailing technical choices and reference standards will be used to this end.

The specialisation in functionality is matched, within each project, by corresponding reallocations of resources.

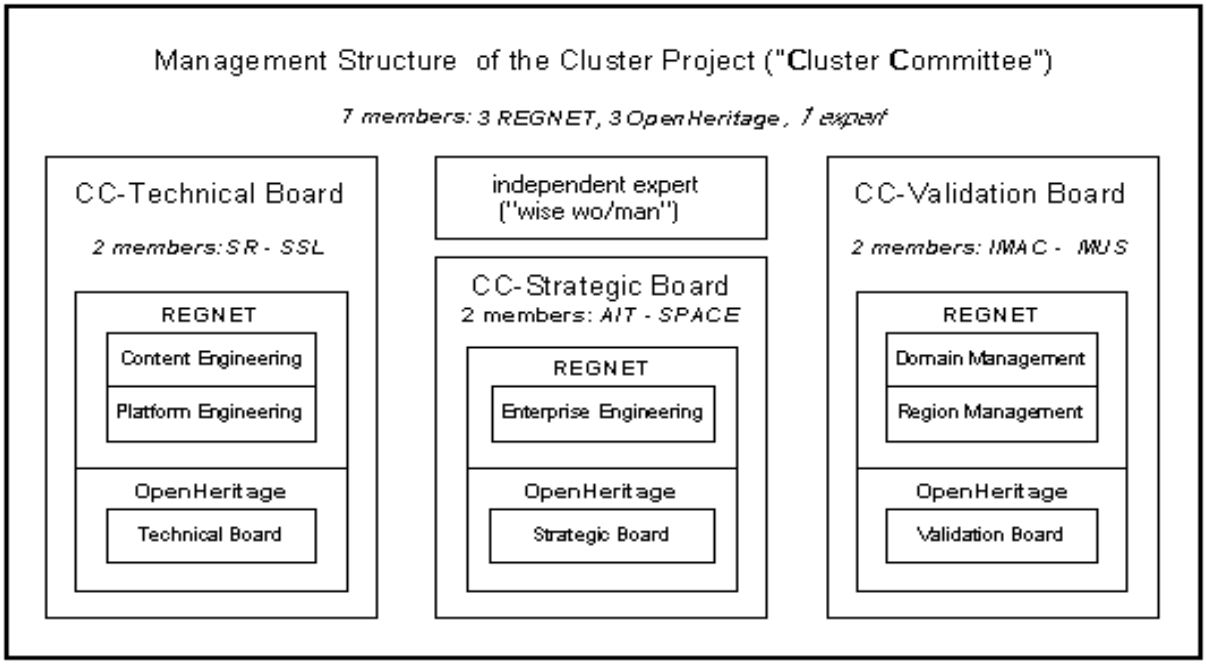
In terms of management structures and work plan, the following changes have been made:

- The Cluster Project will be a named entity ("*OpenHeritage in Regional Networks*", RN-OH) and will be referred to as a integrated project in particular contexts and occasions;
- The management of the two projects will be tightly connected, through the creation of a **Cluster Committee** made up of 2 members from the *OpenHeritage* and REGNET technical teams (SSL and SR), 2 members from the *OpenHeritage* and REGNET validation teams (MUSEON and IMAC) and of two management officials from SPACE and AIT. The board will also have a seventh member (a Wise Man, i.e. a domain expert, appointed by the two consortia);
- The Cluster Committee will supervise and validate the technical integration of the two projects, will ensure that common standards are pursued and will tune the

exploitation and dissemination efforts in order to avoid redundancies and to attain results of common interest. It will meet 5 times during the project at 6-month intervals, in the occasion of the main project milestones;

- The two projects will have to assess the results of their different approaches to collections management, TSCs and portals and to define together corrective actions and synergies over the course of the two project years. This will be managed through the Cluster Committee;
- A new task has been introduced in the Project Management WP of *OpenHeritage* in order to deal with the clustering. The Task produces a deliverable (D02) at the end of the first project year (*Report on clustering activities*).
- Promotion and dissemination activities will be carried out in synergy by the two consortia, under the supervision of the Cluster Committee.
- The work plan of the two projects has been rearranged chronologically in order to provide better synchronisation.

Cluster Project: OpenHeritage in Regional Networks (RN-OH)



In terms of resources, the impact of clustering can be described as follows:

- In WP1, there will be a decrease of SPACE's budget in the resources devoted to the development of a data entry component by 6 Person Months, and in WP2 a decrease by 5 PMs. In WP2 there is also a decrease by 3 PMs related to the effort of AIT. WP3 was reduced by 2 PM (AIT), which means a decrease of the version-2 development of the REGNET system. By the resulting amount (**16 PMs**) the development activities related to data generation will be decreased.
- The activities related to the set-up of a legal framework have been expanded in order to specialise *REGNET* on this front and to provide OpenHeritage with specific input. The manpower devoted to this area has **increased by 1 PM** from 9 PMs to 10 PMs.

- Travel costs are not raised because the meetings of the Cluster Committee are the same related to milestones of RN.

The overall impact of the clustering activities is a decrease by 15 PMs.

This corresponds to roughly 150K-EURO costs or 75 K-EURO EU-funding. Due to the low travel budget it was proposed to raise travel budget – mainly for content provider - by the amount of 51.600 K-EURO (45% funding: **23K-EURO**). The remaining 52 K-EURO (which is the equivalent of appr. **8 PMs** of ONB) has been used to strengthen the capacity of the content provider ONB which provides the famous image collection to the project (7 PMs) and to support the organisation of the REGNET conference (1 PM).