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EMILIA ROMAGNA ← DIGITALE ©

REGIONAL  
ICT PLAN

OPERATIONAL  
PROGRAMME  
2003

strategies for the  
information society  
in emilia-romagna

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## 0. INTRODUCTION

The Regional ICT Plan is a public action plan designed to maintain and promote the leading position of the Emilia-Romagna region while safeguarding the principles of democracy, social cohesion and social solidarity for which the region is noted.

Part of this action plan is the Operational Programme for 2003 drawn up by the regional government with contributions from the Telecommunications Advisory Group and the Regional Technical Group for E-government and the Information Society made up of representatives from provincial local authorities, municipal government, ANCI, UPI and UNCEM. The purpose of the Operational Programme is to review the actions undertaken in the previous year and to decide on the actions necessary to maintain and consolidate the progress made. It should be emphasised that the Focus 2002 projects involved all levels of regional government in the definition and implementation of actions. In effect this approach has

created a system of institutional framework which has proved to be a successful formula in winning the first Italian call for bids for e-government. This collaborative approach is being continued in the implementation of the series of integrated projects which will form the basis for truly effective regional e-government.

We believe that this type of co-operation between the various levels of regional government will prove to be the winning approach in the second stage of implementing e-government when the solutions adopted will be made available to the largest number of local authorities possible. The solutions have been developed by local government administrations as part of the *Nuova regione – New Region* framework where e-government is seen as an integral part of governance as a whole and where the intention is to ensure that products can be effectively integrated into the organisational processes of other public administrations at the local level.

The Regional ICT Plan 2002-2005, of which the present operational programme is part, provides a framework for the construction of the regional information society of the future. Its purpose is to bring together all those components which go to make up an information society. Components which include investments in infrastructure, public administration on-line services, research, training and education. Training is necessary to turn these investments into a concrete reality. Training and research, because we are convinced that our region must have the innovative local talent needed to make our region competitive and enable it to play a leading role on the global stage.

The Operational Programme 2003 includes new initiatives of major importance which when implemented will bring our region considerable advantages. These initiatives will be developed and taken forward together with other players in local public administration using the co-operative approach which we described previously.

In recent times, e-government has become a major public policy driver in the development of the information society. This is clearly

shown by the fact that one of the most important activities in 2003 was the negotiation of a framework agreement on e-government with central government's Department of Innovation and Technology (DIT).

The *Aix Declaration on E-Government* produced by the "First International Conference EGOV 2002" held at Aix-en-Provence in September 2002 provides a comprehensive overview of the issues involved in e-government. Here, we provide a summary of the basic ideas discussed in the document as they relate to a regional context. To help cross-referencing we have used the same headings as the original document.

#### PUBLIC GOVERNANCE IN THE 21<sup>ST</sup> CENTURY

The concept of e-government has met with great success and has added momentum to the rapid spread of information technology now taking place in the public sector of industrialised countries. The emergence of the Internet has changed the rules of the game in many ways. For the first time in history it is now possible to adopt an integrated, global approach in the reorganisation of public governance and administration. Suitable global strategies are now required to make the most of process re-engineering, of citizen and business portals, of innovative technical platforms and of knowledge-based information systems. It will be necessary to control all these factors if we are to succeed in governing and guiding the ongoing transformation of governmental and administrative organisations.

The demand for better, more modern government is increasing everywhere. E-government increases the efficacy and efficiency of any response by raising the quality of services provided to the public and by raising the standards of transparency and accountability.

The challenges of e-government are such that the cooperative efforts of a wide range of actors from government, industry, science and the consulting professions are mandatory. The obstacles to be overcome are many and include: competing institutional goals, the regulatory jungle, the fragmentation of traditional public sector institutions, the



legacy of unchanging, or seemingly unchangeable, practices and procedures.

One way to cope with these obstacles is by building networks of cooperation. The framing and implementation of e-government research and development programmes at the national, European and international level deserves high priority, too. This will foster general expertise and promote the reference models and practical standards proposed and thus accelerate the spread of innovation.

The current situation, characterised by an abundance of projects, presents a very confusing picture. However, some idea of the way ahead is beginning to emerge. A consensus is forming around seven key issues indicating the paths to be followed in promoting e-government. The seven key issues for the future of e-government are outlined in the document "E-government for real federalism. A shared vision for a co-operative project", agreed between the Ministry for Innovation and Technology (MIT), regional governments and local authorities at a joint conference held on 24/07/03. The seven key issues are described below. To aid cross referencing, we will use the titles given for each issue in the Aix Declaration.

**1. A holistic view.** Moving ahead means having a global vision. Clear strategies and perceptions are a prerequisite to meeting the global challenges and opportunities presented by technological progress. E-government is more than a new wave of administrative modernisation. E-government involves a permanent e-transformation enabling governance on a comprehensive scale. A major change in thinking will be crucial to the success of this transformation. It will no longer be possible to think of information, actors, processes and technologies as isolated entities representing an individual part of public administration. They must now be seen as shared elements of a co-operative, joint effort shared by various levels of government. Initiatives concentrating just on technology or organisation or on the single aspects of the transformation alone are destined to fail. The Ministry of Innovation and Technology and regional governments are

working towards the shared vision necessary to take e-government forward. This joint commitment has led to the creation of the e-government Regional Competence Centres (CRC). CRCs have two main objectives. Firstly, to enable and facilitate the creation of regional e-government systems. Secondly, to provide a channel for interaction between regional CRCs and central CRCs so that expertise and excellence at the local level can be incorporated in the national strategy.

2. *Service provision as a focus.* Citizen and business portals are very important to public administration because they represent the image and actions of government to the outside world. We should remember, however, that communications between public administration and the public is just a small part of a much larger picture. E-government must cover all aspects of administrative activity and service to the user. Success in distributing information and services via telematics depends on the skill and confidence of users in dealing with electronic transactions. This is not all. Users need to be sure that their private details are protected and secure. They need to know that they are dealing with a form of government which is open, responsible and transparent. User also need widely available, cheap access to e-government services. This means that a widely available broadband network is required.

3. *Redefining governmental processes.* A thorough rethink of the machinery of government is mandatory. A review will reveal many more situations where IT is a facilitator, enhancing the effectiveness, efficacy, quality and, indeed legitimacy of public action. Many aspects of the legal framework involved in these processes will require a thorough review. Such a review must produce new institutions suited to the new ways of producing and delivering public services.

4. *Knowledge enhanced government.* A shift in focus away from structures and processes towards content leads us to the very core of administrative work - the decision-making process. The management



of legal and administrative knowledge is a decisive factor in governance. Understanding the links between this knowledge and the processes involved will help us improve design and effectively understand the connections between cause and effect in public administration. In public agencies, human skills have to be backed and supported by a new generation of integrated and intelligent information systems.

5. *An engineering approach.* A sound engineering approach is indispensable. At the basic level this translates into a suitable IT infrastructure that provides high availability, top data protection and security and broad communication channels. At the application level this means integrated, re-usable design and an architecture that supports excellence in service provision, re-organisation processes and knowledge management. The methods used must take into account the role of people, knowledge, work and decision-making skills and enable smooth interaction between technological and human factors. It will be necessary to adopt a flexible approach, going forward a step at a time and making best use of the strengths offered at the local level. It will also be necessary to have a general reference plan providing a unifying framework for all initiatives. This framework is provided by the Regional ICT Plan.

6. *Reference models and administrative standards.* Organisational reference models and pilot projects should give a broad idea of the complete range of possibilities available. Standards are of primary importance because they cover a wide range of critical factors. We need, for example, to develop a common understanding of processes based on shared interpretations of administrative concepts. We need to ensure the interoperability of platforms and choose a common standard for meta-data, methods, technologies and applications. The uniformity provided by shared standards should be seen as enriching local skills rather than stultifying them because it provides the competitive context in which to improve the efficiency and efficacy of shared tools.

*7. Change management.* Success can only be achieved if the public sector makes a quantum leap in its ability to innovate. Best practice guidelines and the re-utilisation of successful experience must replace never-ending experimentation and exclusive, on-off local projects. Competent change management will have to place people first, at the centre of a training offensive without precedent. This will be necessary in order to spread a culture of innovation and give people the know-how required to deal with change.

Put briefly, the emphasis is not on the development of software products per se but rather on the diffusion and implementation of products which have already proved their worth under closely monitored and controlled conditions.

E-government research must focus on this particular area of interest, undertaking initiatives involving combined public and private sector involvement. Research should focus on training plans and methods, on the stepwise deployment of developments, on the management of complex projects and on a policy of continuous improvement.



## OPERATIONAL PROGRAMME FOR 2003



The Operational Programme for 2003 covers four main areas of activity:

- A. Telecommunications infrastructure.
- B. E-government projects.
- C. IT research.
- D. New initiatives.

The actions regarding telecommunications infrastructure and e-government projects (points A and B above) already started in 2002 will be continued in 2003. The IT research (point C) already planned as part of Focus 2002 will be started in 2003. New initiatives (point D) will include new projects and activities funded from outside the regional ICT plan or financed with funds redirected from other objectives which were redefined after the first year of activity.

### 1.1 THE FINANCIAL PLAN FOR 2003

The table below shows the funding schedule for the years 2002-2003. This includes the resources for the biennial plan, those for the first e-government bid and other resources set aside by the Region. At the moment, the schedule does not include the resources from the e-government initiatives organised by the Ministry of Innovation and Technology (MIT) for 2003 since the time frame and methods for these have not yet been defined.



Initiative	Resources 2002	Resources 2003	Resources from 1 <sup>st</sup> government bid	Other Resources	Total resources
Research and development	4,15				4,15
Legislative commission	0,16				0,16
Telecoms Advisory Group	0,13	0,16			0,29
Broadband network	7,00	15,50			22,50
Mobile radio network				25,00	25,00
SIL			0,91	4,00	4,91
Sigma ter	1,90	1,00	0,81		3,71
Intercenter	2,50	3,00	1,02		6,52
Sole	3,60				3,60
Agriservizi			1,18	2,00	3,18
Monitoring	0,40	0,40			0,80
People, Panta rei	1,00				1,00
New initiatives		2,50			2,50
Rilfedeur			0,64	1,26	1,90
Support activities, Regional Competence Centres (CRC)		0,10			0,10
TOTAL	20,84	22,66	4,56	32,26	80,32

Note: Figures are in millions of €.

## 1.2 PROGRESS REPORT FOR FOCUS 2002. FOCUS 2003

This section reports on the progress of Focus 2002 initiatives at the time of writing.

### A TELECOMMUNICATION INFRASTRUCTURE

Like all local authorities, the regional government of Emilia-Romagna was faced with a dilemma – which do we provide first, infrastructure or services? The Regional government of Emilia-Romagna took a long-term, strategic decision to equip the region with the very best in telematic infrastructure designed to meet medium-term future needs rather than just present day requirements. In practice this objective takes the form of two projects: a broadband network for local authorities and a regional mobile radio network for the emergency services. The projects share the same two aims:

- To provide public administrations with infrastructure that will facilitate the creation of truly innovative, leading edge applications and advanced organisations.

- To promote local initiatives and to stimulate the supply side of the market offering services to citizens and businesses and thus give the regional area a competitive advantage.

The implementation of these initiatives will require agreements at the institutional level, the creation of technical and scientific working parties, skills in the management of large projects and, above all, the investment of much effort in the management of change. Institutional agreements and change management will be the joint responsibility of the regional government, local authorities and local authority groupings. The following sections outline the two projects.

#### A.1 PRIVATE BROADBAND NETWORK FOR PUBLIC ADMINISTRATIONS

The general idea is to develop a data network with an entry point of 100 megabit/sec gradually passing to speeds of one gigabit/sec or faster as soon as costs become acceptable; this development is planned for the period running up to 2007. One of the planned results is the delocalisation of processing equipment in service centres with a consequent greater emphasis on applications and services.

The technical and administrative operations required for the first stage of the private broadband network for local authorities have been finalised. This part of the project covers the provincial local authority areas of Bologna, Forlì-Cesena, Rimini and Ravenna and is based around four agreements:

- A framework agreement between the Region of Emilia-Romagna and the local authorities (provinces, municipalities and mountain communities) in the designated areas where the parties to the agreement indicate the Hera multi-utility company as the company responsible for the construction and management of the sub-network.
- A contract with Romagna Acque S.p.A. for the extraordinary maintenance of civil engineering works and for the purchase of fibre optic equipment to be used in the construction of the network primary infrastructure.



- A contract with Hera S.p.A. for works to complete the primary infrastructure, for making network connections (with fibre optics, xDSL or satellite, whichever is most convenient) and for managing the network.
- A contract with the University of Bologna for the connection of the Romagna local centres to the central office and for the construction of a metropolitan area network (MAN) at the towns of Cesena and Ravenna.

Work has already started.

The other stages of the project concern the other provinces in the region and the mountain communities and are following the same path. The institutional and administrative framework is planned for completion within the next 10 to 15 months.

Studies are also underway to develop new technical-organisational models to be implemented for the network nodes, those parts of the network covering provincial local authorities and municipalities.

Once the network is fully operational, a "Centre for the development and control of regional ICT" will be set up with responsibility for the technical control of the network and for managing the organisational changes involved.

#### A.2 REGIONAL MOBILE RADIO NETWORK – R<sup>3</sup>

The other major ICT initiative in the Region of Emilia-Romagna is the construction of a digital radio network for the emergency services. This brings together the existing, separate radio networks for the ambulance service, civil defence and municipal police into a single, unified network. The objective is to provide centralised services and the best technology that the market has to offer.

The general idea is that the Region will build the infrastructure, with funding from the Ministries of Civil Defence, Health and the Interior, coordinate the information system and provide support in the form of the Telecommunications Advisory Group. Studies are planned into a management system which will pass some of the project costs onto

users and thereby enable partial recovery of investment costs. Specifications have already been drafted and a call for bids has been issued. The call is for the design of the entire network and the construction of the first stage which will provide mobile radio cover throughout the regional area.

The next tasks are: complete the call; set up the works management; proceed with the funding and order of the second stage which will provide portable equipment cover throughout the regional area.

Seminars for the first groups of users have already been started; seminar participants are from the ambulance service, civil defence and municipal police forces. In-depth technical, organisational seminars are planned for the second half of 2003. These will be focussing on the central, and perhaps most difficult, part of the project – the management of the transfer from the existing old systems to the new system. The transfer should take place within two years of the start of works, i.e. between the end of 2005 and the beginning of 2006. Once the network is fully operational (with between 6,000 and 7,000 users) it will be developed and extended to serve additional users.

## B E-GOVERNMENT PROJECTS

The distinctive feature of these projects and the projects already started as part of the present action plan is that they involve the entire regional area. The regional government is central to the process, integrating, co-ordinating and supervising activities. But at the same time none of the projects could exist without the initiative and direct continuous participation of the local authorities involved. Ever closer collaboration between regional government and provincial, municipal and health service authorities will continue to be a feature of these projects. A leading role in this collaboration is played by the Regional Technical Group. The section which follows gives a brief progress report on the projects started in 2002.

### B.1 AGRISERVIZI – AGRICULTURAL SERVICES

Agriservizi is a project promoted by the Region of Emilia-Romagna to

set up a Regional Agricultural Information System under the terms specified in the regional law 15/1997.

The central government law DPR 503/1999 set up a national register of agricultural companies linked to the regional information systems. By law, the register must contain comprehensive information about all companies operating in agriculture and forestry. The register therefore contains company details, information about company organisation and production and details about any grants, funding or authorisation received from public administration.

The Companies Register for Agriculture and Forestry is the centre piece on which all the procedural management systems are based. In Emilia-Romagna, matters governing agriculture are administered by the regional government, provincial local authorities, the mountain communities and AGREA.

Participants in this project are the Region Emilia-Romagna and the Region Lazio (as developers) and 9 provincial local authorities and 14 mountain communities in Emilia-Romagna regional area (as users).

The project was started in 2001 and is planned for completion in 2005.

The funding for the part of the project presented for the e-government call is as follows (figures in KI):

MIT co-funding	1,180.0
Own project resources	6,977.0
Project total	8,157.0

#### Activities in 2001

- Definition of outline specifications.
- Communication policies for the project.
- Delivery of basic hardware and software ready-for-use in the project.
- Services providing user identification and access to the information system.
- Companies Register for Agriculture and Forestry sub-system.

- Management of Agricultural Machinery Users sub-system.

### Activities in 2002

- Presentation of project for the Italian national call for bids on e-government.
- Project approval and admission to co-funding.
- Contracts with local authority users and participants.
- Service for the Plant Protection Sector sub-system.
- Regional Payments Authority Accounts sub-system.
- Definition of the regulations governing the management of the Companies Register for Agriculture and Forestry in the Region of Emilia-Romagna.

### Objectives and planned results for 2003

- Stipulation of contracts with CAAs (Agricultural Advisory Centres) for the management of the Companies Register for Agriculture and Forestry
- Joint implementation of cooperation between the Companies Register for Agriculture and Forestry and Infocamere (Chambers of Commerce) information system.
- Intervention for Natural Disasters sub-system.
- Rural Development Plan sub-system (at least for “e” and “f” measures).
- EU Agricultural Policies sub-system (at least the part concerning cereals).
- Testing of experimental integration with *Panta rei* and *Sigma TER* projects.

### B.2 INTERCENTER

IntercentER is a project promoted by the Region of Emilia-Romagna designed to set up a digital procurement system for goods and services at the regional level.

The purpose of the system is to improve the efficiency and efficacy of public administration procurement processes. This will indirectly increase the value produced by these processes to citizens and busi-

nesses and lead to an overall increase in the efficiency of the regional economy.

Participants in this project are 49 public administrations from the regional area (all as users). The public administrations are 9 provincial local authorities, 17 municipalities (of which 6 are provincial capitals), two mountain communities, one union of municipalities, 13 local health authority trusts, 5 hospital trusts and the Istituti Ortopedici Rizzoli (Rizzoli Orthopaedic Hospital Group).

Project funding is as follows (figures in KI):

MIT co-funding	1,020.0
Regional resources	4,128.9
<b>Project total</b>	<b>5,148.9</b>

#### Activities in 2002

- Presentation of a project for the Italian national call for bids on e-government.
- Project approval and admission to co-funding.
- Revision of project costs following a reduction in the original amount of co-funding.
- Feasibility studies and business plan analyses in the health service sector and in the local authority sector in the region.
- Draft of a partial, technical tender specification to be used for the acquisition of an e-procurement platform and related consultancy services.

#### Objectives and planned results for 2003

- Legal analyses.
- Drafting and approval of a regional law setting up the company.
- Definition of a government model, a functional model, an organisational model and a funding model for the company, followed by incorporation of the company.
- Completion of the tender/open competition for selecting the supplier-provider of system technology.
- Issuing of a call to tender/open competition for the supply of con-

sultancy services required to support the activities of the new company.

- Integration and qualification of suppliers.
- Cost rationalisation plan for the health service and local authority organisations in the region.
- Approval of legislation setting up a regional procurement organisation and permitting regional authorities to undertake procurement activities using a rationalisation program and e-procurement tools.
- Company incorporation (definition of a government model, a functional model, an organisational model and a funding model).
- Completion and award of tender/open competition for the acquisition of a e-procurement platform and related consultancy services.
- Issuing a call to tender/open competition for the supply of consultancy services required to support the activities of the new company.
- Organisation of a workshop to present the project to suppliers.
- Definition of the classes of goods and products for which some framework contracts are to be agreed.

### B.3 RILFEDEUR

RILFEDEUR is a project promoted by the Region of Emilia-Romagna designed to widen and improve the activities of municipal police forces in recording complaints from the public regarding inner-city decay and crime. The overall aim is to improve the relationship between the police and the public using the latest hardware and software solutions.

The project is co-ordinated by the regional authority. Nine local administrations are taking part in the project. Five of these (the municipalities of Bologna, Forli, Modena, Reggio Emilia and Rimini) are taking part as project developers while the remaining four administrations participating (the municipalities of Argenta, Fidenza, Sassuolo and the provincial local authority of Bologna) are taking part as re-users. The municipality of Carpi is not part of the RILFEDEUR

project but has asked and obtained authorisation to participate as a re-user.

Project funding is as follows (figures in KI ):

MIT co-funding	640.0
Regional resources	1,257.5
Project total	1,897.5

### Activities in 2002

- Acquisition of palm-top PCs and installation of police reporting software. In October and November functional testing of the system was carried out by the Municipality of Bologna in the historic centre of the city.

### Objectives and planned results for 2003

- Analysis of the current situation by partner authorities. Definition of software technical and functional specifications. The software must be able to integrate the information recorded on municipal police force palmtops with the reports received from the public by telephone or via a web-site.
- Reporting of crime to the Bologna Prefecture IT centre is to continue as part of a framework agreement.
- Extend the testing of palmtop PCs to routine municipal police force work.
- Definition of the existing situation at the participating partners.
- Analysis of the palmtop PC reporting system during routine activities.
- Definition of a tender specification for the development of software for managing multi-user information flows.

#### B.4 SIGMA TER

Sigma Ter is a project promoted by the Region of Emilia-Romagna to create an infrastructure for exchanging and integrating regional cadastre information. This infrastructure is designed to enable the development of new services for private citizens and businesses and

to provide support in the use of local property registers and the management of local property taxation.

The SIGMA TER project grew out of a need to facilitate the decentralisation of cadastres in accordance with Law no. 59 of 1997 and as defined in the law D. Lgs. no. 112 of 31/3/1998. The purpose of the project is improve the planning, administrative and management capabilities in matters concerning property and property taxation. The project will also improve the quality of services to private citizens and businesses who need to match cadastre information (managed by regional agencies) with regional information (handled by regional and local authorities).

The project developers are: the regional governments of Emilia-Romagna (project co-ordinator), Abruzzo, Liguria, Toscana, Valle d'Aosta; the provincial local authorities of Bologna, Genova, Parma, Piacenza, Pisa; the mountain communities of Alta Val Polcevera and Garfagnana; the municipalities of Bologna, Cesena, Collesalveti, Faenza, Ferrara, Genova, La Spezia, Livorno, Lugo, Modena, Reggio Emilia and Rimini.

In addition to these local authorities there are a further 150 authorities who have put their names forward as re-users of the solutions and experiences which will be developed during the project.

Project funding is as follows (figures in KI ):

MIT co-funding	3,800.0
Region of Emilia-Romagna resources	5,273.6
Resources from other authorities	12,474.0
<b>Project total</b>	<b>21,547.6</b>

#### Activities in 2002

- Definition of project and partnerships.
- Project presentation.
- Approval and award of co-funding.
- Formal definition of project groups



### Objectives and planned results for 2003

- Definition of executive project by May 2003.
- Start of analyses and project design in order to provide tangible results by autumn 2003.
- Integration of products already being developed by many other local authorities.
- Definition of the executive plan.
- Release of a first set of deliverables.
- Activation of IT tools for project management and work groups (shared contacts, repository, on-line forum, mailing lists, etc.).
- Promotional activities and communications aimed at participating authorities and the public.
- Co-ordination with complementary projects (also those outside the region) where contacts have already been activated during the design stage.

### B.5 SIL

SIL is a project promoted by the Region of Emilia-Romagna in close collaboration with provincial local authorities to construct an employment information system (SIL). The SIL network is federated and distributed locally and will provide access through the provincial centres to information and services concerning employment opportunities throughout the region. SIL is designed to raise the profile and level of service of the services offered to businesses and those in employment.

Participants in the project are the Region of Emilia-Romagna and nine provincial local authorities in the region.

Project funding is as follows (figures in KI):

MIT co-funding	910.0
Regional resources	3989.0
Project total	4,899.0

### Activities in 2002

- The project was set up together with all the participating provincial local authorities and presented for the e-government call for bids at the national level.
- Preparation of the project was completed with the call for bids and the award.
- Organisational and IT analyses were completed at the provincial local authority level.

### Objectives and planned results for 2003

- Service map analyses and definition of priorities for implementing the SIL modules.
- Definition, in collaboration with provincial authorities, of the lots for start-up of the information system.
- Definition of a publishing plan and project portal requirements.
- Definition, in collaboration with provincial authorities, of the service management model to be used for selecting and matching the demand and supply sides of the employment market. This consists of a comparative analysis of the management methods currently used, focusing on the differences between the various methods. This will be followed by the joint drafting of a shared definition of the management model to be used for the new service.
- Definition of the criteria and rules to be used for matching the demand and supply sides of the employment market.
- Definition of the roles of the local authorities and other bodies using the system.
- Design and physical model of the database.
- Module for selecting and matching offers of employment.
- Module for managing service bookings.
- Module for managing basic administration.
- Module for acquiring administrative documents from businesses.
- Module for the management of user levels. This will be based on national model and the joint model defined in collaboration with the provincial local authorities.



- Management of interoperability between provincial authorities.  
Definition of system security policies.

#### B.6 SOLE

The SOLE project will provide a wide range of telematic services for healthcare professionals and local health authorities throughout the region; the project includes the technical infrastructure needed to provide these services. The services will be supplied to: general medical practitioners (GP), home nursing services, city emergency medical cover centres, district and hospital day clinics, rest homes, hospices, mental hygiene centres, family clinics and local social services. The project will connect those hospital services where an on-line link to family doctors (GP) is a major priority. SOLE will provide links with: accident and emergency departments, imaging, radiology and laboratory diagnostic services and day clinics for patients with chronic conditions (diabetes, hypertension, anti-coagulant therapies). This technological innovation will provide continuous healthcare because it enables the two-way flow of information between family doctors, hospital and day-clinic specialists and other healthcare professionals. The creation of a local health authority network will enable healthcare professionals to create a more stable relationship between doctor and patient. This will make the general medical practitioner the clinical reference point for the treatment of the most common pathologies and for the assistance of patients affected by chronic and degenerative pathologies. The general medical practitioner thus become the main point of reference for individual health problems and the point of entry to other healthcare services.

#### *Project partners*

Participating local health authority trusts (LHAT): Bologna Nord LHAT, Bologna Sud LHAT, Città di Bologna LHAT, Imola LHAT (project co-ordinator), Rimini LHAT, Parma LHAT, Piacenza LHAT, Bologna Hospital Trust, Parma Hospital Trust, Istituto Ortopedico Rizzoli orthopaedic hospital trust.

The project does not have national funding. A decision of the RER regional government (decision no. 1686/2002 of 16.9.2002 on a joint proposal by the Councillors Office for Industry and the Councillors Office for Economic Development and ICT) assigned responsibility for the administrative, financial and technical management of the project to the Imola Local Health Authority Trust. The decision approved the project, set the duration of the project at 2 years and set aside funding for the first year; funding for the second year will be approved in a second decision to follow. Total funding approved for the first year is I 3.600.000,00, divided as follows:

- I 2.700.000,00 to be managed by Imola LHAT, to be spent in six-monthly portions.
- I 900.000,00 for expenditure on services (Temporary Business Grouping - RTI).

#### Activities in 2002

- CUP 2000 was selected as the single project partner/supplier. A contract was drawn up between the single supplier CUP 2000 and the Imola LHTA.
- The RER – ICT Directorate issued a call for bids for the development of SOLE project software. The bid was awarded to CUP 2000 (RTI - Temporary Business Grouping).
- Preparation and validation of a questionnaire to be used to analyse the existing situation at the LHTAs participating in the project.

#### Objectives and planned results for 2003

- Analysis of the existing situation at the LHTAs.
- Drafting of the executive plan complete with objectives, costs and project timescale.
- Acquisition and installation of hardware. Development, testing and debugging of middleware.

#### Project plan

- Stage 1 - Survey
  - Surveys at LHTAs.

- Joint LHTA work groups define objectives, architecture and technical solutions.
  - Market survey to define costs of executive plan.
  - Drafting of executive plan.
  - Presentation and validation of executive plan.
- Stage 2 – Build (1<sup>st</sup> step)
- Purchase of network technology and plant.
  - Detailed functional analyses.
  - Development, testing and debugging of basic layer software.
  - Definition of an agreement with general medical practitioners and hospital specialists.
  - During 2003, system technology will be tested and the model for the interaction between LHAT and GP management applications will be finalised. Some system functions will be implemented during 2004.

#### B.7 PANTA REI

This project will build a regional network for the exchange of digital documents between provincial local administrations. Each Province will have a local network centre equipped with the necessary hardware and software. Local centres will be responsible for the management of the electronic document archive. Each local administration will be connected to the regional centre and will have access to the general services offered.

#### *Project partners*

15 provincial local authorities including all the Provinces of Emilia-Romagna.

108 municipalities as users and 140 municipalities as re-users.

The Region of Emilia-Romagna

Ministry of Cultural Heritage

Union Camere (Chambers of Commerce) Emilia-Romagna

Hummingbird Spa

ADS Automated Data Systems S.p.a., Bologna

IDS Informatica Distribuita e Software S.r.l., Messina

Project funding is as follows (figures in K€):

MIT co-funding	2,620.00
Partner resources	8,080.00
<b>Project total</b>	<b>10,700.00</b>

### Activities in 2002

The project partners (local and central government authorities, technical partners) were selected. The project was presented at the start of June within the deadline stipulated.

The project came second overall in the classification for funding applications and was approved. With funding approved, the process of finalising the contracts with project partners was started.

By the end of the year all the agreements with the Provincial Councils involved had been approved.

The technical part of the project was started during drafting of the contracts between the participating authorities, the Bologna provincial local authority and the Department of Technical Innovation (DTI). The contract with the technical partner, Hummingbird, was finalised at very advantageous economic conditions for the project.

Work continued to promote and raise awareness of the project *Panta rei* throughout local authority organisations; this work was co-ordinated by the Bologna provincial authorities and covered each province in the area and their respective municipalities.

### Objectives and planned results for 2003

- Signature of contracts with the 263 participating authorities (28/2/2003).
- Signature of contract with the Department of Technical Innovation (DTI).
- Start of eight work groups on project topics.
- Co-ordination of actions throughout the region. Involvement of municipalities in the technical and operational aspects of the project.
- Study and definition of the technical architecture to be used.

- Purchase of EDMS licenses.
- Definition of a common project specification by application of the same protocol at all project partners.
- Executive design of the architecture to be used at centres. Calls to tender for technical suppliers. Call to tender for the EDMS platform server.
- Finalisation of authentication system specifications and start of call to tender.
- Finalisation of digital signature system specifications and start of call to tender.
- Start of supplier accreditation/qualification process.
- Selection of certified post system and start of call to tender.
- Completion of procurement. Implementation of network centres.
- Drafting of management manual to be used by authorities from 1/1/2004.
- Integration of vertical protocol systems.
- Drafting of AOS system specification and start of call to tender.
- Drafting of project specification for typical services.
- Integration of authorities with standard protocol into the EDMS system.
- Implementation of management manual at participating authorities.
- Equipping of local network centres with basic hardware and software (AOS system not included). This work will cover 60% of the provincial local authorities involved.
- Finalisation of project specifications for typical services.
- Drafting of specifications for the links, interface and integration between Panta rei and the People and Sigma ter projects.

#### B.8 PEOPLE

This project is designed to simplify the relationship between local authorities and the public. The project will introduce innovations into this relationship by developing a model for the exchange, integration

and sharing of services, products and solutions among Italy's most dynamic municipalities. The project will develop a multi-channel telematic system providing approximately 200 services identified by participating authorities as the basic package of services required to meet the needs of citizens and municipalities. These services will be available mainly through an internet portal.

### Activities in 2002

Objectives: To create a project consortium, to present the project for the e-government call and to obtain the funding necessary.

Partnership: 54 municipalities, the Bologna provincial authority, ANUSCA.

MIT co-funding                    |    7,260,000

Partner resources                |    13,482,857

Project total                        |    20,742,857

Results: The project was approved and funded. The project was classified as the best project for the provision of services and was judged the best contribution overall of the 138 projects approved by the Ministry for Innovation and Technology (MIT).

### Objectives and planned results for 2003

- Realization of a shared software solution needed to create an internet portal providing access to municipal services. The portal will provide access to a virtual municipality providing over a 100 on-line services in the following areas:
  - a. Local taxation services
  - b. Authorisations, concessions and permits. This service will replace the existing SUAP (Unified Office for Industrial and Commercial Activity) and offer citizens and businesses a single point of contact with the municipal authority.
  - c. Citizen's services, including social services, education and cultural services.
  - d. Municipal register of births, deaths and marriages. Other municipal registers.
  - e. Regional Information System (SIT) targeted at industry profes-

sionals and businesses. Services providing connections to other public portals.

- Implementation and entry into service of the portal at all the municipal authorities participating in the project. The project work plan is divided into 14 activities proposed by participating authorities and considered to be the most suitable areas for intervention on the basis of their experience. Total project time is 20 months.

The 14 activities are as follows:

1. Project management
2. Usability management
3. Technical architecture
4. Co-operation
5. Multi-channelling
6. Service centres
7. Local taxation services
8. Services for municipal authorisations and permits
9. Municipal registers
10. Citizen's services
11. Regional Information System (SIT) services
12. Services provided by other public portals
13. General implementation
14. Implementation for re-use.

These activities are broken down into further sub-activities. The People project is complex and wide-ranging and in order to provide the level of detail necessary in the project work plan we have structured our descriptions on three levels – project, activity and sub-activity.

#### C THE PRE-REQUISITES OF THE INFORMATION SOCIETY

The three major areas of intervention in the development of the information society are infrastructures, applied projects and support actions. This section deals with the third major area of intervention – support actions. Support is fundamental to the overall success of

the ICT plan. Support actions include research. Research should be the jewel in the crown of any advanced society and is fundamental to bringing together infrastructures, e-government projects and regional economic development.

#### C.1 ICT RESEARCH

The Region of Emilia-Romagna intends to co-fund research projects in the areas described in this section. These projects will be partnerships between the universities and businesses located in the Region of Emilia-Romagna.

The policy to support research projects is based on two, primary considerations:

- Regionally-based research is a fundamental to the spread of new technology.
- ICT research, both pure and applied, is typically software oriented. It is therefore labour intensive and requires people and management rather than capital intensive investment in plant and equipment.

The policy objective is therefore to support IT research and development at the regional level within a mixed public-private sector framework and to create the trust of local industry in the regional plan for the information society. The basic idea is to aid several research groups which will each have the critical mass necessary to deliver products of excellence.

In practice this will be done using calls for bids and following the negotiating procedure stipulated in the legislative decree DL no. 123 of 31/3/1998. The procedure consists of two stages:

1. Selection. Applicants will be judged on the basis of the procedural principles and the bid specifications. The bid specifications define the areas for which research and development projects can be proposed as follows:
  - Multimedia systems.
  - Wide band technologies and applications.

- Development of applications for ambient intelligence.
  - E-learning platforms and content.
  - Applications for network organisations and for industrial districts.
2. Negotiation. This stage consists of in-depth analysis of the projects selected in the first stage and the modification, where necessary, of the original project. The analyses will lead to the drafting of a classification ranking the project participants.

This initiative will be funded for three years and the results expected at the end of this period will include a combination of the following:

- Initiatives for local business and the production of innovative products destined, in particular, for use by public administrations.
- Research spin-off including methods for implementing the Regional ICT Plan actions and for the establishment of new research centres by Italian and foreign companies in our region.
- Consolidation of research networks with the major involvement of research institutes, universities and businesses.

#### C.2 THE REGULATORY FRAMEWORK

This initiative was part of the 2002 Plan but was not implemented. It is now included in the 2003 Plan almost unchanged. The objective of the initiative is to provide a regulatory framework in the Region of Emilia-Romagna which overcomes existing legal, fiscal and administrative barriers in order to stimulate the creation of a modern society in the digital age.

The regulatory framework proposed consists of:

- Regional regulations and provisions which match the needs of new technology and the information society. This set of regulations should be standardised and flexible in terms of both content and form.
- Special protection for the civil rights of individuals (minors, minorities, etc.) and businesses.
- Measures to improve social and regional cohesion. Guarantees pro-

viding universal access to the information society as a right for everybody.

The regional commission responsible for drafting the regulatory framework has the following brief:

- To eliminate the legal barriers to the consolidation of the information society and to promote the development of innovation.
- To define legal and technical regulations and standards improving the privacy, security and protection of electronic data.
- To define and implement measures to guarantee effective access to information in the public domain in the region.
- To design measures supporting electronic commercial transactions especially for small businesses and retailing.
- To guarantee greater expression of democratic and participatory rights through, for example, Internet and other network technologies.

The commission will consist of legal experts, economists and experts in ICT systems nominated by the regional authority. The commission will collaborate with the Telecommunications Development Advisory Group.

### C.3 TELECOMMUNICATION DEVELOPMENT ADVISORY GROUP

The Regional Telecommunications Advisory Group was already operating in 2002 and made a major contribution to the drafting of the ICT Plan. The group consists of experts mainly from the universities in the region. The group's objectives are (in order of priority):

1. To supply expert technical opinions on telecommunications questions submitted to the group for appraisal.
2. To propose major, high-profile technical initiatives and research activities to be carried out by the Region of Emilia-Romagna as part of the regional information system or part of the regional ICT plan.
3. To assess the results obtained from completed or current initiatives which come within the group's terms of reference.

4. To suggest possible directions for economic policy in telecommunications and new technologies as part of the regional ICT plan or other special plans.

#### C.4 PLAN BENCHMARK AND MONITORING

The objective of this initiative can best be summarised as “Benchmark to govern better”. The initiative runs alongside the regional ICT plan year-in, year-out. The initiative consists of two parts. First, benchmarking of the development of the information society in the Region of Emilia-Romagna and comparative analysis with other European regions. Second, monitoring of ICT plan projects throughout their life cycle, highlighting the critical factors to be overcome in order to achieve the planned results.

Benchmarking in this initiative involves the use of most of the indicators developed as part of the e-Europe plan for analysing the development of the information society at the national level; the indicators have been adapted to suit application at the local level. The indicators were selected and adapted by the ERIS@ (the European Regional Information Society Association) European network. We set up a sub-group dealing with these topics together with the directorates of the EU Directorate General *Società dell'Informazione e Regio* directly involved in benchmarking and monitoring. During 2003, the initiative will produce three surveys:

- Interactivity of on-line services, the quality of public administration sites, the spread of broad band and e-procurement at the local authority level.
- Users (families, schools, research centres).
- Business. Internet use in business. Development of ICT companies throughout the region.

The main Monitoring Plan has been designed to incorporate the plan for monitoring projects co-funded by the national e-government project call. This is intended to help project leaders track the progress of their individual projects more easily. The plan produces quarterly pro-

ject reports and also a quarterly report on the progress of the Regional ICT Plan.

#### C.5 REGIONAL COMPETENCE CENTRE FOR E-GOVERNMENT (CRC)

The Regional Competence Centre (CRC) for e-government in Emilia-Romagna is the operational arm of the Regional Technical Advisory Group on e-government. Its purpose is to support regional government and local authorities in the implementation of ICT plan initiatives and to support them in preparing projects for the national e-government bid.

CRC activities planned for 2003 include the setting up of a regional study group to track the progress of the information society in the region; this work accompanies that of the benchmarking surveys described in C.4 above. The CRC produces reports analysing the strengths and weakness of the region in this sector. CRC's brief for 2003 includes the drafting of a plan of e-government training initiatives. CRC training activities will be integrated into individual local authority initiatives and are intended to support the implementation of the regional ICT plan.

This year's ICT plan places special emphasis on e-learning in public administration and the CRC will be providing support here, too.

The Regional Competence Centre will also be providing support in the drafting of the framework agreement described in the following section.

#### D. NEW INITIATIVES IN 2003

This section describes the new initiatives and projects planned for 2003. The new projects will be initiated by various regional organisations, including the Regional Technical Group, who will be responsible for defining project outlines, deciding budgets and distributing new resources (see section 1.1).

##### D.1 TELEWORKING IN PUBLIC ADMINISTRATION THROUGHOUT EMILIA-ROMAGNA

Teleworking has a number of advantages for public administrations.

A local authority can, for example, reduce the amount of office space, equipment and even parking spaces needed for its employees. An administration can retain employees who for family reasons or disability can no longer come into administration offices to work. There are also environmental advantages. Teleworking cuts commuting, reduces peak-hour congestion and thereby reduces pollution.

The Region of Emilia-Romagna supports and promotes the spread of public administration teleworking in the region through incentives to local authorities in Emilia-Romagna.

The Regional Technical Group for E-government and the Information Society has a brief to identify those official local authority procedures and tasks which could be performed by teleworking. A list of these procedures will be distributed to all the public administrations in the region.

It should be noted that teleworking comes into its own when it uses private, dedicated networks since these networks offer the high level of security required. At the moment, only open, public networks are available and these do not guarantee the level of security required for teleworking in public administration. It will be necessary to create virtual private networks (VPN) on top of public networks for this purpose. This is one of the objectives of the regional plan to construct a broadband network. The Region is studying temporary solutions for implementation in the interim period.

## D.2 FEDERATED E-LEARNING SYSTEM

1. One of the projects closely linked to the construction of a broadband network for public administration is an e-learning system for students resident in the region who also attend universities in Emilia-Romagna.

This initiative could be linked to the *CAMPUSONE* projects being implemented at various universities. These projects aim to provide video editing stations which will be used to produce multimedia teaching material for transmission over a network. The material, live

or recorded, would be transmitted via a video streaming server in the broadcasting or on-demand modes.

A project currently running in the province of Parma has shown that this type of teaching support activity can be of great social utility in mountain communities. It is only a question of equipping some of these mountain communities with the necessary equipment.

The project is very ambitious and will therefore be introduced gradually in a series of well-planned steps taking into account the type of information to be transmitted, the band width available and the timescale for using this type of information.

II. Broadband and new ICT e-learning technology offer region-wide opportunities for people living in less-favoured or otherwise disadvantaged areas. Broadband and new e-learning technology also open up considerable opportunities for the training of regional and local authority employees. The spread of e-learning in public administration is one of the medium term objectives of e-government plans at all institutional levels. Investment in e-learning projects will therefore have to be clearly targeted and, first and foremost, must be realistic.

Scarce resources. The amount of investment needed to effectively use new technology. The ability to provide training within a reasonable timescale. The need to support and accelerate the processes triggered by regional and local authority e-government projects. These are just some of the factors which clearly indicate the need to construct collaborative systems or networks of public administrations throughout our region. Systems and networking will help to optimise resource use, guarantee effective, quality training initiatives and enable the full implementation of the projects in which we are all involved.

Local authorities are experimenting with ICT based e-learning, with some success but not without problems and difficulties.

The Federated E-Learning initiative will define a series of clearly targeted and interrelated actions. The initiative will start with a feasibility study and lead on to a joint project with the following objec-

tives:

- To provide a high-quality e-learning infrastructure in Emilia-Romagna with costs which are accessible for all regional local authorities.
- To enable the creation of content, services and appropriate, modern learning environments.
- To encourage co-operation and dialogue and thereby improve the range of e-learning services on offer to public administrations.

The feasibility study to be carried out at the start of the initiative will include the following actions:

- Analysis of local experiences and good practice. Collection of high quality, strategic information and the definition indicators to be used in the drafting of guide lines and rules for joint use.
- Creation of a virtual workshop for evaluating project results. The workshop will also enable the re-use of knowledge acquired in projects, models and learning environments.
- To provide the region as a whole with an e-learning system which enables the production, exchange and distribution of teaching material and content of joint interest.
- To create an e-learning portal providing access to a standard set of resources, services and content including course catalogues, enrolment systems and news.
- To draft a funding plan using the European, national and regional lines of funding for each type of action.

The results of the feasibility study will be incorporated in a joint project involving local authorities. The project will be implemented step-wise starting in 2004.

#### D.3 VIDEO COMMUNICATION

The ICT initiatives planned for 2003 will include an initiative to develop the opportunities offered by video communications. Once the regional broadband and fibre optic network are operative it will be possible to increase the efficiency and reduce the transmission times

of all those activities involving the transfer of data and images. For this reason, we plan to carry out a feasibility study analysing the areas where video communications might be applied in the immediate future.

#### D.4 CULTURAL HERITAGE

Italy's cultural heritage and that of the region of Emilia-Romagna are perhaps among the richest in the world. Unfortunately this is not always realised and the region's cultural heritage still requires activity to promote and raise its profile. The application of information and communications technology in this area opens up major new prospects. ICT applications could improve the use of the region's cultural heritage. ICT could prove to be a valuable tool in restoration work or in the creation of new content linked to cultural heritage.

Two initiatives have been planned in this area. These will initially be developed with several local authorities in the region and results will later be extended to all those authorities interested.

#### I. A collaborative domain for on-line cultural heritage

New technologies offer the possibility of a higher degree of integration between libraries, museums, galleries, archives and other institutions making up the fabric of our cultural heritage. This greater degree of integration is now part and parcel of public expectations and local government policy. It is now widely accepted thinking that such a cultural heritage network should be systematically linked to, and included in regional marketing policies, regional development policies and policies for developing local economies.

In order to create a cultural heritage network or system it will be necessary to bring together and standardise information which until recently has, by its very nature, been fragmentary and isolated. The objective is to incorporate this information into a single system thus creating added value for the end users of this information. In practice this will involve the creation of a regional infrastructure bringing together the contents of various data bases into a Cultural

Heritage System, and the creation of local service centres (managed primarily by provincial and municipal local authorities) supplying services to the end user.

The new services in this project will make full use of the opportunities offered by the broadband network planned for the public administrations in the region.

Part of the project includes the development of the *Sebina* project organised by the Institute for Cultural and Natural Heritage of the Region of Emilia-Romagna. Sebina was started in November 2002 with a three-year investment plan and aims to produce a leading edge product with a highly innovative range of functions and technical architecture.

The local authorities involved in the project will be responsible for creating the complete system of services to be based on the regional infrastructure. They will also be responsible for configuring the system to local needs and thus optimise the management of local cultural heritage and the relationship with users. On-line cultural heritage services are an extraordinary opportunity to market the local area and to support tourism and the local tourist industry (see project II below).

The municipal and provincial local authorities of Parma, Ravenna and Bologna will be testing packages of local services in a pilot project making full use of the potential offered by the broadband network and video communications. The results of this pilot project will be re-used by other authorities in the region and in Italy. The pilot project will be testing services for music, museums and cinematheques at Parma, Ravenna and Bologna.

## II. Cultural heritage guide service

This project will create a guide service to the cultural heritage of a small to medium sized town centre.

The guide service will be advertised to users interested in the local area by SMS, MMS, internet or signage.

Initially the user books the service on the providers portal from a mobile or fixed work station. Booking is menu-guided. The booking menu lists the places of interest to visit and the approximate duration of each visit or tour. One of the distinctive features of this service is that the user can fully personalise the guide booked.

During the presentation, the tourist uses a mobile terminal to link to the service providers portal using a password obtained at the end of the presentation. The technology for the mobile terminal has not yet been decided but will be selected from those currently available.

At this point the tourist can request a personal guide to each of the places of interest on the itinerary selected. This is an audio guide but on more advanced versions will be available on a multimedia terminal with sound, text and images. This activity will start in 2003 with a feasibility study and where feasible will lead on to the start-up of a test bed project.

#### D.5 PUBLIC ADMINISTRATION PORTAL

The rapid spread of internet and the world wide web has created a plethora of information pages and services. These are confused, confusing and difficult to use and it is often difficult to have a good overview of the services on offer. Web information and services are often supplied over isolated, one-way channels forcing people and businesses to follow numerous links before they find what they actually want. One of the ways of overcoming this problem and making users' lives easier has been the creation of portals - single points of access bringing various services together in the same place. However, this solution has not yet made it possible to bring together on-line services developed at different times, by different local authorities using different technologies and a wide variety of platforms.

Conventional search engines have only managed to solve this problem partially because they are still not able to limit the field of search or perform truly targeted, effective searches. (For example, it is difficult to select all the pages and only the pages of a particular domain

which refer to one of the life events stipulated in the national e-government plan).

Semantisation and conceptual analysis are two innovative solutions which will make it possible to overcome the limits of current portals and to build on the investments already made by public administrations. They will also enable the integration of current and future on-line information and services.

Semantisation involves defining the ontology of web pages (in other words, the system used to represent knowledge) and then describing a page in terms of this ontology. As an alternative to the complete semantic description of a page it is possible to use intelligent agents which perform screen scraping and deduce the semantics of a page. Once you have this semantic information from a page you can represent page information in a standardised, integrated way via a true portal. Obviously, once you have defined an ontology you can propose it to other authorities, share and fine tune it with them and build an information network based on this ontology. This will also make it possible to perform semantic queries across a large number of sites.

Conceptual analysis interprets natural language and identifies the concepts contained in natural language using a semantic network. A semantic network consists of a network of linked nodes where each node represents a concept. Conceptual analysis involves trying to understand the structural and lexical aspects of language in much the same way as we human beings do.

In theory, the combination of semantisation and conceptual analysis should make it possible to design and construct an innovative tool which overcomes the limitations of the current types of portal.

The new *Ermes* could be based on these ideas and concepts. Concepts which will make it possible to display, enhance and integrate the information and services provided by local authorities. These concepts will strengthen interaction and enable the construction of extemporaneous paths for targets, opportunities and topics. They will

provide new opportunities for the region and will form the basis for an effective multi-channel system.

#### D.6 BUSINESS REGISTER

Businesses are the principal private users of the services provided by regional authorities throughout Italy and could therefore be considered as 'customers'. A regional authority therefore needs a detailed picture of its customer base, a unified business register which can be shared with all regional government departments responsible for industry and commerce, agriculture, the environment and tourism. It could also be shared with local authorities who, it should be noted, have been asking the regional government to intervene in this area for some time. Local chambers of commerce are the primary source of information about business. However, the nature of their official responsibilities and their organisation mean that chambers of commerce hold a lot of duplicated information and that there are large discrepancies between one province and another in the way in which data is collected and handled.

At the present time, the information sub-systems run by a variety of management companies contracted to the chambers of commerce are not co-ordinated in any way and have a very limited sectorial view of the problem.

In these circumstances, a project to build a central repository for business register information seems a natural development. This project takes the provincial and regional chambers of commerce as its starting point and intends to introduce rules for guaranteeing the uniformity of information. The central business register will also take data from regional directorates and from local authorities.

Data collection forms for collecting data from chambers of commerce and other sources, and for keeping the register up to date will be prepared. Data will be prepared for consultation and downloading.



#### D.7 CENTRE FOR THE DEVELOPMENT OF REGIONAL ICT

Center – Centre for the development of regional ICT – has a brief to direct the innovation and development of ICT in the Region of Emilia-Romagna. Center has a three-fold mission:

1. To act as the region's technical competence centre, employing highly-qualified personnel with expertise in networks, security and basic applications. Center will collaborate with the Regional Competence Centre (CRC) contracted by MIT to develop e-government projects.
2. To act as the operations centre, supervising and controlling the region's ICT network and managing operation of the neutral access point (NAP). Center will carry out continuous central monitoring of the quality and security of the telematic infrastructure. As the ICT operations centre, Center will act as the interface with the national public connectivity system (SPC) and with the technical organisation of the Q3I regions; the Region will nominate the persons responsible for this role in the work groups.

The centre's operational functions include certification and auditing and regional service providers and qualification of local authorities in the region.

The centre, in agreement with the CRC, will implement training schemes in networks, security and, where necessary, in ICT applications. Training activities will be targeted at public administrations, industrial districts and regional civic networks.

3. To support and promote innovative services in public administration. Promotional work will be directed at citizens and businesses and will provide services for business networks in industrial districts and civic networks throughout the region. The centre has responsibility for stimulating, co-ordinating and testing these services. As part of its duties, the centre can create a database recording details of the network infrastructure, the application centres (health, cadastre, portals, etc.) and regional ICT services.

The next section provides a more detailed description of some of the functions performed by Center:

- a) **Promotion of innovative services:** The public administration broadband private network in Emilia-Romagna provides a modern, advanced infrastructure designed to act as a vehicle for advanced, innovative services in the region. Designing and promoting these services is the primary responsibility of CenTER. The centre can call on the collaboration of the University of Bologna. A contract to this effect has already been signed and may be extended to the other universities in Emilia-Romagna.
- b) **Research:** The centre will promote co-operation between all those involved in developing e-government actions in the region. It will encourage and co-ordinate initiatives, studies, research and monitoring work designed to further the development of the information society in the region. It will stimulate the development of regional e-government services.
- c) **Interface with the public connectivity system (SPC).** The new model for the national public administration network makes provisions for a local organisation which manages security related matters; this organisation acts as the interface with the Public Connectivity System Technical Centre (CTSPC) and other organisations involved.
- d) **NAP:** The broadband network being created in the region has the prerequisites for the creation of a regional Neutral Access Point (NAP). The regional broadband network has a carrier network (fibre optic backbones) and an access network (fibre optic, satellite and radio links) suitable for the construction of a regional NAP. The installation of satellite hub channelling satellite traffic from mountain communities and other authorities with satellite links also strengthens the case for a regional NAP.
- e) **Network and network security management and training.** The centre's responsibility in this area include: definition of regional policies and procedures for network management and security; technical and organisational implementation of these policies and procedures at the regional level; definition of guidelines;

monitoring and auditing. The centre will also be responsible for training the highly specialised personnel required to manage network and network security at the regional government and local authority level.

- f) **Liaison with the Regional Competence Centre (CRC) and support.** The Region of Emilia-Romagna has signed an agreement with the MIT to set up a CRC for the development of e-government and the information society. The CRC is a facilitator, serving the public administrations in the region, collecting and guiding their needs and proposing methods, processes and solutions.
- g) **Participation in the Q3I regional network interoperability initiative.** At the beginning of 2003, the Italian regional governments participating in CISIS (Inter-regional Centre for Information and Statistics Systems) set up the Inter-regional ICT Interoperability Framework (Q3I). The Region of Emilia-Romagna participates in the Q3I initiative. Q3I provides a framework for sharing and maintaining common technical standards concerning the ICT infrastructure and applications being used by the regions.

The framework agreement between the Region of Emilia-Romagna and the local provincial authorities of Bologna, Ravenna, Forlì-Cesena and Rimini and the framework agreements implementing the infrastructure throughout the regional area make provisions for a Management Committee. The Management Committee will be responsible for questions relating to the management of e-government services, e-government applications and the information services provided by local authorities; the committee can involve any other authorities nominated. The committee will indicate the methods which best encourage co-operation between small and medium-small municipalities in order to help them meet the needs outlined above.

**FRAMEWORK****AGREEMENT BETWEEN THE REGION  
OF EMILIA-ROMAGNA AND THE MINISTRY  
OF INNOVATION AND TECHNOLOGY**

This agreement will be finalised once the Operational Plan 2003 has been approved by the Emilia-Romagna regional government. The Operational Plan 2003 is the strategic policy document which defines the initiatives to be included in the framework agreement to be signed between the Region of Emilia-Romagna and central government.

It should be emphasised that central government's Department of Innovation and Technology (DIT) shares this planning approach for the second stage of the e-government project. A planning approach based on framework agreements which the regional government of Emilia-Romagna has been requesting from the MIT since January 2002.

The Joint Conference of State, Regional and Local Authorities held on 24<sup>th</sup> July 2003 approved the document "E-government for real federalism. A shared vision. A collabo-

collaborative approach". This document lays the foundations for a collaborative approach and makes a strong case for closer co-operation not only between central and regional governments but also between regional government and local authorities within the regional area. The framework agreement for the implementation of e-government between the Region of Emilia-Romagna and the Ministry of Innovation and Technology (MIT) should be seen against this background. One hopes that full implementation of e-government may start as soon as possible with the active participation of local authorities throughout the region.