

# MASTER PLAN



Programa de Cooperación Territorial  
Programme de Coopération Territoriale  
Programa de Cooperação Territorial  
Territorial Cooperation Programme



1.	Introduction .....	3
1.	Parnet-TIC Project Scope.....	6
2.	Analysis of the setting.....	10
3.1	Variables of the political climate.....	10
3.2	Variables of the regulatory climate.....	18
3.3	Variables of the sociocultural climate.....	23
3.4	Variables of the technological climate.....	28
3.5	Conclusion of the overall environment.....	36
4.	Analysis of the e-Government and e-Participation status .....	39
4.1	Users .....	40
4.2	Technology Providers.....	41
4.3	Barriers to the development of e-government and e-participation.....	47
4.4	Conclusions of the situation of e-government and e-participation .....	50
5.	Internal analysis.....	52
5.1	Partners and general characteristics.....	52
5.2	PARNET-TIC project conditioning factors.....	91
5.4	Conclusions of the internal analysis.....	94
6.	Diagnostic summary.....	96
7.	Proposals for action in e-government and e-participation.....	98
7.1	Screening of proposals mechanism .....	98
7.2	Proposal from each partner.....	100
7.3	Proposals finally accepted.....	105
8.	Detailed definition of action proposals .....	107
8.1	Inbound – Outbound SMS platform.....	107
8.2	Management of recycling centre .....	112
8.4	Electronic inquiries (e-inquiries) .....	122
8.6	Other proposals not connected to the PARNET-TIC project .....	126
8.7	Procurement.....	127
8.8	Conclusions on the proposals for action .....	127
9.	Balanced scorecard of the project.....	128
10.	Conclusion.....	132
11.	Bibliography.....	133



## 1. Introduction

The provision of services throughout the European Union by public authorities to citizens, businesses and to other authorities is required in order to come up with community policies, both with regard to the interior market and the associated four freedoms, as well as for the existence of the European area of security, justice and liberty.

Thus, trans-European telematics services have become pan-European e-government services to the extent that it has evolved from a focus of interest centered on data exchange to a focus of interest centered on the provision of services throughout the EU territory by governments, to achieve the benefits of an area without borders, i.e. the free movement of persons, goods, services and capital.

The importance of Electronic Government is that the growing process of globalization and development of the new information society requires a proactive, effective and decisive attitude from both the State as well as the modernisation of public administration, geared at intensively incorporating ICTs into State processes, as a complement to other techniques and tools in various areas of management.

Electronic Government is not an end in itself. Moreover, its essentially instrumental nature requires a review, redesign and process optimization as a step towards the introduction of any change in technology or in the production functions of public organisations. Thus, Electronic Government acquires the twin role of catalyst for process changes and technological tool as an instrument to improve the performance of State acts.

For some years Government Authorities in general have been committed to new technologies in a wide range of areas, both internal and external to the organization. The strong commitment to global e-administration is a clear reflection, and one which has launched several actions to achieve a far more efficient, effective and satisfactory relationship between the government and those it administers.

The basis for the implementation of this type of Administration is not the result of any fad or any revolutionary invention, but responds both to the emergence of new requirements for the citizen, as well as the various obligations that the current legal system demands of the Administration, which revolve around the effectiveness, efficiency, economy and greater proximity to the citizen

The implementation of e-government will require: firstly, to ensure that the entire population has access to the technical means required; secondly, that whatever measures are necessary for the new method builds trust in users; thirdly, to adapt the traditional administrative procedure to new situations created by new technologies, and fourthly, with a commitment to the provision of training material and human resources employed in the various Public Administrations.



The action lines pursued today for the implementation of this system refer to the telematics records, digital ID card, electronic voting, electronic procurement, and pan-European services. This e-Administration aims to provide citizens with a system that is easy to access and manage and which meets the needs that arise with regard to contact with the authorities. Viz., using this system, the citizen should be able to submit applications, handle procedures, obtain personalised information, receive communications from the administrative authorities ... all without leaving their home, without long waits, without sacrificing their rights, and in complete comfort.

Elsewhere, there is an incredible range of e-participation experiments being promoted on everything from public initiatives and associations, although interesting results are also starting to appear as a result of the collaboration initiatives between the public and private spheres. These experiments seek to exploit the major potential of this system, which consists of making a wealth of information available to users and enabling dialogue and deliberation among an indeterminate number of persons. These Internet possibilities are of a clearly deliberative, democratising and participatory nature.

Internet offers the possibility of interactive communication between Internet users and politicians, organizations and individual citizens. They have the opportunity to exchange ideas and debate with politicians, experts and representatives of organizations and, above all, the opportunity to submit amendments to the laws under discussion in Parliament

We can conclude by affirming that the most common and frequent use of electronic participation e-administration systems will depend on changes in political and administrative mentality. Political institutions such as the parties, parliaments, governments and councils are willing to improve information and communication with citizens.

Thus, **Parnet-TIC** is submitted as a project aimed at encouraging the use of ICTs by the population and undertaking the necessary actions to extend their usefulness to areas of great social concern, such as education, culture and administration in general. Through the transnational cooperation strategy of this project, the beneficiary institutions want to improve service provision and public participation in their respective areas of operation and make progress, in their role as local governments, in actively incorporating these territories into the Information Society.

This Master Plan will present the e-administration and e-participation proposals submitted and selected by partners, detailing the necessary human, technical, economic and support resources required for the development and implementation of these tools. Simultaneously, a study of the political, social, economic and cultural setting in which the project is developed will be submitted, along with an analysis of the current status of each of the participating partners in the field of new technologies. This will be used as the basis for selecting tools that best fit the needs of each partner.



Finally, we would point out that this Plan is also conceived as a framework of transnational action (Spain and Portugal), and is a reference for listing the different types of actions within the field of e-participation and e-administration to be carried out within the structure of each partner involved, but which must be simultaneously flexible enough to ensure permanent adaptability to new challenges that arise in the dynamics between citizens and the public administration.

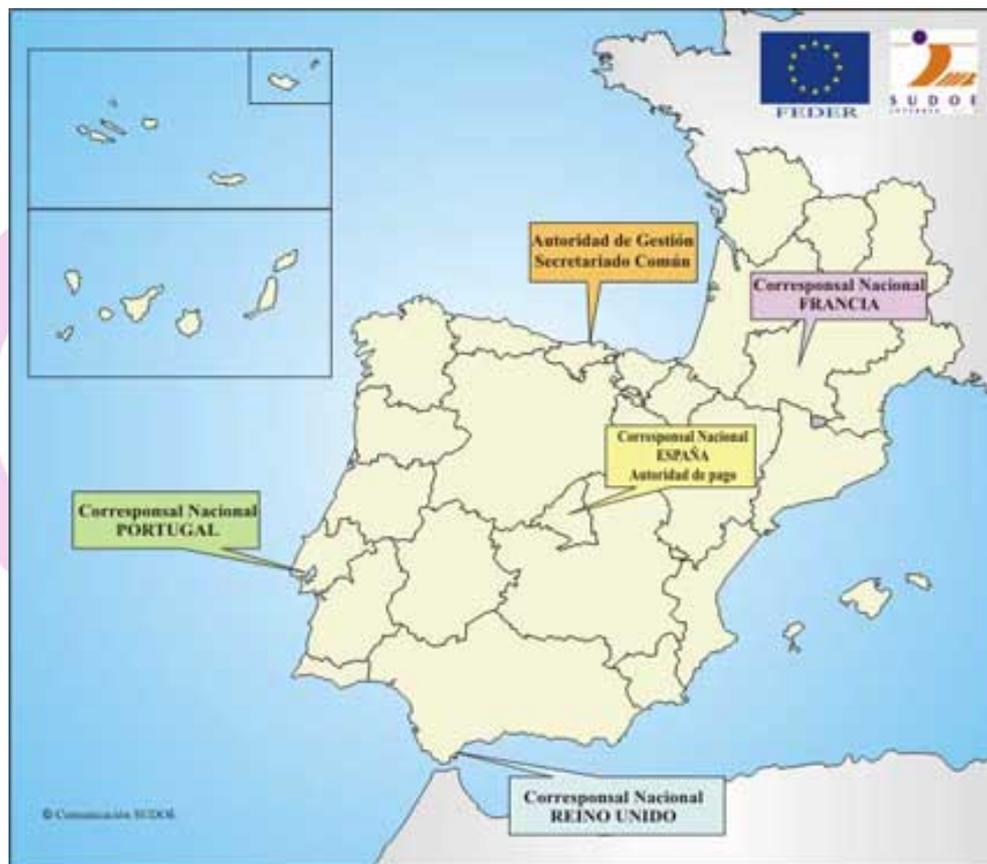




## 1. Parnet-TIC Project Scope

The Southwest Europe (SUDOE) 2007-2013 Programme forms part of the transnational chapter of cooperation and regroups regions from four countries:

- **Spain:** the entire territory except the Canary Islands
- **France:** Aquitaine, Auvergne, Languedoc-Roussillon, Limousin, Midi-Pyrénées, Poitou-Charentes
- **Portugal:** the whole of the mainland
- **United Kingdom:** Gibraltar



Programme organisations and institutions

Source: SUDOE



The priorities of the 2007-2013 programme revolve around 4 areas:

1. Promotion of innovation and stable technology cooperation networks.
2. Increased sustainability for the protection and preservation of the environment and the natural environment of Southwest Europe.
3. Harmonious integration of the Southwest Europe Space and improved accessibility to information networks.
4. Driving sustainable urban development by building on the positive effects of transnational cooperation.

Parnet-TIC, codenamed **SOE1/P3/E002**, was approved at the first call for projects in the Territorial Cooperation Programme Area Southwest Europe (SUDOE Programme) in Priority 3, "Harmonious integration of the Southwest area and improved accessibility to information networks", whose primary objective is to promote territorial equality in access to communications infrastructure, the information society and knowledge.

Consequently, based on programme specifications, the main objective of the Parnet-TIC Project is the implementation of technologies to serve citizens in rural areas by testing forms of e-government and e-administration to improve infrastructures, services and accessibility in these municipalities, thus promoting the participation of citizens in public policy.

At the same time, it seeks to create a flexible and efficient working network between different local authorities in the various territories that make up the Southwest Area.

So we can list the main objectives to be achieved through the development of this project as follows:

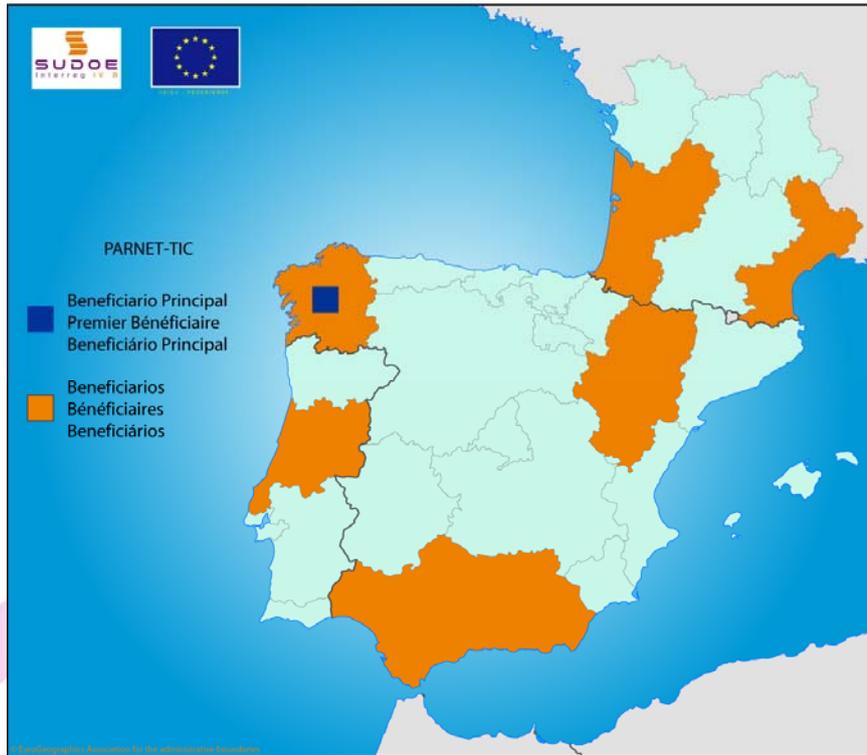
1. Minimize the negative consequences in terms of socio-economic development experienced by medium-sized rural towns due to their location in peripheral areas where transport networks and infrastructures are less adequate than in the larger cities and located at the poles of development. These negative consequences materialize in situations such as:
  - Reduced geographic mobility on the labour market and therefore difficulty in accessing new employment opportunities.
  - Reduced access to training at international benchmark centres.
  - A lower rate of incorporation into the information and knowledge society due to a lower level of training in ICTs and less efficient infrastructures.
  - A less flexible relationship between citizens and government through failure to take advantage of the full extent of e-government benefits.



2. Create a network of rural towns to promote the information society in which they share experiences and best practices and jointly develop technologies and applications.
3. Increase the Supply of the number of public services offered through e-administration, focusing especially on the following areas: education, culture, job seeking and improvement, support to businesses, especially SMEs in their dealings with the administration, e-government.
4. Promote the use by citizens of these services through:
  - Information and awareness campaigns, ensuring a balanced use in all regions.
  - Pilot projects to demonstrate the benefits of the information society.
5. Improve involvement and participation in local public policies, fostering communication among local governments and citizens through NICTs.
6. Investments in communications infrastructure necessary to provide flexible and rapid access to services that implement the project and to those that may be already in place.

As a result of the transnational cooperation strategy, the following territorial agents are taking part in the project:

1. A Coruña County Council (Diputación Provincial de A Coruña): [www.dicoruna.es](http://www.dicoruna.es)
2. INLUDES: <http://www.diputacionlugo.org/html/inludes.htm>
3. Huesca County Council (Diputación Provincial de Huesca): [www.dphuesca.es](http://www.dphuesca.es)
4. Almería County Council (Diputación Provincial de Almería): [www.dipalme.org](http://www.dipalme.org)
5. Lugo City Council (Ayuntamiento de Lugo): [www.lugo.es](http://www.lugo.es)
6. Águeda Municipal Chamber (Camara Municipal de Águeda): [www.cm-agueda.pt](http://www.cm-agueda.pt)
7. PRES Universités Montpellier –Languedoc-Roussillon



**Parnet-TIC Project Partners**

Source: SUDO E



## 2. Analysis of the setting

This Master Plan must take into account the baseline in order to emphasize and concentrate resources on those areas where they are most needed, and especially where it can achieve a greater impact on results.

The analysis of the overall environment allows detailed information on the most relevant events and trends that will influence the development of e-administration and e-participation initiatives, from a social, political, regulatory and technological point of view. To perform this analysis it is necessary to consider the four dimensions listed below:

### 3.1 Variables of the political climate

The governments of European countries, the USA and some Southeast Asian countries have a firm commitment to contribute to the development of the Information Society, approving a series of measures to support investment in equipment and information technologies, promoting the introduction of Internet in schools and universities and developing new services to offer distance learning programmes, telemedicine, cyber libraries, information services, application and monitoring of administrative procedures, etc. to citizens through the Internet.

Moreover, with globalization and the disappearance of borders, governments are losing prominence in the new world order, to the detriment of businesses and individuals themselves.

Also, the Internet can act as a "democratising" element of society, by facilitating greater citizen participation in decisions that affect them, using "electronic voting" systems, which have already been set up in some neighbouring countries in various election campaigns and referendums.

From a political standpoint, the various European Union countries are clearly committed to the development of e-Administration in all its aspects, as one of the key instruments to promote the Information Society and improve the efficiency and processes of Governments.

Here are some of the plans in which European policies are driving the use and set-up of these new e-administration and e-participation tools:



## EUROPEAN PLANS

- *i2010 e-government action plan*



This action plan is designed to make public services more effective, to modernize them and adjust them to the needs of the population. To this end, a set of priorities and a roadmap have been proposed to accelerate the implementation of e-government in Europe.

The action plan emphasizes the importance of accelerating the introduction of e-government in Europe, in order to respond to a series of challenges and demands, namely:

- modernise and make public services more efficient;
- provide the highest quality and most secure services to the population;
- respond to the demand from companies that want less bureaucracy and more efficiency;
- guarantee cross-border continuity of public services, essential to support mobility in Europe.

Some initiatives in the field of e-government have already led to substantial savings of time and money in some Member States. Furthermore, it is estimated that there will be an annual saving of 50,000 million euros if electronic invoicing becomes widespread in Europe.

Through this action plan, the Commission will:

- allow individuals and businesses to obtain specific advantages in the field of e-government and do so quicker;
- ensure that the national e-government does not create new barriers within the internal market, due particularly to the lack of interoperability;
- extend the benefits of e-government across the European Union (EU) allowing economies of scale.

The plan identifies five priority areas:

*Access for everyone:* The implementation of e-government should benefit everyone. For this it is essential that disadvantaged people encounter the fewest obstacles in accessing public services online. In this fight against the digital divide, Member States have pledged to ensure



that the entire population, including disadvantaged social groups, enjoy a large measure of e-government from now until 2010

*Increased efficiency:* Member States are committed to achieving greater efficiency through innovative use of information and communication technologies (ICT), and substantially reducing the administrative burden by 2010. Cross-border provision of certain services is a significant advance for individuals, businesses and administrations and may, in fact, serve as example of the European e-government.

*One such high impact service is e-procurement::* Each year, public procurement accounts for between 15 and 20% of GDP, viz., about 1.5 billion euros. Each year, electronic procurement could save millions of euros, hence the importance of achieving a high level of such procurement.

*Establishing the key tools:* For the introduction of e-government to be optimal, it is essential to provide certain key tools, such as : interoperable electronic identity management systems (eIDM) for access to public services; authentication of electronic documents; electronic archiving.

*Greater participation in the democratic decision process:* ICTs represent considerable potential to involve more people in public debate and policy decisions. In order to exploit this potential, the action plan seeks to support projects using ICTs for increased citizen participation in democratic life.

The action plan forms part of the EU's i2010 strategy, which aims to stimulate the development of the digital economy in Europe, and is based on the Ministerial Declaration adopted at the Third Ministerial Conference on e-government (November 2005, Manchester, United Kingdom), which set measurable targets for e-government by 2010.

Further information:

[http://europa.eu/legislation\\_summaries/information\\_society/l24226j\\_es.htm](http://europa.eu/legislation_summaries/information_society/l24226j_es.htm)



## SPAIN'S PLANS



### *The State Fund for Employment and Local Sustainability 2010*

Managed by the Ministry of Territorial Policy, it targets EUR 5,000 million at funding municipal projects for: economic, environmental and social sustainability.

This new Fund is an important stimulus for the economy and jobs, by funding projects related to the new production model.

#### Objectives:

1. Financing municipal investment in newly planned works for immediate implementation, generating jobs and which are of a social nature, addressed from the perspective of sustainable development in its environmental, employment, support for innovation, economic and social development spheres.
2. Contributing to social sustainability by funding the running costs incurred in the provision of social services under municipal jurisdiction.

It has five main strands: competitiveness, environmental sustainability, standardization of the housing sector, innovation and professional training, support to new economic sectors.

The new State Fund for Employment and Local Sustainability is a new economic stimulus measure that gives continuity to Plan E, with the prospect of creating a new productive model through the Sustainable Economy Strategy.

*Economic sustainability:* to increase the competitiveness of our entire production system, opening up new opportunities in the field of innovation, promoting economic activity, new technologies and renewable energy.

*Environmental sustainability:* to combat climate change and to conserve and use natural resources rationally, promoting sustainable transport, saving water and making better use of this, sustainable management of resources, among other actions.

*Social sustainability:* to ensure quality public services for citizens in social, educational, health, cultural and sports areas, with special focus on dependent persons.

Likewise, the Plan E considers the implementation and formation of the so-called e-government in its lines of action. Actions targeted at:



- The modernization of municipal administration through the establishment of document management processes, digitalisation and access to high-speed landline and mobile communication networks, with special consideration for those processes of technological modernization aimed at fulfilling the mandate of Law 11/2007 of 22 June, governing electronic access by citizens to public services.
- Those for the creation, equipping and development of technological infrastructures and innovation.
- Those aimed at improving access to information technology networks and infrastructures and landline and mobile telecommunications, and the use of these.

Further information:

[http://www.mpt.es/prensa/actualidad/noticias/2010/02/20100208/text\\_es\\_files/file/Power%20Point%20nuevo%20Fondo%202010.pdf](http://www.mpt.es/prensa/actualidad/noticias/2010/02/20100208/text_es_files/file/Power%20Point%20nuevo%20Fondo%202010.pdf)

### PORTUGAL'S PLANS

3. The Technology Plan is a political idea, an agenda of modernization and political commitment through which Portugal has wanted to prepare its society for the challenges of globalisation since 2005.

**TECHNOLOGICAL  
PLAN**  
PORTUGAL  
INNOVATES...

Today In Portugal, 100% of public schools, 87% of public institutions, 76% of businesses and 30% of households are connected to fixed broadband.

In the field of the e-escola initiative, over 250 thousand students and teachers have access to a laptop with mobile broadband at a reduced price. Through the

Magalhães initiative of the e-escolinha programme, 500 thousand students in the first cycle of basic education are in the process of receiving laptops.

100% of sophistication and availability of online public services for businesses have been covered and 90% of the services provided to citizens. This achievement positions Portugal among the leaders of these two European rankings.

As a clear sign of the commitment of companies and citizens to take on new services, the number of electronic returns exceeded that of returns sent through traditional channels.



Between 2005 and 2008, the initial public funding for the R&D sector grew over 86%. This year, the budget authorised for Science and Technology in Portugal represents 1% of Gross Domestic Product (GDP).

The impact of this commitment is becoming clear. During this period, it tripled the creation of technology-based businesses and the Technological Trade Balance reported its first positive balance.

The impact analysis conducted shows that the strengthening of business capacity and entrepreneurship in society are the engines of competitiveness and economic growth in Portugal.

The Technology Plan -by promoting innovation, research and education, and by focusing public policy on knowledge, technology, science, development of the networked society and improvement of financial systems- helped to create an environment that fosters entrepreneurship and the entrepreneurial spirit in society.

The Technology Plan for the Modernization of Administration (SIMPLEX) allowed central government procedures to be simplified, through more than 450 red-tape reducing measures, dematerialization and administrative simplification. It launched the second generation of lojas do cidadão (citizen service kiosks) and set up a network of simplification processes at autonomous level. The Organization for Economic Cooperation and Development (OECD) assessed these measures as a very positive and good international practice.

Further information:

<http://www.planotecnologico.pt/en/technological-plan/about-the-plan/list.aspx>



### INTERNATIONAL STATISTICS



Moreover, the UN e-government Readiness report shows that Spain has moved to ninth place worldwide in e-Government, This report analyzes the ability of different countries to develop the use of new technologies in public administration with the aim of enabling people to access information and public services. The ranking, which studies government presence on the Internet, telecommunications infrastructures and the willingness of people to use e-government is headed by South Korea, followed by the USA, Canada, UK, Netherlands, Norway, Denmark, Australia and Spain. France closes the list of the top ten and Portugal is ranked 39. Thus, Spain has advanced eleven positions in this ranking in 2009. It also becomes the fifth country in Europe and the leader of the southern countries of Europe.

Rank	Country	Index value
1	Republic of Korea	0.8785
2	United States	0.8510
3	Canada	0.8448
4	United Kingdom	0.8147
5	Netherlands	0.8097
6	Norway	0.8020
7	Denmark	0.7872
8	Australia	0.7863
9	Spain	0.7516
10	France	0.7510
...	...	...
...	...	...
36	Uruguay	0.5848
37	Latvia	0.5826



38	Italy	0.5800
39	Portugal	0.5787

Source: UN eGovernment Readiness, 2009

According to a study by the National Observatory of Telecommunications and the Information Society (ONTSI) on the status of Local Government regarding the use of Information and Communication Technologies, despite the fact that progress is undeniable and many administrative procedures can be performed online, the truth is that we still face challenges, especially in regard to local government. (Further information: <http://www.ontsi.red.es/index.action> )

This study also detected imbalances and the main actions undertaken by enterprises in their progress towards full e-government.

The main benefits expected by those in charge of local administration with regard to the inclusion of ICTs are:

- Improved services to citizens;
- Enhance citizens' image of the Council;
- Improve communication information (greater transparency in investments and the results obtained);
- Improve the effectiveness and efficiency of public resources;
- Fostering the development of the Information Society.

The experience of local governments indicates that the incorporation of information and communication technologies provides the following advantages:

- Improving the service provided by the institution;
- Entails internal organizational progress;
- Implies a technological leap;
- Has a positive effect on workers' satisfaction.

Homogenization policies must be among the first actions for implementation of e-government. In supramunicipal entities, there is a technological development plan in 60% of cases. Priority action lines of local and supramunicipal governments are:

- The increase of online procedural services;
- The management of records using the electronic signature;
- The improvement of municipal websites;
- Documentary management;



- Territorial management systems;
- The municipal intranet;
- The citizens folder;
- Payment gateway;
- Inventory of procedures.

File management is the most widely deployed electronic management for all segments, although there are clear differences between the existence of electronic processing services and their related electronic record, with the level of electronic notification and the levels of electronic inquiry on data files minimal.

### 3.2 Variables of the regulatory climate

In recent years the legal and regulatory climate has been adapted to new requirements resulting from technological advances and the development of the Information Society. We could consider legal aspects as important as the Protection of Personal Data, the regulation of the Provision of Services from the Information Society, the use of Electronic Signatures and Certification Services, the fight against new Computer Crimes, Content Control, the defence of Intellectual Property and Copyright in the digital world, and so on.

For example, in Spain on 22 June 2007 the Council of Ministers approved the Law on Citizens' Electronic Access to Public Administrations, a rule that establishes the right of all citizens to interact electronically with public administrations, and the obligation of these administrations to guarantee this.

This law, which becomes a starting point for a new generation of citizens' rights, digital rights, has the backing of numerous autonomous regions and representatives of local authorities, who have participated in its preparation with suggestions and contributions.

The e-government Advisory Council, a body which includes representatives from the private sector, users and educational and legal fields, has issued a statement of support in recognizing that this rule "responds to the needs of citizens in the 21st century, to the priorities of our economy and the necessary modernization of public services".



## Comparison of the regulations of partners who will be affected by the development of the Parnet-TIC electronic tools

The following is a summary table with key regulatory issues affecting each of the countries of the project partners, followed by a detailed explanation of each concept that is mentioned.

Concept	Summary
<b>Territorial division</b>	a. Local entities are recognised as artificial persons b. There is a territorial division of the local entities c. There is a territorial division of the local entities
<b>Jurisdiction of territorial entities</b>	There can be no protection between them, each one enjoys full autonomy, permitting collaboration between multiple entities to achieve common goals.
<b>Role of partners</b>	Participating partners are not homogeneous local entities.
<b>Political objectives of partners</b>	Providing technical assistance to local entities by conducting projects relating to its jurisdiction for promoting measures to improve administrative organization with a focus on work systems and mechanization of tasks.
<b>The European Charter of Local Autonomy</b>	a. Local entities have, within the scope of the Law, full freedom to exercise their initiative in any matter that is not excluded from their competence or assigned to another entity. b. Local entities are one of the main foundations of a democratic regime, citizens have the right to participate in the management of public affairs and local entities have effective powers that enable administration that is both efficient and in close proximity to the citizen.
<b>e-Government</b>	It is defined as the use of information and communication technologies in public administrations, combined with organizational changes and new skills, to improve public services and democratic processes and strengthen support for public policies.
<b>Data protection</b>	In all three member countries there is a legal security framework to compile and process personal data as well as the communication of this data between authorities, provided that the principles established in both laws are safeguarded.
<b>Electronic access of citizens to public services</b>	Provides the legal framework that facilitates the spread and use of ICTs in society in general and in particular the administration, generating sufficient confidence that removes or minimizes the risks associated to their use

1. In Article 137, the Spanish Constitution states that the Spanish State is organized territorially into municipalities, provinces and the autonomous regions that are formed, giving autonomy to these institutions to manage their interests. (Further information: [http://noticias.juridicas.com/base\\_datos/Admin/constitucion.t8.html](http://noticias.juridicas.com/base_datos/Admin/constitucion.t8.html) )

In Article 235, the Portuguese Constitution recognizes the existence of local autarchies (local authorities) as artificial persons that are responsible for looking after the interests of their respective populations.

Therefore, in the regulations of these countries:

- a. Local entities are recognised as artificial persons.



- b. There is a territorial division of the local entities.
- c. Local entities have autonomy to handle their own affairs.

2. Article 3 of Law 7/85, which regulates the bases of the local Spanish system, establishes that the following are local territorial entities: the municipality, the province, the island in the Balearic and Canary islands, the territorial entities smaller than the municipality, the areas or other entities that comprise several municipalities, metropolitan areas and associations of municipalities. (Further information: [http://www.ruidos.org/Normas/Ley\\_7\\_1985.html](http://www.ruidos.org/Normas/Ley_7_1985.html) )

Article 236 of the Portuguese Constitution provides that on the mainland local authorities are the local parishes, municipalities and administrative regions, recognizing that in large urban areas and on islands other forms of “autarkic” organization may be established. (Further information: <http://www.redipd.org/documentacion/legislacion/portugal-idpt-idphp.php> )

3. The legislation of the countries makes a clear distinction between the powers of each of the territorial local authorities, stating that there can be no protection between them, unless each one enjoys full autonomy, permitting collaboration between multiple entities to achieve common goals.

4. Participating partners in this project are not homogeneous local authorities, for there are four county councils and two city councils with over 20,000 inhabitants, but, given that the county councils are responsible, inter alia, for ensuring comprehensive and appropriate services of municipal competence throughout the provincial territory, we treat them as units equipped with the same powers for the purpose of achieving the aims of this project.

5. Article 115 of Law 5/97, governing Local Government of Galicia, Article 70 of Law 7/99, governing Local Government of Aragon and Article 14 of Law 11/87, regulating relations between the Autonomous Community of Andalusia and the County Councils of their Territory require that county councils provide technical assistance to local authorities by conducting studies, projects and works management relating to its jurisdiction, inter alia, for promoting measures to improve administrative organization with a focus on work systems and mechanization of tasks. (Further information: <http://www.diba.cat/innovacio/fixers/galicia1.pdf> )

6. Article 109.1.a of Law 5/97, governing Local Government of Galicia, Article 66.1 of Law 7/99, governing Local Government of Aragon and Article 6 of Law 11/87, regulating relations between the Autonomous Community of Andalusia and the County Councils of its Territory set forth that the County Councils have powers, inter alia, to coordinate the municipal services to ensure comprehensive and adequate provision of public services throughout the province. In the case of Galician and Andalusian Law, especially in those municipalities with less than 20,000 inhabitants. It is appropriate to remember that in the province of Huesca, with the exception of the municipality of Huesca, they all have less than 20,000 inhabitants, so that clarification is not necessary.



7. The European Charter of Local Autonomy stipulates:

- a. Local authorities have, within the scope of the Law, full freedom to exercise their initiative in any matter that is not excluded from their competence or assigned to another authority.
- b. That the local authorities are one of the main foundations of a democratic regime, recognizes the right of citizens to participate in the management of public affairs and recognizes that local entities have effective powers that enable administration that is both efficient and in close proximity to the citizen.

8. The European Commission defines e-government as the use of information and communication technologies in public administrations, combined with organizational changes and new skills, to improve public services and democratic processes and strengthen support for public policies. (Further information: [http://www.mpt.es/documentacion/politica\\_local/union\\_europea\\_y\\_organismos\\_internacionales/parrafo/04/document\\_es/cartaeuropea.pdf](http://www.mpt.es/documentacion/politica_local/union_europea_y_organismos_internacionales/parrafo/04/document_es/cartaeuropea.pdf) )

9. Regulations governing protection of personal data. Spanish Law 15/1999 of December 13, governing Protection of Personal Data reads:

- a. The purpose of the Law is to guarantee and protect, with regard to the processing of personal data, civil liberties and fundamental rights of individuals, and especially their honour and personal and family privacy.
- b. It will apply to personal data recorded on a physical medium that makes them susceptible to processing, and any form of subsequent use of this data by the public and private sectors.
- c. The creation, modification or removal of Public Administration files can only be implemented through a general provision published in the Official Journal of the State or corresponding Official Journal.
- d. Personal data collected or developed by public authorities for the performance of their duties will not be disclosed to other public authorities to exercise different powers or powers over other issues, unless the communication has been provided for by the provisions governing the creation of the file or through a higher provision that regulates the use thereof, or when the purpose of the communication is subsequent processing of the data for historical, statistical or scientific purposes.

Portuguese Law 67/98, governing Protection of Personal Data reads:

- a. The purpose of the law is the protection of personal data with regard to the processing of personal data and the free circulation of such data.
- b. This law applies to the processing of personal data wholly or partly by automatic means, as well as through non-automated processing of personal data contained in manual files or intended for them.
- c. The communication of personal data that is not provided for in a statutory provision will be subject to the approval of the CNPD (Data Protection Agency) requested by the



person in charge or the group of corresponding controllers, as provided in Article 27. (For further information <http://www.redipd.org/documentacion/legislacion/portugal-idpt-idphp.php> )

So, in both countries there is a legal security framework to compile and process personal data as well as the communication of this data between authorities, provided that the principles established in both laws are safeguarded.

10. Law 11/2007, governing electronic access to Public Services via citizens provides the legal framework that facilitates the spread and use of ICTs in society in general and in particular the administration, generating sufficient confidence that removes or minimizes the risks associated to their use:

- a. It recognizes the right of citizens to interact electronically with Public Authorities.
- b. It regulates the conditions for the use of electronic means in conditions of trust and security.
- c. It seeks the simplification of administrative procedures, providing opportunities for participation and transparency.
- d. It sets the period within which the Public Authorities must adapt so that citizens can exercise their right.

In the case of Portugal this law is contained in "Resolução do Conselho de Ministros No 155/2007 of 02.10.2007 and No. 9/2007 of 17/1/2007, which lays down the guidelines for accessibility by people with special needs to government Internet sites and public services of the central administration, in the same way as the Spanish law does.

Therefore, from a regulatory point of view, all partners have sufficient powers and autonomy to develop this "Parnet-TIC" project and to encourage active incorporation of these territories into the Information Society based on the results of this study.

At a level of the regulatory setting within which this project is developed, we can summarise by saying that the National Strategic Reference Framework in Spain establishes among its strategic priorities the development of "content" and skills in information technology required in the knowledge economy by creating applications and providing e-government services in particular with regard to interaction with businesses.

For Portugal, the National Strategic Reference Chart sets the strategic priorities as promoting and encouraging knowledge, technology, innovation in society, as well as increasing government efficiency, modernizing public institutions and improving efficiency.



### 3.3 Variables of the sociocultural climate

One way to observe the degree of development of the Information Society is by analyzing the evolution of key indicators: the percentage of Internet users, the percentage of households with Internet access, and the percentage of mobile phone users.

	Spain	Portugal	Community of Andalusia	Community of Aragon	Community of Galicia
Persons that use a PC	69.20%	51.40%	66.50%	72.90%	60.20%
Persons that use Internet	64.50%	46.50%	61.10%	67.20%	54.10%
Persons that use a mobile phone	90.50%	No Data	89.40%	90.30%	85.10%

Source. Spain National Institute of Statistics 2009, Portugal National Institute of Statistics 2008

The Internet has become a common tool in the everyday life of Spanish citizens. The most common uses of the Internet by Spaniards can be pooled into three groups:

- o Search for information, which includes the use of a search engine in reading the news, searching for information on health and the public administration and visiting forums;
- o communication with other users, which includes social networks, e-mail, instant messaging and use of chat services;
- o Leisure, with the most popular being downloading or access to music, software and videos.

Globally, there are over 1,500 million Internet users (one in four citizens of the world). The percentage of Internet users in Spain in 2008 has increased by nearly 10 percentage points over the previous year, reaching approximately 64.50% of the population in 2009. In the case of Portugal the figure is slightly lower, at 46.50%.



The differences by age, although these decreased over the last year, remain compelling. For those between the age of 65-74 the percentage of Internet users is 13.4%, while among younger persons (16-24) this percentage is multiplied by seven (95.2%).

According to a study by the National Institute of Statistics (INE), in 2009 Spain will reach 24.6 million people of 10 or over who have accessed the Internet at some point, an increase of almost 5% over the past year. Considering the population aged 16 to 74, 64.5% have accessed the Internet at some point, and 9 out of 10 did so in the last month.

The frequency of access is also growing among those who used the Internet in the last three months, more than half use it daily or weekly.

The increase in Internet use among the population is bringing the Internet user profile closer to the population profile. Even so, the population of Internet users is substantially younger than the total population and has a higher level of education. Almost all students have accessed the Internet at some time and over 95% go online every week, while only 14.6% of pensioners have.

The percentages of Internet users are higher among those with a higher education level. Three out of four people whose level of education completed reaches the second stage of secondary education have connected to the Internet in the last month and among those with a university education this proportion is nine out of ten.

In Spain, households that have no access to the network argue that they do not need access to it, that they do not possess the necessary skills to use it. Moreover, they complain about the high cost of connection or indicate they do not want access because they believe that the information stored there is dangerous or harmful.

The personal computer is the usual mode of access and is becoming a common feature in homes. In Spain, 69.20% of the population use one while in Portugal this figure is 51.4%.

In this sense the solutions come from training activities and dissemination of the benefits of new technologies, as well as ensuring that all services meet minimum standards of usability and accessibility.

The lack of physicality in relationships that are built through any electronic device gives greater importance to sociocultural aspects. Therefore, public policy in e-government should consider those aspects to improve its effectiveness in the excluded sectors of the population. Those aspects range from the initial perception that a person has about public services (usefulness, proximity, reliability) to the capacity of using the information available online and making it efficient.



The relationship needs between citizens and governments are huge and there is a considerable amount of administrative work that citizens must carry out in their daily lives. The two most common deficiencies in this regard are:

- The high number of different agencies to be visited to perform certain procedures; The ICTs have enabled one-stop services to be introduced that help simplify this problem;
- The number of times the same information is requested by public agencies. In most cases this will be information that the government already has.

The application of new technologies to the Administration has a major impact on society as a whole and this is because the use of information and communication technologies in certain services can foster the integration of groups with special needs (people with motor and sensory difficulties, persons that live in rural areas, workers whose work timetable coincides with that of the Administration, people who live in other cities, etc.).

Moreover, the Administration also plays an essential role in facilitating the entry of businesses into the Information Society. The digitization of requests and authorizations, social contribution, payment of taxes, etc. greatly helps the company to gradually join the Information Society, with the benefits this in turn brings to society as a whole.

The main social demand for this e-government and e-participation service is mainly due to the fact that online processing reduces the Government's response time and the time it takes the public to move from place to place and wait in queues or in offices. By integrating all the elements into a global information system, more efficient and personalised services can be offered and operations simplified.

The use of e-government makes it possible for greater interaction with citizens, who can participate actively in the development and improvement of services. The vast majority of public authority portals provide information very close at hand to the public. maps, public transport, festival programme, etc. One of the contributions most valued by citizens in the improvement of administrative processes is the possibility of knowing their status at any given time. The new services allow the Administration to speed up the entry of users into the Information Society. With these new services, the Administration has an important tool to familiarize and educate society about this issue.

Elsewhere, for the services to have the broadest extent possible, special emphasis should be placed on the ease of use and learning. We must not forget the disadvantaged groups, such as rural areas, an area where Parnet-TIC places special emphasis as it is more difficult for people here to access the offers of the Administration. Therefore, minimum requirements must be put in place that enable users of all walks to use and enjoy electronic services.



This new technological and social setting is a unique opportunity for Public Administrations to promote multiple actions in order to modernize their management and relations with citizens and staff members through the use of information and communication technologies. New technologies always require training initiatives, and in the case of e-government that need is even greater. Added to the technical leap are the profound organizational and legal changes that the use of electronic signatures and the implementation of the new LAECSP law involve.

However, if we are aware of the social demand that e-government has and the need to train disadvantaged populations, such as rural areas of special interest within this project, we can analyse the size of the population of each partner as well as overall to find out the operating sphere of Parnet-TIC.

The population covered by the project partners is over two and a half million residents in total.

<b>TERRITORY</b>	<b>POPULATION (No. of inhabitants)</b>
Region of A Coruña	1,145,488
Region of Almería	684,426
Region of Lugo	355,195
Region of Huesca	228,409
Municipal Chamber of Águeda:	49,691
<b>TOTAL POPULATION</b>	<b>2,547,109</b>
N.B.: The population of the Municipality of Lugo is already included in the population of the Region of Lugo.	

The structure of the municipalities based on their population size is shown below.



SIZE	REGION OF A CORUÑA	REGION OF ALMERIA	REGION OF LUGO	REGION OF HUESCA	MUNICIPALITY OF ÁGUEDA	TOTAL
< 1,000 inhabitants	0	49	4	170		223
1,001 – 5,000 inhabitants	40	33	51	25		149
5,001 – 10,000 inhabitants	32	8	7	1		48
10,001 – 20,000 inhabitants	11	6	4	5		26
> 20,000 inhabitants	11	6	1	1	1	21
TOTAL	94	102	67	202	1	467

With regard to the population or structure of the participating territories, we can note that:

- There are 21 municipalities with over 20,000 inhabitants, of which 3 are individual partners in the project;
- The largest number of municipalities is within the range of less than 5,000 inhabitants (79.6%); however, that same segment only represents 19% of the population;
- The section of municipalities with over 20,000 inhabitants reveals there are 19 municipalities, representing 4.5% of all municipalities, covering 51% of the population;
- In the province of Huesca, the only municipality with over 20,000 inhabitants is the town of Huesca. In this province, we refer to the law of regionalization, as this is being enacted due to the small size of municipalities.

As far as the territorial figures are concerned, it is necessary to refer to the reference countries.



COUNTRY	POPULATION	MUNICIPALITIES	COMMENTS
SPAIN	45,828,172 inhabitants	8,114	17 autonomous communities and 50 regions, plus the autonomous cities of Ceuta and Melilla. Galicia is characterised by a huge spread of the population, and represents more than half of the core areas of Spain.
PORTUGAL	10,627,250 inhabitants	308	4,251 parishes and 204 continental island territories (Azores and Madeira)

Source: EUROSTAT (Data for 2009).

In the new electronic society some disabilities are no longer meaningful. Online formalities, especially in small municipalities, may be the solution to the depopulation of rural areas. The implementation of administrative procedures online facilitates communication with citizens in rural areas and greater interaction with society.

The European Commission is aware that there is a new medium of communication, and the common goal now (citizens, businesses, governments) is for everybody to be connected to the Internet, for households and schools (allowing new generations to discover the new possibilities at an early age) to have access, for everybody to receive adequate training on the new culture, for Europe to adopt an entrepreneurial posture on the digital revolution, for the process not to lead to what is called the "digital divide", and for an environment to be achieved where consumers can place their trust (security is necessary for the development of an e-economy).

The Commission realizes that the future is digital, and those societies that get involved early in the emerging Information Society will gain a competitive advantage.

### 3.4 Variables of the technological climate

To review the situation of partner organizations in terms of e-government and citizen participation, we reviewed various sources of statistical information to allow us to evaluate technology indicators.

#### ICTs IN THE GOVERNMENT

Under the National Action Programme 2005/2008, governing public investment in R&D in Portugal, the investment was doubled and private investment has a positive momentum to be captured as scientific and technological potential for 2007. There was an unprecedented strengthening of human resources, networks of excellence and skills were developed, promoting partnerships with knowledge centres renowned worldwide.



In 2008/2010 the PNR priority will be given to consolidating networks as poles of competitiveness and technology, promoting collective efficiency as an instrument of innovation and creation of competitive dimension on a European and global level. Elsewhere, efforts will be focused on reinforcing human resources, development of thematic R&D consortia, of scientific institutions, the creation and participation in international networks of knowledge and encouraging private investment in R&D.

In its modernization and business development plan, Portugal is involving businesses, families and institutions. The country's Technology Plan seeks to remove business barriers and problems and help governments to invest knowledge, technology and innovation more and better.

In 2006, the country was covered with broadband internet access. Internet access prices have been decreasing and are below the European average. In just two years they were able to connect all schools with broadband Internet which promoted the purchase of personal computers for students through tax incentives and training in information technology and communication. The "Schools, Teachers and laptops" project has already provided equipment for over 1,000 ICT rooms with 14 computers each, and the distribution of 26,000 laptops.

With regard to funding of ICTs, the "eEspaña 2009" study, prepared by the Orange Foundation, shows that although the budget allocation from the government for 2009 represents a reduction year-on-year, the financing of the new Plan Avanza2 exceeds average levels of ICT investment between 2005-2008. The new plan has decreased the funding of infrastructures in response to a situation of relative maturity in this regard. On the other hand, the ICT Sector Development (SME) and Training for Citizens and SMEs focal points together account for 80% of all the plan's 2009 budget. This situation clearly indicates that there are two objectives:

- That companies develop new products, processes, applications, content and services with high technological component.
- That citizens and businesses make greater use of ICTs.

The administration is one of the major consumers of ICT (in 2007, consumption of ICT in Local Government and State Administration represented about 10% of the ICT sector). All administrations have been making a major effort to computerize jobs, and in the case of central government this has already reached the figure of 150 computers per 100 employees.

- The smaller municipalities are spending a larger share of ICT spending on telecommunications than large municipalities and county councils, since they have costs that small municipalities often obtain from the county councils.
- The figure for IT spending stood at 750.86 million euros (25% more than in 2005), corresponding to 30% of the expenses of county councils, councils and town halls.
  - Software expenditure: 10% (increase of 27% with regard to 2005);
  - IT services: 33% (increase of 25% with regard to 2005);
  - Hardware purchases: 19% (increase of 22% with regard to 2005);



- ICT personnel: 36% (increase of 16% with regard to 2005)
- Others: 2%;
- The personnel costs account for the highest percentage in the municipalities of over 10,000 inhabitants;
- In small municipalities the hardware and services costs predominate;
- 46% of expenses at county council is represented by IT services.

A crucial aspect in Portugal is the effort to modernize public administration in progress, to meet the needs of citizens and businesses, mostly focused on e-government. This has reduced bureaucracy, simplified procedures and increased confidence and transparency in the markets. In this context, Portugal was considered a "Best Reformer" by the World Bank report on the conditions for doing business.

The process of business creation online, coupled with the easy registration of patents and trademarks, was considered one of the most innovative practices by the European Commission. Other structural measures, such as the Citizen Card, the electronic passport, single vehicle document, direct social security or NetEmprego now allows architectures to be reconfigured and demonstrate in practice the potential of new models of e-governance to solve problems faced by individuals and businesses.

These are just some examples of the application in Portugal of the Lisbon Strategy priorities, whose aim is to increase EU competitiveness through innovation and training individuals, businesses and institutions. Investment in human capital, the classification of the scientific and technological system, modernization of public services and increasing the competitiveness of enterprises summarizes the objectives of the technology plan, aimed at better preparing Portugal for the knowledge economy.

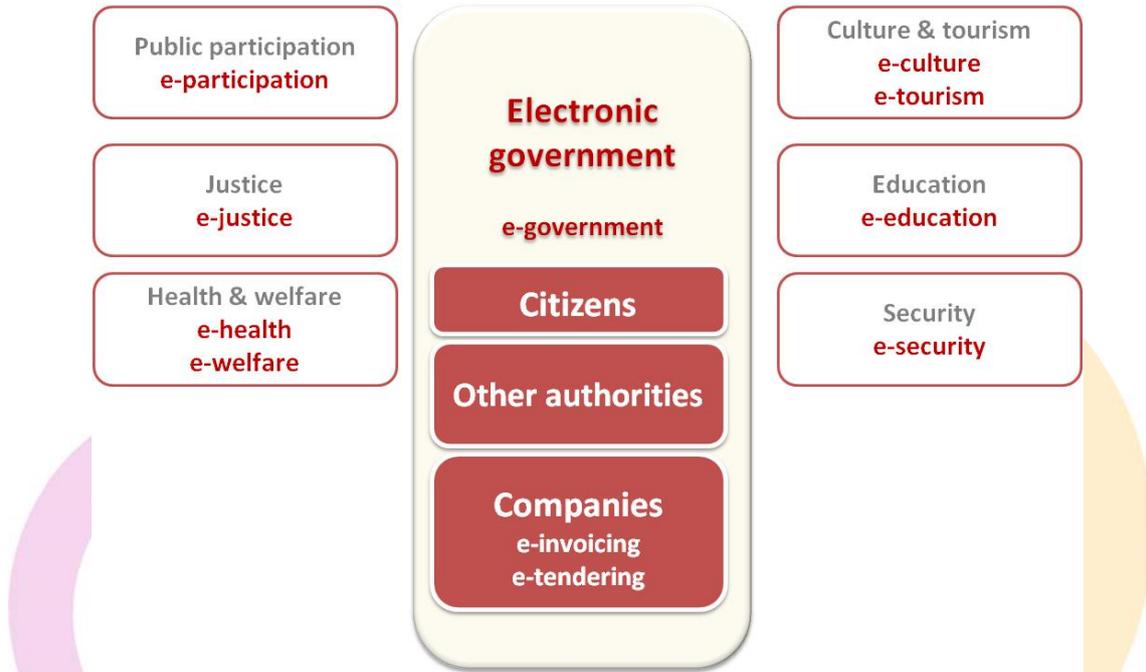
In Spain, the use of e-government by citizens is increasing, with 28% already using the Internet to obtain information. The number of those who fill in forms is considerably smaller (16%), and those who submit forms is only 9%. The procedure most commonly used over the Internet is the payment of taxes by citizens. Convenience is the most appreciated feature for Internet users while security is considered a major problem.

Regarding use by companies, these are above internet users in the use e-government. 60% of companies download administration forms; 59% get information and about 45% fill in forms. The tax agency is also the most visited body.

The concept of eGovernment has several interpretations, some referring to online services for citizens and others to the automated integration with other service providers, agencies or other governments.



eGovernment represents the new relationship between administration, citizens and businesses, including full support for all the processes between the Administration and those that are administered, regardless of the location, time or communication channel used for this.



eGovernment model

Source: Own compilation

According to Eurostat data, in 2009 the average use of eGovernment in Europe was 30%, Spain with 30 and Portugal slightly lower at 21%.

Use of eGovernment

	2009
EU average	30%
Spain	30%
Portugal	21%

Source: Eurostat 2009



### ELECTRONIC ID NUMBER

The advent of the Information Society and the widespread use of the Internet has made it necessary to adapt the mechanisms for proving identity to the new reality and have an effective instrument that brings to the digital world the same certainty with which we operate every day in the physical world and which, essentially, are:

- Prove the identity of the person electronically and without any room for doubt;
- Digitally sign electronic documents, giving them a legal value equivalent to a handwritten signature.

To meet these new needs the electronic National Identity Document (eID) has been launched, similar to the traditional one and whose main novelty is that it incorporates a small integrated circuit (chip) able to securely store information and process it internally.

The new electronic ID is used only for transactions with the administration by citizens who have one, represented by only 19.3% of the Spanish population, although this percentage is increasing day by day.

The electronic signature, also called the digital signature, is a set of data or a coded summary associated to a message, which guarantees the signer's identity and the integrity of the text or message sent with complete security. This percentage is relatively low compared to the use of eID but is gaining ground (52% of companies with more than 10 employees), and its use is primarily for their relations with the administration and not with the client.

#### Distribution of the eID and electronic signature in Spain

	Distribution of eID	Distribution of other recognised e-signature certificates
<b>Total Persons</b>	19.30%	7.40%
<b>Habitat: More than 100,000 inhabitants and regional capitals</b>	21.90%	9.10%
<b>Habitat: From 50,000 to 100,000 inhabitants</b>	19.40%	7.10%
<b>Habitat: From 20,000 to 50,000 inhabitants</b>	17.60%	6.40%



Habitat: From 10,000 to 20,000 inhabitants	15.40%	6.60%
Habitat: Less than 10,000 inhabitants	17.50%	5.20%

Source: Spain National Institute of Statistics (INE) 2009

In Portugal, they are developing the citizen card, a new document for Portuguese citizens that replaces the ID card, income tax card, social security card and healthcare card. It is a card with visual identification of the citizen, featuring a photograph of the person.

This new instrument simplifies and streamlines the administrative procedures, combining the different means of identification on a single card and increasing the level of security and confidentiality of personal data.

These advantages make the "Citizen Card" a major catalyst for administrative simplification and one of the more striking elements of the policy to modernise public administration.

The "Citizen Card" combines multiple documents into one: The card covers national ID, income tax, social security, health and voting. It was designed as a citizenship certificate, enabling the person to use electronic services and authenticate digital documents. The citizen card is both a physical and digital document.

As a physical document the "Citizen Card" allows the user to be identified securely in person.

**BROADBAND**

Extending the use of broadband (allowing high-speed internet access at any time) is of vital importance in improving productivity of the European economy and getting the most out of specific e-applications for each entity.

Moving up to broadband has led to a radical transformation in Internet use. It is unlikely that phenomena as diverse as web portals with user-generated content and advanced technologies of the "digital ecosystem" would be possible without extensive use of high-speed permanent connections. Citizens, patients and students in Europe, for example, can only reap the full benefits of the Information Society when this type of access becomes widespread.

Access to broadband depends on factors from economic growth to social inclusion. Although penetration rates in Europe are behind the world leader (South Korea), in recent years a concerted effort has allowed an increase of close to 70% annually. In October 2005, Europe surpassed the US in number of broadband lines, and 2006 was a record year in the number of new connections.



But progress is uneven. Broadband has not yet reached some of the less developed EU regions. In 2005 only about 60% of businesses and households in remote and rural areas of the EU-15 had broadband access, compared to over 90% in urban areas. And in the new member states the disparity is even greater.

Added to this is the fact that in rural areas that do have broadband, access is often slow, which limits the performance of the services available. Widespread access could reduce disparities in today's society; unequal access aggravates the disparities.

Action is required at regional, national and European level to bridge the digital divide and ensure that everyone has access to the Information Society, regardless of where they are. The EU helps Member States to learn from their respective experiences, coordinate their activities and target all available resources at this objective.

Spain closed 2009 with a rate of 20.8 lines per hundred inhabitants and Portugal with 17.

**Broadband penetration and population densities for OECD countries**

<b>Countries</b>	<b>Broadband penetration (subscribers per 100 inhabitants, June 2009)</b>	<b>Population density (inhabitants/km2, 2006)</b>
<b>The Netherlands</b>	38.1	402.9
<b>Denmark</b>	37	127.4
<b>Norway</b>	34.5	14.7
<b>Switzerland</b>	33.8	186.7
<b>Korea</b>	32.8	488
<b>Iceland</b>	32.8	3.1
<b>Sweden</b>	31.6	20.5
<b>Luxembourg</b>	31.3	187.9
<b>Finland</b>	29.7	15.7
<b>Canada</b>	29.7	3.3



<b>Germany</b>	29.3	230.1
<b>France</b>	29.1	116.8
<b>United Kingdom</b>	28.9	250.6
<b>Belgium</b>	28.4	351.1
<b>United States</b>	26.7	32.5
<b>Australia</b>	24.9	2.8
<b>Japan</b>	24.2	338
<b>New Zealand</b>	22.8	16
<b>Austria</b>	21.8	99.4
<b>Ireland</b>	21.4	63.2
<b>Spain</b>	20.8	90.3
<b>Italy</b>	19.8	198.8
<b>Czech Republic</b>	18.1	132.3
<b>Portugal</b>	17	115
<b>Greece</b>	17	85.1
<b>Hungary</b>	16.8	107.9
<b>Czech Republic</b>	12.6	110.2
<b>Poland</b>	11.3	121.9
<b>Turkey</b>	8.7	91.1
<b>Mexico</b>	8.4	53.4
<b>OECD</b>	22.8	34.2 Final del formulario

Source: [Organization for Economic Co-operation and Development \(OECD\)](#), 2009

We list some of the main priorities that governments have launched to improve broadband access in society. The 2010-2013 Galician Broadband Master Plan seeks to facilitate broadband access to Galician society as a whole, as one of the key drivers for the development of Galicia.



Innovation and continuous development of telecommunications services requires improvements in quality, capacity and speed of the networks that support them and are accompanied by a technological evolution of these networks, so that all users have a quality and bandwidth to ensure appropriate access to all services.

To provide maximum value, the vision is to develop and extend new technologies and telecommunications infrastructure of broadband telecommunications to citizens, public authorities and the business sector in Galicia, with particular focus on those most disadvantaged and underserved areas:

- ✓ reducing the regional imbalance among the public.
- ✓ encouraging the business sector through the use of new broadband technologies as the economic driving forces and generators of competitiveness and innovation.
- ✓ encouraging the participation of different stakeholders.
- ✓ the drive to modernize public services.
- ✓ encouraging the coordination of various government agencies for the unification of efforts and maximizing their impact.

### DIGITAL TERRESTRIAL TELEVISION

The transition to DTT is part of a community process which has established a set of key decisions that are binding on all member countries. In simple terms, the European Union is committed to a process of switching off analogue terrestrial television broadcasting and replacing this with digital television. 2012 has been set as the deadline for completing this transition.

Portuguese DTT is now available for 60% of the population. By 2009, 6 million Portuguese could already access local DTT and the aim is to cover 80% of the population by the end of 2010.

For its part, Spain, through the National Technical Plan for Digital Terrestrial Television, approved by Royal Decree 944/2005 of 29 July, sets 3 April 2010 as the switch-off date for analogue terrestrial television broadcasts. It also establishes a schedule to extend coverage to levels of 95% and 98% of the population in 2010. Coverage data for February 2010 shows 97.61% of the population nationwide.

### 3.5 Conclusion of the overall environment

Beginning with the political and regulatory environment in which the project is developed, we can point out that European governments are committed to the inclusion of information and communication technologies. To this end they are seeking to improve the services provided to



citizens by public authorities, which will entail a huge internal organizational advance and would also increase worker satisfaction.

Homogenization policies must be among the first actions for implementation of e-government. Some of the priority action lines of local and supramunicipal administrations are:

- The increase of online procedural services;
- The management of records using the electronic signature;
- The improvement of municipal websites;
- Documentary management;
- Territorial management systems;
- The municipal intranet;
- The citizens folder;
- Payment gateway;
- Inventory of procedures.

In recent years the legal and regulatory climate has been adapted to new requirements resulting from technological advances and the development of the Information Society. Legal aspects such as the Protection of Personal Data, the regulation of the Provision of Services of the Information Society, the use of Electronic Signatures and Certification Services, the fight against new Computer Crimes, Content Control The defence of Intellectual Property and Copyright in the digital world, are some of the actions that administrations are focused on in strengthening the use, knowledge and functionality of these tools.

In the socio-technological aspects we can summarize by stating that European governments are aware that there is a new medium of communication, and the aim now is for all citizens, companies and administrations to be connected to the Internet; for homes and schools to have access; for everybody to receive adequate training on the new culture; for Europe to adopt an entrepreneurial position on the digital revolution, and remove the possible digital divide that could occur by including those less favoured sectors (rural or those with weak purchasing power) in the process, and finally, creating an environment in which consumers can place their trust (security is necessary for the development of an e-economy).

Regarding the population's behaviour in the use of technologies, at a global level there are over 1,500 million Internet users (one in four citizens of the world). In Spain the use of internet accounts for 64.5% and this figure is 46% in Portugal.



ICT spending in every government has increased considerably. All administrations are making a major effort to computerize jobs and increase the connectivity of computers to the Internet, intranets, and mailboxes.

The use of e-government continues to increase, as does the use of eID and the citizen card in Portugal.

This general context in which e-government and e-participation activities are to be launched within Parnet-TIC project offers a favourable political-regulatory, social and technology conditions for setting up these tools. Although suspicion could be decisive in stimulating proposals, it is a fundamental task of the participating administrations to promote security and user confidence (business, citizens and administration).

Europe is heavily committed to improving services to the public by providing a fast and reliable service; and it wants to achieve this through electronic services, promoting the use of technologies, reducing the digital divide and supporting administrations in the projects they want to develop.

For all the above, Parnet-TIC can and should take advantage of the political, legal, social and technological opportunities that are presented to ensure the successful selection and implementation of e-management tools and electronic participation that it seeks to bring about.



#### 4. Analysis of the e-Government and e-Participation status

Overall, the maturity of e-Government experienced dramatic growth in the early part of the 21st century, led by countries such as Canada and the United States.

The initial assessment of the services offered by the Administration has broadened, considering aspects such as:

- the provision of services to citizens;
- the solidity of the customer service areas (interconnected multichannel administration);
- the ability to consider civic demands in the provision of services, and
- making sure there are proper investments to meet these demands.

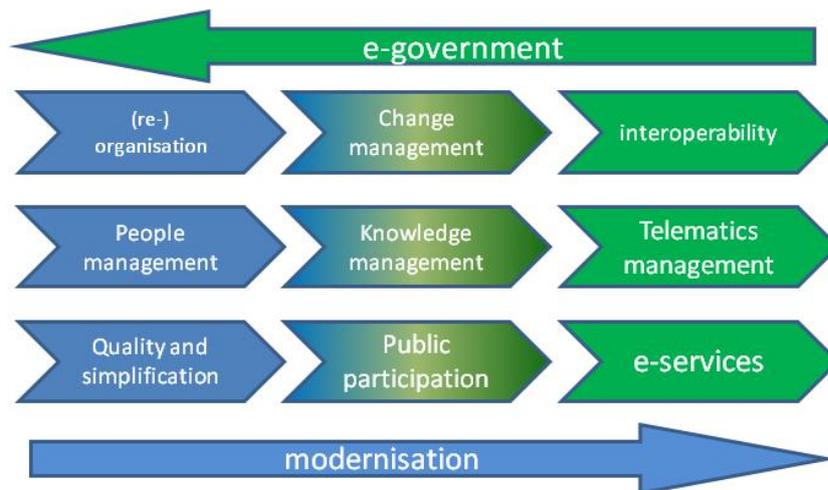
The constant evolution of technology and applications make it difficult to establish a single leadership; however, countries like Canada, Denmark, Sweden, Singapore, Switzerland and the Netherlands are at the head in general maturity of services to citizens.

The relationship needs between citizens and governments are huge and there is a considerable amount of administrative work that citizens must carry out in their daily lives.

e-Government facilitates the provision of management information, conducting negotiations with various agencies through a one-stop procedure, the exchange of information between departments, streamlining administration procedures, etc.

The application of new technologies to the Administration has a major impact on society as a whole. The use of information and communication technologies in certain services promotes the integration of groups with special needs (people with sensory and motor difficulties, people living in rural areas, workers whose working hours coincide with the Administration, people living in other cities, etc.).

The Administration also plays an essential role in facilitating the entry of businesses into the Information Society, since the digitalisation of applications and authorisations, payment of taxes and levies greatly helps the company to join the Information Society, with the benefits this brings to society as a whole.



**Modernisation and e-Government**

Source: e.admin.net

In this section we define e-government technology, its users and suppliers, as well as market barriers and difficulties in setting up and using e-government and e-participation tools.

**4.1 Users**

With the development of the Information Society, the Spanish government aims to improve service to citizens, manage much of the administrative processes through the Internet and reach a technological point of union between the various governments (Central, Regional and Local).

Public Administrations, both in Spain and other member countries of the European Union, are committed to progress towards the so-called Knowledge Economy, through the development of telecommunications infrastructure, implementation of e-government, investment in scientific research and above all in promoting and providing all citizens with access to new technologies.

The number of e-government users not only depends on the level of citizens' knowledge, but also the percentage of people who can access it and use its more sophisticated services, a ratio directly related to households that have broadband Internet connection. In 2008 this was 51%, with 45% of total broadband access, i.e. 90% of those with access to the network. In the same year the EU 27 had a percentage of households with Internet access of 60%, while the number of households with broadband connections stood at 48%, three percentage points above the average for Spain.

If we classify the type of users at whom e-government and e-participation is targeted, we would divide it into three large groups: the public, businesses and administrations.



**e-government scheme**

Source: KZGunea. Basque Government

In terms of **services to the public**, e-government has already shown its benefits in the daily life of citizens. e-government not only facilitates information from governments, but also the helps reduce waiting times in those transactions involving the public. It also promotes a direct relationship between the public and the government. Thanks in particular to online forums, to virtual discussion rooms and to electronic voting, citizens can directly question leaders and express their views on public policy.

As regards **services to companies**, improvements in providing electronic administrative services leads to increased productivity and competitiveness, due to the reduction of not only the costs of public services themselves but also transaction costs for companies (time and effort). For example, electronic processing of customs and VAT, as well as electronic tax declarations have the advantage of expediting procedures while improving the quality of service. The sophistication of online services, with regard to interactivity and the range of transactions, has gone even further for services to companies than for services to the population.

As regards **services between administrations**, e-government can strengthen cooperation between national, regional and local authorities as well as EU institutions. Regional and local administrations are often at the forefront in the provision of public services online. Moreover, the development of e-government at regional and local level has become a priority for the Structural Funds: it accounts for about 30% of expenditure on the Information Society.

### 4.2 Technology Providers

In this section we distinguish two types of providers of technology tools and solutions for e-government and e-participation: the first is a supplier of technology platforms capable of integrating different modules and applications, whilst the second is a smaller provider that offers tools and procedures capable of joining the already designed platform. These are more specialized providers.

Moreover, technology platforms of e-government have already been developed and are used by different administrations. These tools can be classified into: a) Core software platforms, b) Applications and c) Communication platforms. Among these, we can mention:

#### a) CORE software PLATFORMS

eSigna is a web platform, developed following open standards (J2EE and XML), which brings the value-added ICT services established at councils into a unified environment. The platform aligned with current available technology enables the following through the inclusion of Public Key and Digital Certificates technology:

1. An electronic, paperless City Council with full integration with existing management systems.
2. That citizens can use in a virtual environment of through a physical presence at the same time.
3. Facilitate citizen participation in local government.
4. Full interoperability with other public authorities.



**SIGEM (Comprehensive Municipal Management System)** is the only Open Source Platform for e-government promoted by government agencies. Application developed for management of the administrative procedure of a file. It allows citizens to use online means to request a grant, aid, licence, or make a payment, receive news on the status of their request, information on missing documents and instructions on how to attach these, and then finally receive notification of the outcome of their efforts.

It is a project of modernization and updating of local authorities, providing them with a system that can electronically gather all the documentation on a case, integrating the traditional subsystems of Registration, Case Engine (procedures flows) and File. In this relationship with the City Council, the citizen can be identified using e-ID card, electronic signature or codes, ensuring confidentiality and privacy of their data

The platform is built using the latest technologies in Software Engineering: Java, SPRINGS, STRUTS, Hibernate, Web Services, Postgres and OpenOffice.



**W@nda** is a processing platform to facilitate the efficient deployment of processing procedures, through integration of e-government components (@firma platform, Trew@ processing engine, telematics system notifications, Port@firmas, etc.) and basic functionalities and value-added present in most procedures.

The platform is built mainly on open source software products. The technologies used are the following:



- Database: Oracle, Hibernate
- Framework Struts
- Framework Spring, Spring Web Services and Spring Security
- Indexing and Search Engine: Solr from the Apache Lucene project and LIUS
- Presentation FrameWork developed making use of Google Web Toolkit
- Syndication through RSS Framework Struts

The main purpose of the W@nda project is the convergence towards an integrated processing suite at the Junta de Andalucía (Regional Government of Andalusia).

**Management System for Administrative Procedures (SGPA):** This consists of a global system of the Xunta de Galicia (Regional Government of Galicia) for the management of administrative procedures initiated ex parte. In defining the platform, a distributed computing system was chosen, equipped with great flexibility which allows the continuous changes that occur in administrative procedures to be included whereby the flow of information occurs online.

Chief among the different modules that were set up is the Subsidies Management System, which can increase the level of information of all procedures with economic content and the generation of associated documentation, thus facilitating the administration of this.

With the Administrative Procedures Management System (SGPA) up and running, this has become the core that has enabled the following actions for administrative reform to be developed:

- Administrative Information System and Citizens Help Desk.
- Immediate Response Service (SERI)
- Contractor Registration
- One-stop Procedures Office for Industries (UTO)



cividas is a platform based on open source solutions that enables national, regional and local authorities to better manage their internal processes and maintain interaction with citizens, either in person, via the web or through other channels such as mobile phones or call centres. Cividas has four key

elements:

- PROCESSES: Authorized users can graphically design processes as a workflow and make them available immediately. Assigned users can access tasks with a graphic display showing the status of the process (procedure) or a list of tasks. The processes are encrypted using XPDL (XML process definition) standard, ensuring its future reuse.



- **APPLICATIONS:** As well as *cividas*, the graphical user interface (GUI) with which users interact with the application when conducting tasks is based on Ontimize, a powerful open source framework based on standard Java/XML web technologies that combines the facility of graphic development for consultants with the flexibility that advanced programmers need.
- **DOCUMENTS:** Documentation generation, scanning, signature and storage are a central part of the solution. *Cividas* supports proprietary standards and open source software such as MS Office, Open Office, PDF, TWAIN and JCR (Java Content Repository).
- **LINKS:** Based on a Service Oriented Architecture (SOA), *cividas* is able to engage with other agencies and institutions as well as facilitating access to public services from other applications via Web-Service technologies.



It is an open-source workflow engine to be used in various applications. The workflow shows us how to structure the tasks to be performed in an application. It demonstrates how to perform the actions, in what order, the relationship between them, control of which users perform certain tasks, the flow of information between them and monitoring of these.

This tool is very useful when an application has stages or steps, specific actions for each step and different actions for different user profiles.



**JBoss** is a J2EE application server implemented in open source pure Java. As it is based on Java, JBoss can be used on any operating system that supports it. JBoss, a division of Red Hat, a robust system of customer service that manages the growing assistance requirements. JBoss consistently records 98% of the Salesforce user adoption nationwide.

b) APPLICATIONS



**Alfresco** is an open source alternative for enterprise content management (ECM), providing document management, collaboration, records management, information management, web content management and pictures.



Alfresco is built on standards such as REST, RSS, Atom publishing, JSON, OpenSearch, OpenSocial, OpenID, Web Services, JSR 168, JSR 170 Level 2, MyFaces, CIFS, FTP, WebDAV, SQL and ODF. This standards compliance makes integration in its architecture simpler and cheaper.



**@firma** is the technology solution on which the implementation of the Platform for validation and electronic signature of the Ministry of Public Administration is based. @firma is a robust and comprehensive product, initially developed by the Junta de Andalucía, on loan to other public administrations in order to promote and extend the development of e-government and the Information Society. It is a solution based on open source software, open standards and Java: Apache web servers, JBOSS, Solaris OS/Linux, AXIS, etc.

### localweb

**Localweb:** Platform for the generation and management of municipal websites. The portals created with Localweb will be where citizens access local e-government. They will be able to consult both public information (news, notices, general information on the entity) and private (license application monitoring, monitoring of grant applications, etc.) through the citizens folder.

One of the main novelties of Localweb is the adoption of SOA architecture for integration with third-party systems. Interoperability with other applications of the Avanza Local Solutions Platform, Sigem (records manager) and Localgis (map display), represents an intrinsic feature implemented in its development.

### localgis

**LocalGis:** Land Information System based on OpenSource solutions, specifically designed for the environment and public administration and aimed at city councils, district councils, county councils, local authorities, autonomous provinces, etc.

It has the features required for land management within the municipal area: Urban Planning, Cadastre, Census, Polluting Activities, Heritage, Infrastructure, Works Licensing, Urban Guide, etc. This combines GIS technology (Geographic Information Systems) with administrative functions and Web Services.

### e-fácil.

**e-Fácil:** The application aims to develop a platform for the adaptation of management systems of local authorities to receive and process electronic invoices and the set-up of companies online.

The platform will enable the reception, validation and processing of electronic invoices in Facturae format. It will enable the provider to know the processing status of the corresponding invoice at any time.



**Avanza Local Padrón:** Management System for municipal population register and ongoing census support. It develops procedures relating to the management of the population: electoral roll and statistical data, all in compliance with the Security Criteria.



**CAMERFIRMA:** the digital certification authority of the Spanish Chambers of Commerce, which also acts under a common chamber framework, thus broadening its scope of validity.

Initially, the Camerfirma project was driven by the Supreme Council of Chambers of Commerce, Industry and Navigation of Spain for secure telematics communications in the business sphere.



**Vortal:** This is a platform that manages procurement, following the requirements of e-procurement.

**Electronic Payment Gateway:** The purpose of this is to allow online payment of taxes, public fees or other public income payable by citizens; electronic certificates are used to link with partner financial institutions.

### c) COMMUNICATION PLATFORMS

**SARA network:** A set of communications infrastructures and basic services that connects all the networks of governments and European institutions, facilitating the exchange of information and access to services.

- SARA enables use of one or more of the services offered by authorities through the network, including:
- Validation of digital identities
- Verification of identity and residence data
- Changes of address
- Services of the Directorate General of Traffic



- Interconnection of electronic records
- Modelling of procedures
- Videoconference
- Voice over IP
- Collaborative environments

**NEREA network:** This is a network for the interconnection of local institutions of the autonomous community of Andalusia, which aims to simplify and promote the secure electronic exchange of information between the Government of Andalusia, the Local Authorities (Councils and County Councils) General State Administration and the European Union.

NEREA gives local authorities the possibility of linking or 'making visible' telematics services offered by one administration to any other administration integrated through this network. As an example, today there are 20 published applications from the State Government and the Government of Andalusia. These applications are immediately transferable to the organizations that join the NEREA network, and reciprocally, any application or service that an Andalusian local authority wishes to provide or share, can be offered through this medium.

### 4.3 Barriers to the development of e-government and e-participation.

Barriers to entry are defined as anything that prevents or hinders access to a new market, installation or implementation of improvements, viz., the difficulties faced by a private company or public body on entering or tackling new challenges.

The European Commission has identified a number of priority issues which should be subject to special monitoring in order to remove obstacles to the spread of e-government.

Below we list the barriers to accessibility or usefulness of electronic government and electronic participation in the current environment.

#### 1. Access for everyone

Ensuring that everyone has access to public services online is a precondition for the generalization of e-government. The issue is even more important given the obvious risk of a "digital divide" due to unequal access to information and computer technologies because of the lack of infrastructures, an aging society and especially the dispersion of the population (rural areas or the shortage of services). In this perspective, education and training are essential to acquire knowledge of the digital technologies necessary to fully exploit the services offered by e-government. Improved accessibility of services also involves the strengthening of the multi-



platform approach (access to services through different platforms: PCs, digital TV, mobile terminals, access points to public internet, etc.).

## 2. User confidence

Public services can only be offered online within a framework that ensures users have secure access. For this purpose, the confidentiality of personal data and security of transactions and digital communications are important aspects which must offer the utmost protection. This requires the promotion of technologies that protect privacy in e-government, in particular through appropriate community schemes. More generally, the security of information and networks and the fight against cybercrime and operating security are prerequisites for a sustainable information society, and hence constitute core political issues for the European Union.

## 3. Laws and Regulations

Public procurement is an area where particularly advantageous use of ICTs can be made. The traditional procurement operations are complex, time consuming and use up a lot of resources. Therefore, the use of ICTs in public procurement can improve efficiency, quality and the cost/effectiveness ratio of these contracts. The absence of clear common rules has until now been an obstacle for the development of electronic procurement in Europe.

Within this sphere we can list the following barriers:

- Recent policy issues related to electronic security, digital signature, data protection...
- Sometimes legal consultants and officials, because of their training and lack of experience in these matters, are wary of new systems.
- The technology framework advances faster than the regulatory framework.
- In general the procedures are designed according to the needs of the management bodies. There is no customer focus.
- In general, the procedures are not subject to continuous redesign seeking to make ICTs available to managers and citizens.

## 4. Social

At a social level there is insufficient extent or penetration of ICTs and, in particular, the Internet. However, this barrier is decreasing every day, although the Internet is not seen as anything more than an element of information and advertising.

There is no confidence in the means of electronic exchange. E-government projects require more guarantees of security than those given for traditional credit cards. There is widespread ignorance on the existence of e-government.



## 5. Corporations

No work has been carried out on systems integration or the development of corporate information and processing systems. There is thus an absence of clear institutional leadership; there is no customer focus.

The corporation sentiment towards the relationship with citizens is very low in Public Administration in general. Citizens are believed to know the structures and the information is made available in accordance with the structures. This situation is negative in providing information and makes it impossible to talk about electronic processing in many cases.

## 6. Lack of integration between Public Administrations

If internal collaboration and coordination (intra-integration) is difficult, cooperation and coordination between Administrations (extra-integration) is even worse. Integration between Public Administrations is required to enable electronic processing of certain administrative records, and many processes demanded by the public. In the case of Spain this integration becomes even more difficult because of administrative decentralization.

## 7. Technology

One of the major difficulties faced as a result of the computer system installed is related to the level of training of civil servants who have to work with this system. Computer experts agree that disparity in the speed of introduction and use of different computer tools by sections and divisions is due to the different capacities of staff working in these departments.

Age is a key element in the timing of introduction of new technologies: younger civil servants are those that adapt and manage the system more quickly, while the older ones appear to be more "resistant" to using the new procedures. While appreciating the qualities and performance of the systems installed, the lack of training for an important sector of municipal civil servants is one of the obstacles to optimum performance. The equipment situation is often very uneven across communities, which further hinders the interconnection of e-government between administrations.

## 8. Resistance to change

Resistance to change, derived from a culture rooted in the past by government workers, and the lack of an overview of the project are the most serious problems in dealing with a process of technological modernization, to the point that in some cases the development of new management solutions is hampered from an internal level, turning the project into a longer and more complex process than planned. The most complex part is the way in which the worker is supposed to work with these new technologies.



As a conclusion we can summarize the main barriers and obstacles to the implementation of new electronic tools as follows:

<b>Access for everyone</b>	The "digital divide" due to unequal access to information and computer technologies is the main technology barrier. Education and training are essential to acquire knowledge of digital technologies.
<b>User confidence</b>	The confidentiality of personal data and security of transactions and digital communications are important aspects which must offer the utmost protection.
<b>Laws and Regulations</b>	The absence of clear Community rules. Recent policy issues related to electronic security, digital signature, data protection... The technology framework advances faster than the regulatory framework.
<b>Social</b>	At a social level there is insufficient extent or penetration of ICTs and, in particular, the Internet. However, this barrier is decreasing every day, although the Internet is not seen as anything more than an element of information and advertising.
<b>Corporations</b>	No work has been carried out on systems integration or the development of corporate information and processing systems. There is thus an absence of clear institutional leadership; there is no customer focus.
<b>Lack of integration between Public Administrations</b>	The integration between Public Administrations is required to enable electronic processing of certain administrative records, and many processes demanded by the public.
<b>Technology</b>	One of the major difficulties faced as a result of the computer system installed is related to the level of training of civil servants who have to work with this system. Education, information and training in the use of technologies represent a major obstacle.
<b>Resistance to change</b>	The most complex part is the way in which the worker is supposed to work with these new technologies.

#### 4.4 Conclusions of the situation of e-government and e-participation

The world of the future is a global network, an interconnected world between citizens, businesses and administrations, which will increase efficiency, streamline processes and



ultimately be more competitive, eliminating barriers of space and time. The implementation of e-government is a priority for all governments of the most developed countries, there is total consensus that this is of vital importance to social development and economic growth.

Public administrations worldwide have faced a major challenge for years: to meet the expectations of their citizens and businesses, and the authorities themselves, particularly with regard to improved service and improved productivity. However, this goal remains unfulfilled for the vast majority of them.

The introduction of ICTs at the Administration significantly improves the quality of service to citizens and businesses, accessing government services in a more comfortable, faster way and at lower cost. Viz., the introduction of ICTs in government is important because the improvement on productivity impacts all economic sectors in question, although of course not all business sectors and not all companies benefit in the same way.

The development of different platforms that exist today largely facilitates the use of these electronic tools, in addition to the exchange of good practices between public administrations that already have these applications.

But not everything that surrounds e-government is positive. As expected, there are a number of barriers that hinder the full implementation of the tool in the user population: businesses, the public and administrations. These barriers include: accessibility for all users, user confidence and security, laws and regulations, social barriers, lack of integration between public administrations, technological barriers, etc.

It is therefore an essential task of local authorities to overcome these obstacles and offer citizens a better provision of services.



## 5. Internal analysis

The internal analysis will allow us to describe the characteristics of each partner, trying to establish a thorough analysis of their skills and abilities and their limitations in the development of tools for e-government and e-participation.

This section is vital as it allows the partners to be in a position to extract the maximum return on their potential, and reduce, as far as possible, the negative consequences of their weaknesses.

### 5.1 Partners and general characteristics

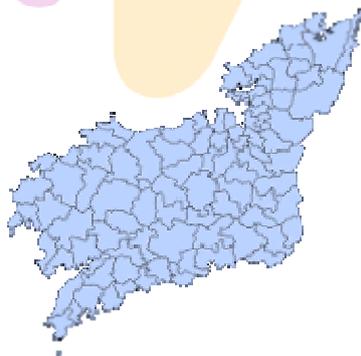
Before describing the current status of each partner, we have to perform a small definition of the tasks, objectives and functionality of each, to enable us to assess the approach that should be included in the electronic management tools that are beneficial overall.

The Parnet-TIC partner group comprises three county councils, a development institute, a city council, a municipal chamber in Portugal and a university in France.

The county councils represent the government and regional administration. It comprises the sum of the territories of the municipalities of a particular region.

**A Coruña County Council:** A local supramunicipal organisation, whose aim is to ensure the full and proper provision of municipal services throughout the regional territory. It is likewise responsible for coordination of local administration with the Autonomous Community and the State. It provides legal, economic and technical cooperation and assistance to local enterprises in its region; it provides supramunicipal and supra-district services; it cooperates in fostering economic and social development and in territorial planning; it mainstreams information on the EU and supports social participation.

#### **REGION OF A CORUÑA (SPAIN)**





**Huesca County Council:** Since the outset, Huesca County council has had two priorities: promoting the interests of the region, and attention to its constituent municipalities. And throughout its history it has exercised its duties in this regard pursuant to the possibilities available.

At present, its powers can be summarised as supporting provincial development through various schemes, in addition to helping the municipalities of the province, especially small towns, meet at least their basic purposes, also providing technical advice on many aspects.

**REGION OF HUESCA (SPAIN)**



**Almería County Council:** a public institution that provides direct services to citizens and renders technical, economic and technological support to the councils of the municipalities in the province of Almeria, in the autonomous community of Andalusia, Spain. It also coordinates and organizes some municipal services that go beyond the municipality.

**REGION OF ALMERÍA (SPAIN)**



**Lucense Institute of Economic and Social Development (INLUDES):** The Lucense Institute of Economic and Social Development (INLUDES) is a local autonomous body attached to the Lugo County Council and which has its own legal personality. INLUDES is a local technical decentralization body of direct management whose primary purpose is to promote economic and social development in the region of Lugo. It has the following powers:



1. Promotion and protection of the various sectors of the region.
2. Economic activities targeted at promotion, testing, outreach and support of public and private activities in different economic sectors in the region.
3. Studies on the potential economic and social development possibilities of the region.
4. Guidance on and promotion of investments, for the various economic sectors in the region.
5. Provide technical advice to agencies, businesses and individuals.
6. Disclosure of agricultural, fishing, mining and industrial possibilities of the region and promoting investments in these sectors.

**Lugo Council:** in charge of governing the city and the municipality of Lugo, the capital of the Galician province of Lugo, Spain.

**LUGO COUNCIL (SPAIN)**



**Municipal Chamber of Águeda:** The entity is the territorial government of the municipality of Águeda, performing the functions set out in legislation.

**MUNICIPALITY OF ÁGUEDA (PORTUGAL)**





**Pole Universitaire Européenne de Montpellier:** a public interest group (PIG) consisting of five universities in the region and territorial, local and regional authorities. It is a public body (subject to State control) which implements missions through its members. It has directed or co-directed a number of actions for the recovery of the international section of the universities in the region. It has acted as project coordinator or organizer in the fields of ICT, the insertion of newly qualified graduates, welcoming foreign students and researchers of scientific information. Elsewhere, it has managed a certain number of European, national and regional projects within the framework of this type of work. This body participates in the Parnet-TIC project only as a partner in the methodological design of the different actions of e-government and e-participation, and will therefore not implement any of the selected electronic proposals.

### MONTPELLIER (FRANCE)



#### 5.1.1 Specific analyses of the partners

To perform an analysis of the current status of the partners with respect to new technologies and tools of e-government, it was necessary to develop a questionnaire that would incorporate the strengths and weaknesses in terms of electronic tools.

The following are the aggregate results of e-government surveys carried out with partners. It maintains the same format of the questionnaire to facilitate the linking of information to the question asked.

#### Scope of the survey

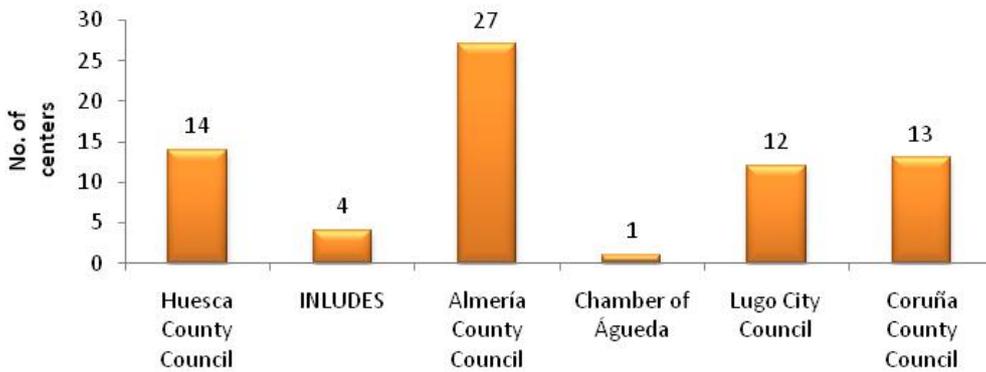
This analysis includes the responses of the following project partners:

- Huesca County Council
- INLUDES



- Almería County Council
- Chamber of Águeda
- Lugo Council
- Coruña County Council

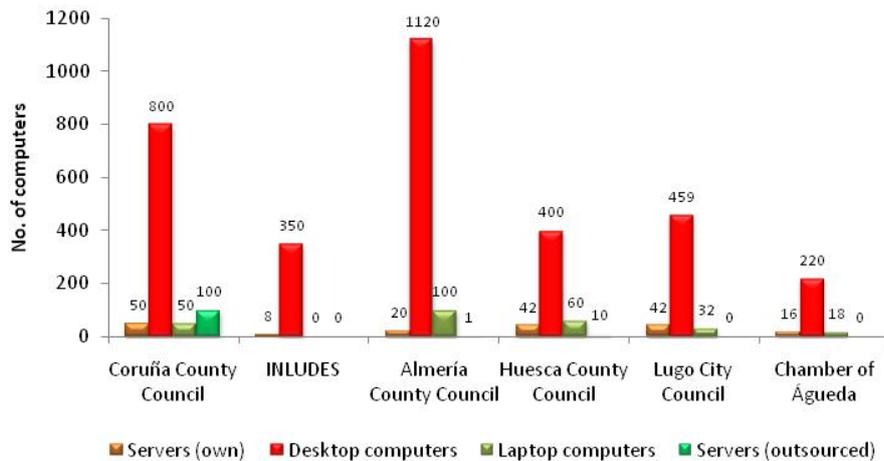
### ADMINISTRATIVE CENTRES OF PARTNERS



Source: Own compilation

IT Equipment

### IT EQUIPMENT



Source: Own compilation



All project participants have computers. There is a higher rate of desktop computers, with an average of 558 units per entity, within a range of 220-1120 units. Only 5 of the 6 participants noted the provision of laptops, within a range of between 18 and 100, and an average of 52 units.

Furthermore, all institutions have in-house servers, indicating an average of 30 within the range of 8-42 units and only three entities said they have servers at outside facilities. 1 in one case, 10 in another, and finally 100.

### Applications, programs and services

The following table allows us to evaluate the platforms, applications, programs and services that partners have. The Numbers Column distinguishes the number of partners that own them, while the NEEDS column shows the number of partners that require an improvement in such applications.

Electronic certification, custody of documents, electronic invoice and telematics certification are some of the tools used least of all by the partners.

We can also highlight that almost half of the partners that have an application or tool suggest an improvement in this field. For example, 4 of the 6 partners involved have a telematics record and the same 4 partners need to improve, acquire/use or change this tool.

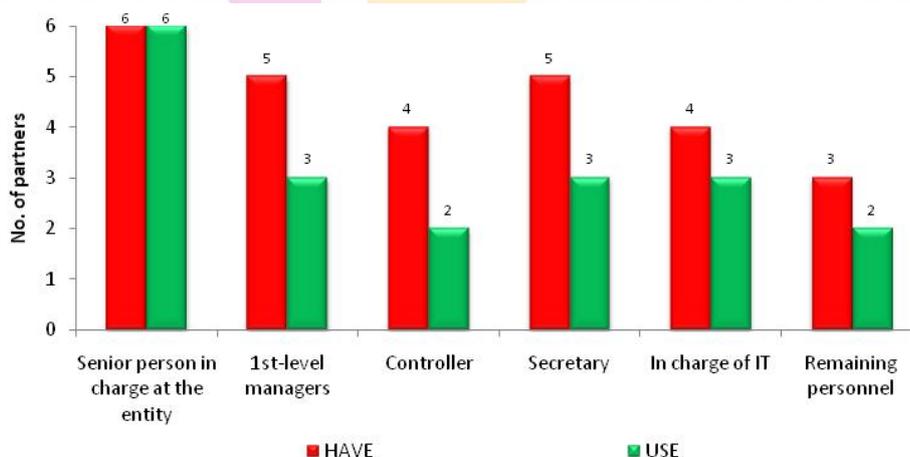
Platform and Administration	No.	TRADE NAME	NEEDS
1. Telematics record	4	Own development, Own development in open source software, Internal, Aries.	4
2. Management / Access to records	5	SIGEM, Tricprocidin and Atendimento, SGPA / XUNTA DE GALICIA / ALTIA CONSULTORES, Wanda	2
3. E-signature platform	5	ASF, @Firma, Unspecified, Camefirma	2
4. Electronic notifications	4	Own development, Virtual office, notifications platform of CORREOS.ES, for the Official Journal (BOP), Sysnot.	2
5. Electronic authentication	1	Fibidoc	3



6. SMS platform	5	Official announcement of internal acts, unspecified Atendimento, Telefónica, Movistar	2
7. Document manager	4	SIGEM, TicDoc - Alfresco – Notes, Arquivo Documenta	2
8. Electronic filing	3	Own development, Alfresco and Arquivo Documental	3
9. Custody of documents	1	Notes-Alfresco	4
10. Electronic invoice	1	Under development	3
11. Attach documents.	1	Facilitator - Notes - Telematics Record	3
12. Payment using electronic means	4	ASF platform, Free software (Cuaderno 60, Multientidad), Payment platform of Red.es, Caixanova and CaixaGalicia Gateway	2
13. Citizens folder	2	Unspecified	1
14. E-procurement platform	3	Under development, partial use in the supply of classified goods, Vortal, Wanda	1
15. Telematics certification	1	@firma	3

### Digital certificates

**People who have a digital certificate to exercise their functions within the institution and who use it.**



Source: Own compilation



	Chairman		Senior executive level		Controller		Secretary		In charge of IT		Remaining personnel	
	Has	Uses	Has	Uses	Has	Uses	Has	Uses	Has	Uses	Has	Uses
<b>A Coruña County Council</b>	YES	YES	YES	NO	NO	NO	YES	YES	NO	NO	NO	NO
<b>INLUDES</b>	YES	YES	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES
<b>Almería County Council</b>	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
<b>Huesca County Council</b>	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	NO	NO
<b>Lugo City Council</b>	YES	YES	YES	NO	YES	NO	YES	NO	YES	NO	NO	NO
<b>Chamber of Águeda</b>	YES	YES	YES	YES	YES	NO	YES	NO	YES	YES	YES	NO

As can be seen, the use of digital certificates is rather limited, only in the case of the County Councils of Almería and Huesca do all staff have and use the electronic signature. In the rest of the project partner administrations, only the Chairman has and uses the electronic signature; other personnel either do not have it or have it but do not use it. All administrations therefore reveal a weakness whereby only half of personnel with a digital certificate use it.

#### Entity's website

The 6 partners have an official website. The URLs are shown below:

[www.dphuesca.es](http://www.dphuesca.es)

[www.deputacionlugo.org](http://www.deputacionlugo.org)

[www.dipalme.org](http://www.dipalme.org)

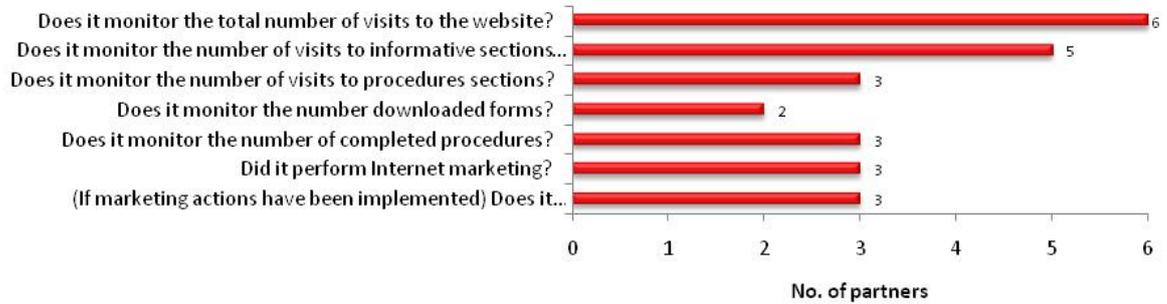
[www.cm-agueda.pt](http://www.cm-agueda.pt)

[www.dicoruna.es](http://www.dicoruna.es)

[www.lugo.es](http://www.lugo.es)



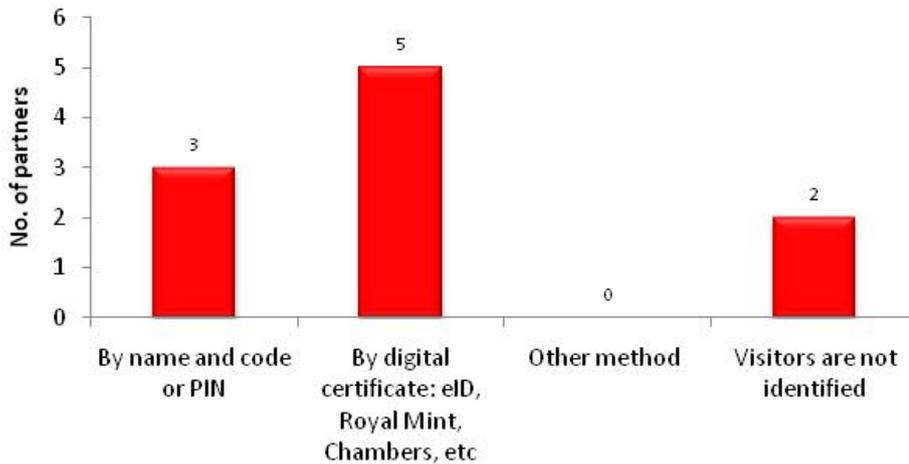
**Activities carried out with their website and Internet channel.**



Most partners (except INLUDES) monitor the number of total hits and the total number of visits to informative sections.

As far as monitoring the number of visits to sections on procedures, number of forms downloaded or completed transactions, control varies from partner to partner. With regard to Internet marketing, only three partners state that they carry out marketing: INLUDES, Lugo County Council and the City of Lugo.

**Identifies and authenticates their web visitors to ensure secure Internet procedures.**



Source: Own compilation



	By name and code or PIN	Digital certificate	Other method	Not identified
<b>A Coruña County Council</b>	YES	YES	NO	NO
<b>INLUDES</b>	NO	NO	NO	YES
<b>Almería County Council</b>	NO	YES	NO	YES
<b>Huesca County Council</b>	YES	YES	NO	NO
<b>Lugo City Council</b>	NO	YES	NO	NO
<b>Chamber of Águeda</b>	YES	YES	NO	NO

#### Specific procedures provided via Internet

To assess the specific procedures that each partner provides through Internet it was necessary to describe a series of information-interaction levels, percentage of level 4 procedures processed electronically over the total handled by any channel, other channels (SMS, phone, DTT etc.) through which services level > 1 services are provided, recipient of these services: Companies (EC - end company, BA – Business Agent), Government (HR - Higher Range, LR - Lower Range, SR - Same Range).

Levels	Description of the 'levels of interaction' through the website
0	It offers <u>no information</u> on management or service on the web
1	It provides <u>an overview</u> of how management or service is performed
2	It allows <u>downloads</u> or <u>generic forms</u> to be requested
3	It allows you to <u>send</u> , update or query <u>personalised individual</u> information (identification required)
4	It allows full management or service, including payment orders (identification required)



Procedures for CITIZENS									
	COMPETENCE	INTERACTION LEVEL					USAGE % LEVEL 4	Other channels with >1 level	Eligibility
		0	1	2	3	4			
Taxes and levies	5		1			4	10		
Presentation of civil service jobs	6	1	1			4	80		
Grant applications, subsidies, scholarships, etc.	5		1	2		2	10		
Complaints and suggestions	6	1	1	1	1	2	5		
Queries made to the library catalogue	4	1	1	1		2	10		
Obtaining certificates	4	1	1			2			
Registration (courses, activities, services, etc,...)	6	2	3			1			
Registration with registers	5		2	2		1			
Requests for appointments, etc.	3	2	1						
Register of documents	6	2	1	1		2			
Consultation and monitoring of the management of cases	5	1	1	2		1	10		

Source: Own compilation



Procedures for COMPANIES									
	COMPETENCE	INTERACTION LEVEL					USAGE % LEVEL 4	Other channels with >1 level	Eligibility
		0	1	2	3	4			
Taxes and levies	5		1			4	10		EC
Obtaining certificates	6	2	1	2		1			EC
Requesting and obtaining authorizations	5	2	1	1		1			EC
Registration with registers (companies, activities, etc.)	6	1	2	2		1			EC
Grant applications, subsidies, etc.	6	1	2		1	2	10		EC
Calls for tenders	6	1	2	1	1	1	80		EC
Preparing and signing agreements	6	2	2	2					EC
Consultation and monitoring of the management of cases	5	2		1	2		20		

Source: Own compilation

Procedures for ADMINISTRATIONS									
	COMPETENCE	INTERACTION LEVEL					USAGE % LEVEL 4	Other channels with >1 level	Eligibility
		0	1	2	3	4			
Grant applications, subsidies, etc.	5	1	1		1	2	10		2 LR
Certificates for authorities	6	2	2		1	1			A; LR
Requesting and obtaining authorizations	5	2	2			1			A; LR
Register of documents	6	1	2	1		2			A; LR
Consultation and monitoring of the management of cases	5	1	2	1		2	80		LR

Source: Own compilation

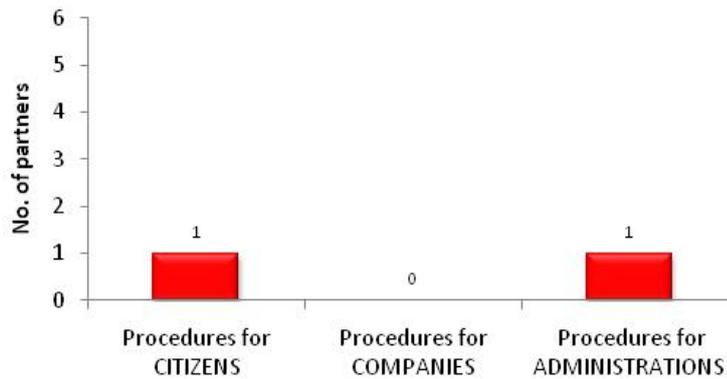


In conclusion, the Almería County Council offers an electronic processing level higher than the remaining partners; offers the public six of the consulted procedures with level 4 interaction (complete management or service including payment).

As for the procedures targeted at the public, the Huesca County Council offers three level 4 procedures and one level 3 procedure for electronic processing targeted at the public. A Coruña County Council offers electronic processing for two level 4 procedures and two level 3 procedures targeted at the public. INLUDES only offers one level 2 procedure and nothing for the remainder. The Chamber of Águeda offers one level 2 procedure and remaining procedures with level 1 of interaction.

Lastly, regarding the procedures for companies and administrations, the results are very similar between the partners.

**Previous procedures of level 5: Entities that offer the user a personalized and automatic service without the user requesting it.**



Source: Own compilation

Only the A Coruña County Council has a proactive procedure (level 5 interaction) aimed at citizens and government, viz., personalized and automatic without user request.

**Procedures catalogue**

With regard to the existence of a procedures catalogue related to the formalities available for the public, businesses and organizations, it must be said that only three of the six organizations questioned offer this. The total number that have one ranges from a low of 16 to an estimated 700, figures that are equivalent to the number of procedures offered by the entity.



At the 3 institutions that have the catalogue: Almería County Council, Huesca County Council and the Chamber of Águeda, this is accessible online by the public. Updating is done centrally and information is available on internal procedures that are not available to citizens.

Only one of the three aforementioned entities offers information segmented by type of user (citizen, company, organization).

### Services provided through the normal procedure

For the study of the procedures or services provided through the institution's traditional method it was necessary to prepare a comparative table which specifies:

1. Procedure (1 - Go directly to the institution, 2 - Telephone, 3 – Others);
2. Percentage with regard to the same service provided electronically (0% = only electronic, 100% only traditional method);
3. Recipient: Companies (EC - end company, BA – Business Agent), Government (HR - Higher Range, LR - Lower Range, SR - Same Range, A – All)

Procedures for CITIZENS							
	Competence	Channels (1/2/3)			% regard to electronic	with	Recipient
		1	2	3			
Taxes and levies	6	2	0	1	1 of 80%; 1 of 100%		
Presentation of civil service jobs	6	3	0	2	2 of 100%		
Grant applications, subsidies, scholarships, etc	6	3	0	2	1 of 80%; 1 of 90%		
Complaints and suggestions	6	1	1	3	1 of 50%; 1 of 95%		
Queries made to the library catalogue	4	1	1	2	1 of 95%		
Obtaining certificates	6	4	0	1	2 of 100%		
Registration (courses, activities, services, etc.)	5	3	0	1	2 of 100%		



Registration with registers	6	3	0	2	1 of 75%; 1 of 100%	
Requests for appointments, etc.	3	1	0	1		
Register of documents	5	2	0	2	1 of 100%	
Consultation and monitoring of the management of cases	6	3	0	2	1 of 80%; 1 of 100%	

Source: Own compilation

Procedures for COMPANIES						
	Competence	Channels			% with regard to electronic	Recipient
		1	2	3		
Taxes and levies	5	2		2	Only 1 authority answered and indicated 100%	2 authorities indicated an End Company
Obtaining certificates	6	3		2		
Requesting and obtaining authorizations	6	3		2		
Registration with registers (companies, activities, etc.)	6	3		2		
Grant applications, subsidies, etc.	6	2	1	2		
Calls for tenders	6	2	1	2		
Preparing and signing agreements	6	3		2		
Consultation and monitoring of the management of cases	6	3		2		

Source: Own compilation



Procedures for ADMINISTRATIONS						
	Competence	CHANNELS			% with regard to electronic	Recipient
		1	2	3		
Grant applications, subsidies, etc.	5	2		2		LR (3)
Certificates for authorities	5	2		2		LR (1); A (2)
Requesting and obtaining authorizations	5	2		2		LR (2); A (1)
Register of documents	6	3		2	1 of 100%	LR (1); A (2)
Consultation and monitoring of the management of cases	6	3		2	1 of 100%	A (1); LR (2)

Source: Own compilation

In short, all partners offer the traditional method in proceedings that fall within their jurisdiction.

- For the public:
  - The most common system is to visit the institution in person: in just one procedure 50% of the total is used, and in the remaining procedures between 80-100% is used.
  - Call centre is only offered by one partner for two procedures.
  - Others (understood to include e-processing) is the second most offered system, although its use is limited.
- For companies (only one entity designated the % of use, so the interpretation of data is limited):
  - The most common system offered by partners is to visit directly.
  - Call centre is only offered by one partner for two procedures.
  - Others (to include e- processing) is the second most popular.



- For the administrations (only one entity designated the % of use for two procedures, so the interpretation of data is limited):
  - The most common system offered by partners is to visit directly.
  - There is no call centre.
  - Others is the second most offered.

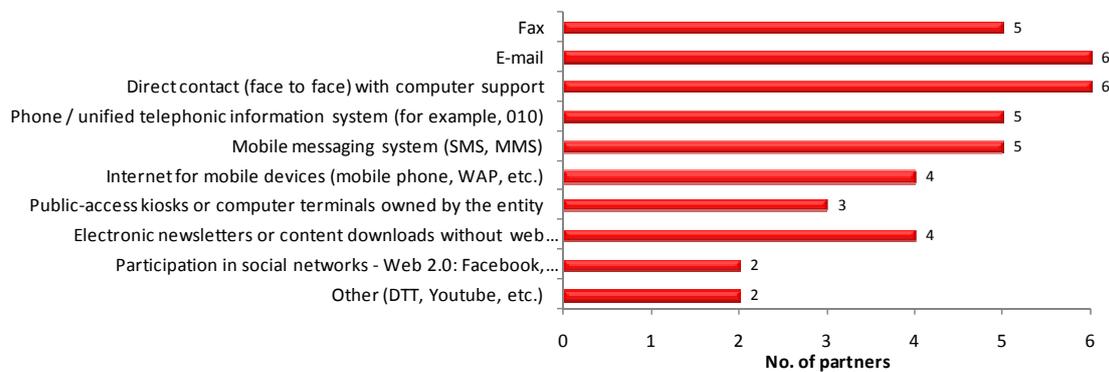
Although the interpretation of the data is limited by the lack of a response, we can state that electronic processing is a system that has a rather limited use at partner entities.

We therefore propose to develop a training and information plan for the implementation of e-government targeted at:

- Government personnel
- The public
- Companies

Communication and participation of citizens

**Channels of communication with the public.**



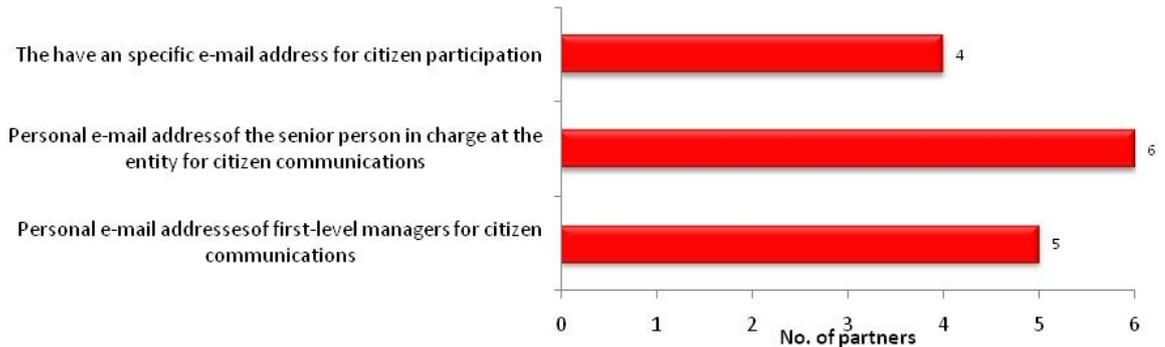
Source: Own compilation

From the information provided we can say that all the partners, to a greater or lesser extent, have communication channels targeted at the public, where traditional methods have greater presence in the provision of such services and where social networks represent the least used channel.



**Communication activities and mechanisms (via web or e-mail) available so that citizens or social groups can participate in the entity.**

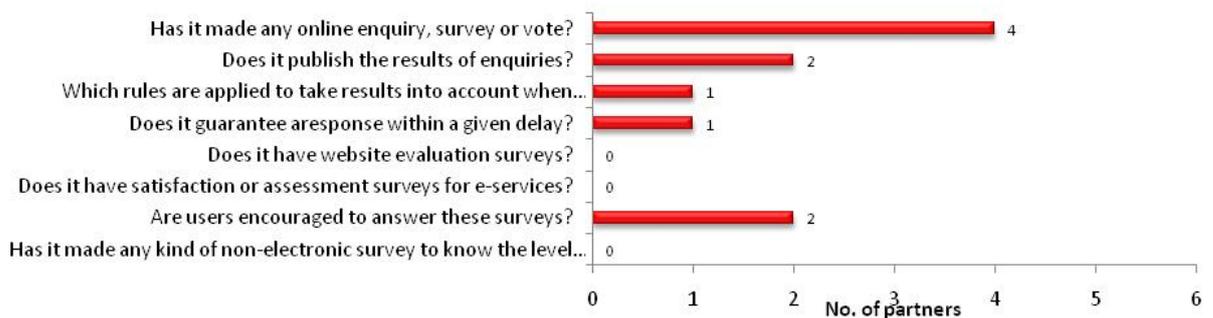
**E-mail for citizen participation**



Source: Own compilation

The Almería County Council and the Chamber of Agueda are the only partners who have no specific e-mail for citizen participation. We therefore propose that all partners should set up an e-mail address for the public as an input and participation channel.

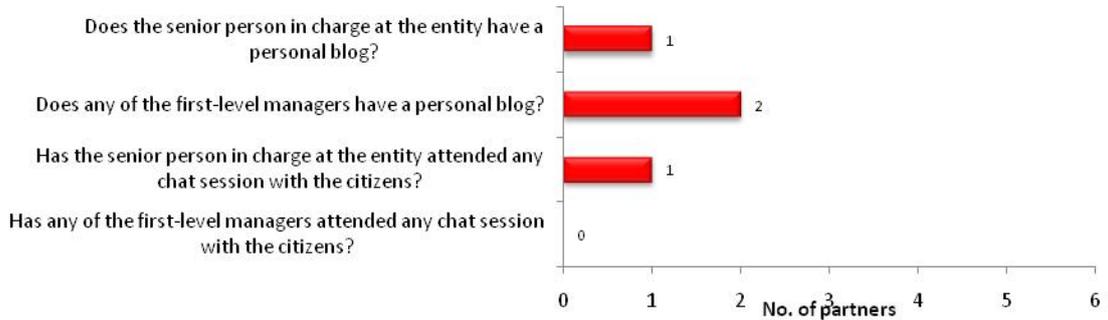
**Inquiries, surveys or polls**



Source: Own compilation

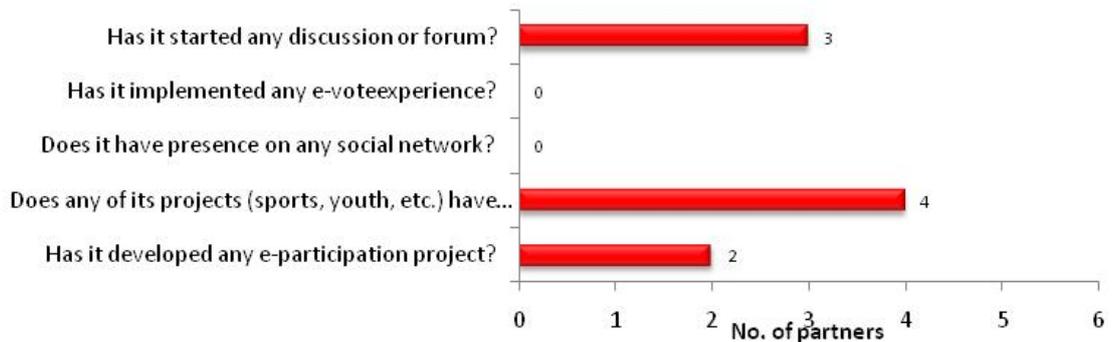


### Blogs and chats



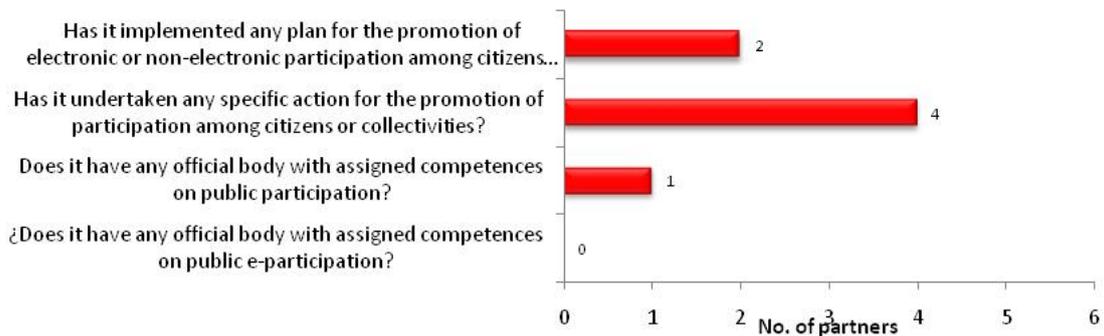
Source: Own compilation

### Other channels



Source: Own compilation

### General framework of electronic and traditional (non-electronic) participation



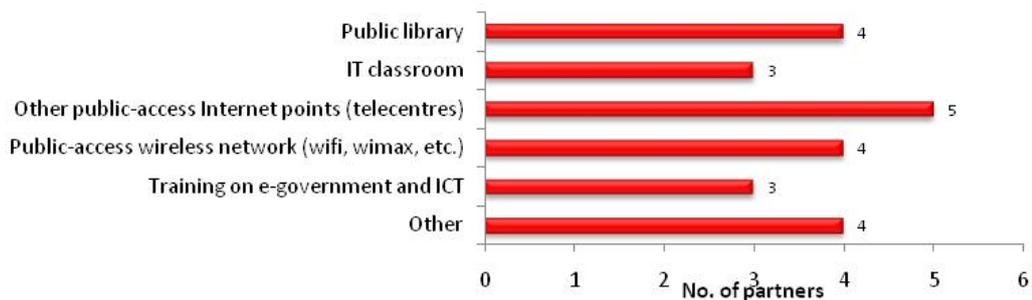
Source: Own compilation



As to the mechanisms of communication with citizens, it should be stressed that four partners have made an inquiry, survey or poll to motivate public participation. However, only two have published the results, only one has taken into account results for decision making and only one partner that has performed any consultation or survey guarantees a response within a specified deadline.

The City Council of Lugo and the Chamber of Águeda have a plan to encourage participation; A Coruña and Huesca County Councils have carried out specific actions to encourage participation. However, no partner has provided satisfaction surveys on their websites.

### Public services provided by the entity



Source: Own compilation

In this case it should be noted that the Almería County Council is the only partner that provides all the services consulted. As a result, an important aspect of improvement for the other partners is carrying out information campaigns and specific training on access to Internet, Intranet, electronic processing targeted at:

- Staff of the entity
- The public
- Companies
- Administrations
- Promotion of computer rooms as knowledge centres

### Citizen Profiles

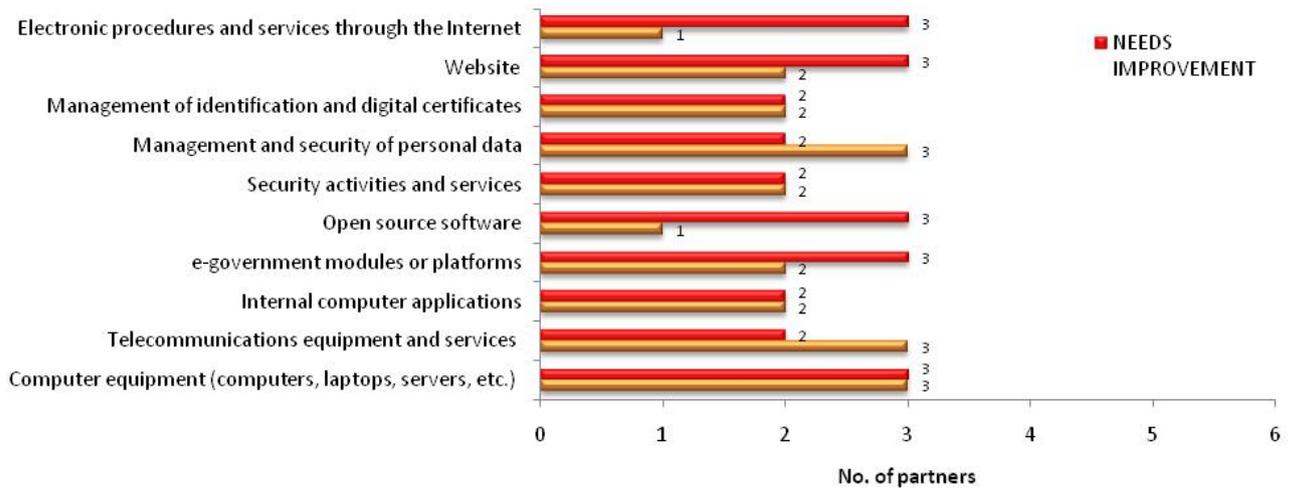
An analysis of the responses provided by the partners to establish the profile of the user accessing the services provided through Internet and those provided through traditional methods shows that we have a Spanish citizen (male or female) with an average mean age of between 30 -65.



Actions / improvements

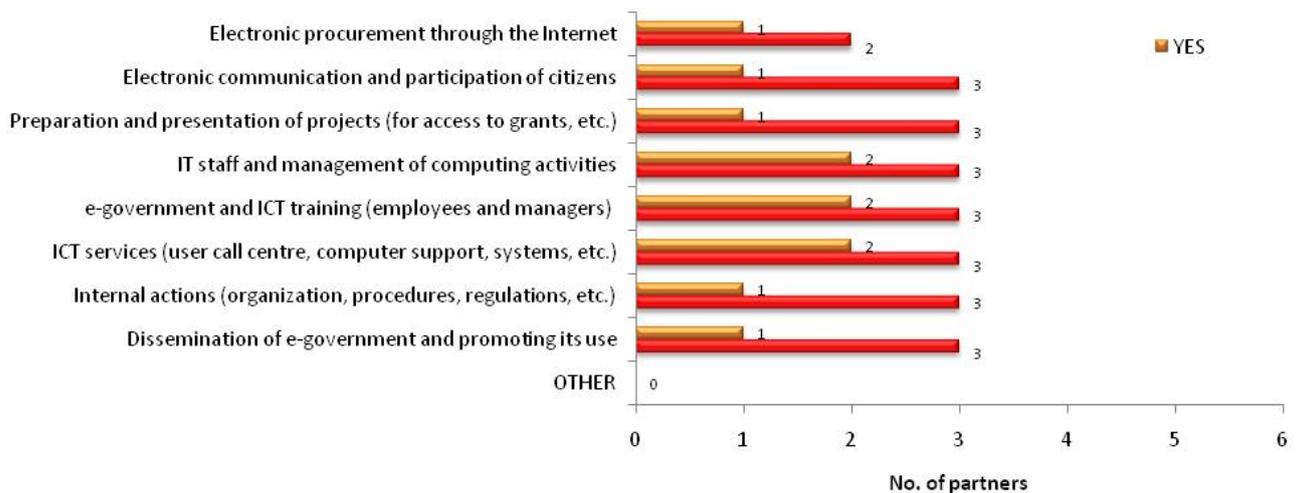
In order to make an initial assessment of the measures necessary for the improvement of e-government at each partner, a list was compiled with a series of e-government procedures to assess the current situation with respect to the performance area, whether or not these have been developed, and the timescale within which improvement actions should be undertaken.

Areas of actions and improvement



Source: Own compilation

Areas of actions and improvement



Source: Own compilation



Areas of actions and improvement	CURRENT SITUATION			Needs	Period (years)		
	NO	PARTIALLY	YES		1	2	3-4
Computer equipment (computers, laptops, servers, etc.)	2	1	3	3	1	0	1
Telecommunications equipment and services	1	2	3	2	2	0	0
Internal computer applications	1	3	2	2	2	0	0
e-government modules or platforms	3	1	2	3	2	0	0
Open source software	2	3	1	3	2	0	0
Security activities and services	2	2	2	2	2	0	0
Management and security of personal data	1	2	3	2	2	0	0
Management of Identification and digital certificates	2	2	2	2	2	0	0
Website	2	2	2	3	2	0	0
Electronic procedures and services through Internet	3	2	1	3	2	0	0
Electronic procurement via Internet	3	2	1	2	2	0	0
Electronic communication and participation of citizens	4	1	1	3	2	1	0
Preparation and presentation of projects (for access to aid, etc.)	2	3	1	3	2	1	0
IT staff and management of computing activities	3	1	2	3	2	0	0
e-government and ICT Training (employees and managers)	3	1	2	3	2	1	0
ICT services (user call centre, computer	3	1	2	3	3	0	0



Areas of actions and improvement	CURRENT SITUATION			Needs	Period (years)		
	NO	PARTIALLY	YES		1	2	3-4
support, systems, etc.)							
Internal actions (organization, procedures, regulations, etc.)	3	2	1	3	3	0	0
Dissemination of e-government and promoting its use	3	2	1	3	3	0	0
OTHERS	6	0	0	0	0	0	0

Source: Own compilation

The most outstanding actions by partners include the addition of computer equipment, open source software, digital certificates, web site enhancement and development of projects to access aid. These are the key actions presented and which can be implemented almost immediately.

Thus 5 of the participating partners in the project believe that improving telecommunications services, internal IT applications, and managing the security of personal data is vital for the proper functioning of their administrations.

Having assessed whether they have the different actions of e-government, each partner had to prioritize 5 main actions that the entity would currently face in areas of e-government, where level 1 was the most important and 5 the least.

Below we present, in order of importance, the 5 most important actions considered by each partner.

LEVEL OF PRIORITISATION	ACTIONS IDENTIFIED
1	<ul style="list-style-type: none"> <li>Issues related to document management, long-term electronic archiving and processing digital documents.</li> <li>Implementation of e-government at the Entity.</li> <li>Standardization of administrative processes (re-engineering).</li> </ul>



	<ul style="list-style-type: none"> <li>• To have the municipal services available in the web services.</li> <li>• Records management.</li> </ul>
2	<ul style="list-style-type: none"> <li>• Citizens folder (this project is expected to begin in 2010).</li> <li>• Staff training in ICT and e-government.</li> <li>• Promote electronic payment.</li> <li>• Boosting participation of the public.</li> <li>• Electronic invoice.</li> </ul>
3	<ul style="list-style-type: none"> <li>• Dissemination of e-government both among staff and among the public.</li> <li>• Incorporation of the mobile channel as a mechanism for communication with the public and municipalities and generally expand multi-channel services.</li> <li>• Enhance processing capability.</li> <li>• Simplify the institutional site.</li> <li>• Electronic procurement.</li> </ul>
4	<ul style="list-style-type: none"> <li>• Implement the measures necessary to ensure security.</li> <li>• Integration of all user support mechanisms (telecentre users, internal users of applications, users of the municipalities) and unification of tools.</li> <li>• Enhance storage capacity.</li> <li>• Develop a network to improve connectivity in the area.</li> </ul>
5	<ul style="list-style-type: none"> <li>• Improve security and availability of systems (creating a contingency centre).</li> <li>• Enhance communications capacity.</li> </ul>

Source: Own compilation on the basis of data supplied by partners in the survey

### Staff, human resources and ICT budget of the entity

Below is the budget. This budget is totally and specifically the one to be used for ICT tools of each partner. The data supplied is for the 2009 budget that each entity had.



Entity Name	Total Annual Budget (€)	Annual budget (€)	ICT	% of the Total Budget
A Coruña County Council	144,000,000	3,000,000		2.08%
INLUDES*	14,007,000	3,474,000		24.8%
Almería County Council	206,500,000	1,500,000		0.73%
Huesca County Council	83,000,000	3,290,000		3.96%
Lugo City Council	92,000,000	1,500,000		1.63%
Municipal Chamber of Águeda:	39,580,000	Unspecified		-

\* This amount includes the budget provided for the INNOVATE project

The total budget ranges between 14 million and 206 million euros, with an average of 123 million, while only 5 of the participants specified the budget for information and communication technologies, with an average of 2 million euros and range of 1.5 to 3.4 million euros.

Five of the six entities have specific persons in charge, most of whom hold managerial positions.

ICT HIERARCHICAL RANKING	No. of ENTITIES
Senior Person in charge at the Entity	1
Executive Manager	4
Middle Manager	1
Administrative Personnel	0

### General conclusions of the survey

The allocation to IT equipment at all partners is quite adequate. Only two members expressed the need to upgrade their computer equipment. However, it would be necessary to analyse:

- Equipment technical features
- Services provided by each entity
- Internal organisation of the entity
- Human resources devoted to ICT



All partners have websites. However, these are mainly informative websites, offering minor advances in administrative issues and, in most cases, without any real electronic processing. The minimum requirements for electronic processing have not really been put in place:

- The use of digital certificates is limited.
- Although some partners say they have a catalogue of procedures, the range is highly variable, and in some cases is too big.
- Only two partners say they have a high level of staff dedicated to this issue.

With regard to information on web usage and the features available:

- Monitoring the number of total visits, to informative sections, to procedures sections and to downloaded forms varies from partner to partner. There is no protocolised procedure that can be analysed to obtain information.
- Only one partner carries out online marketing.

All partners, to a greater or lesser extent, have communication channels targeted at the public, although not all institutions have e-mail for citizen participation.

Only two entities have a plan to encourage participation; no partner offers satisfaction questionnaires and participation in social networks is rarely used. All this indicates that the usage level of citizen participation is very limited and governments are tasked to define content for the promotion of participation, define procedures, provide transparency to the process by providing security and raising user confidence.

The partners claim that the five most important actions they should undertake for the implementation of e-government are:

- Issues related to document management, long-term electronic archiving and digital document processing.
- Implementation of e-government at the Entity.
- Standardization of administrative processes (re-engineering).
- To have the municipal services available in the web services.
- Records management.

The project partners are clear that the introduction of electronic processing is the goal to be achieved, leading to a number of improvements and simplification in administrative procedures that will result in models of transparency, efficacy and management efficiency.



### 5.1.2 Good practices of partners

In various meetings and committees held to coordinate the project, the partners have specified some good practices developed by each of them:

- ✓ A Coruña County Council: Set-up of SIGEM in 15 procedures for all City Councils (except the large ones).
- ✓ INLUDES: Innovate Project which will shortly disclose results of e-government implementation.
- ✓ Huesca County Council: Support the deployment of services to reach very small municipalities that do not have sufficient infrastructure or HR.
- ✓ Almería County Council: Citizen Folder and proposed infrastructure and services for virtually every municipality in the province.
- ✓ Lugo City Council: Implementation in rural locations and Web 2.0 tools. Electronic procedures using multiplatform delivery systems. Forthcoming citizen card project.
- ✓ Municipal Chamber of Águeda: Implementation of e-government very high with an application of “zero paper”. Services like Agueda.tv Set up very quickly through political support.
- ✓ Communauté d'Agglomération Pau Pyrénées. Single citizen and family folder that serves as a repository for the formalities they carry out.

These projects are shown in more detail below:

- **A Coruña County Council. Set-up of SIGEM in 15 procedures for all City Councils (except the large ones).**

The project aims to implement the SIGEM e-government system in 84 municipal councils around A Coruña. This is an initial stage in which three procedures will be implemented by each municipality. Subsequently, a second stage will complete this ambitious project through full implementation of inventory management processes of local councils, including electronic processing.

SIGEM is the Integrated Municipal Management System, designed with the objective of promoting the presence of the local councils and county councils on the Internet and promoting the provision of online services. Its implementation launches a series of key features throughout



Local Administrations, which guarantee citizens and businesses the right to interact electronically with these government agencies. For this right, recognized in the recent Law on Citizens' Electronic Access to Public Services, to be really guaranteed, the solution implemented must address issues to ensure that electronic processing has the same validity and effectiveness as that given to acts carried out in person and on paper. These aspects are the requirements for: authentication, viz., accreditation of the identity of the parties, confidentiality of data exchanges, content integrity of documents, non-repudiation, secure time reference. All these conditions require the use of digital certificates and encryption techniques.

In addition, the SIGEM project has a second objective, the creation of structures for cooperation between various administrations, allowing the exchange of information among agencies, so that the citizen does not have to provide data and information already held by any other authority, without compromising the confidentiality or obligations concerning the protection of personal data. As a result, one of the commitments of the municipalities involved in the project is the maintenance of a range of online services that match the existing demand. SIGEM, a set of tools that allows the lifecycle of a document to be managed at a local authority, includes the following steps: 1. A document is recorded. The registration module enables documents in electronic format to be attached; the electronic stamping of documents; the search/retrieval and storage of records, electronic authentication, etc. Elsewhere, the electronic processing module includes the following services: telematics registration, electronic payment, electronic certification and telematics notification. 2. A file is opened and processed in the Management Units. 3. The file includes the signing, payment and notification processes. As for case management, it simplifies and streamlines the administrative processes that are handled at local authorities, and includes a catalogue of procedures, for modelling procedures and the design of stages and steps; a "workflow" engine for the distribution, management and monitoring of the case; a processing environment, which is the "visible face" of records management for users, as well as a publishing environment that informs the citizen of the status of their files. 4. Once the formality is finalised, the file is saved in an archive, in accordance with archiving standards. Benefits for citizens. However, SIGEM allows the citizen to apply online for subsidies, aid or licences, make payments, receive news on the status of their application, information about the lack of any document and instructions on how to attach it, and then finally receive notification of the result of their efforts. A Coruña County Council thus addresses an ambitious programme which will introduce e-government in the region's municipalities.

- **INLUDES.**

The Innovate Project aims to use e-government to promote technical and cultural developments that places Lugo as a territory that is fully inserted into the Information Society, while promoting social and territorial cohesion and contributing to the generation of a knowledge economy as the basis for economic and social progress to achieve higher levels of welfare for the entire population. This project is funded 70% by the ERDF and 30% by INLUDES.

The project aims to act as an engine for growth and employment in the province of Lugo, promoting the application of ICT in productive, social and public services to satisfy a number of purposes, such as generating strategic development of a competitive and dynamic economy



based on intellectual capital and knowledge and the breakdown of social and regional divides through the creation of a scenario of equal opportunities in the Information Society.

1. The Innovate Project targets a series of challenges such as:
2. Job creation.
3. Social integration.
4. Development of the knowledge economy.
5. Strengthening equal opportunities.
6. Increasing business competitiveness.
7. Improving public participation in local affairs.

The priority of this project is to bring new technologies to the rural population where penetration is traditionally lower, as well as to social groups such as women and the elderly, trying to make them partakers of all the benefits that local services and remote and virtual access will provide.

The area covered by the Innovate Project includes 66 municipalities in Lugo, except Lugo itself.

#### Functional areas of operation

1. Provision of infrastructures and technological applications in the area of the municipalities of Lugo province.
2. Implementation of e-government at Lugo County Council.
3. Plan to promote and mainstream the Information Society.

All proposed actions involve the deployment of equipment and infrastructures that will enable citizens to interact with the government, driven by improved local services to be offered through new technologies.

- **Huesca County Council.**

Support the deployment of services to reach very small municipalities that do not have sufficient infrastructure or HR.

- **Almería County Council**

Citizen folder and proposed infrastructure and services for every municipality in the province.

The citizens folder offers a guide to services and procedures with a folder that is identified by the procedure to be carried out.



- **Lugo City Council**

Implementation in rural locations and Web 2.0 tools. Electronic procedures using multiplatform delivery systems. Forthcoming citizen card project.

The citizens folder comprises:

1. A private folder, which allows you to view the status of bills and to pay these.
2. Access to all procedures, where you can record documents in the general records of the council as if this had been carried out personally. You can attach text documents, images or drawings with the application.

Most frequent procedures:

1. Census
2. Registration certificate
3. Certificate of registration of deceased persons.
4. Registration note
5. Sports
6. Bills: Payment of invoices

- **Municipal Chamber of Águeda:**

The website provides continuous municipal television broadcast with a menu.

Zero paper: Offers a number of fairly complete series of online administrative procedures:

1. Water
2. Cemeteries
3. Bylaws
4. Tax
5. Fairs and markets
6. Housing
7. Leisure
8. Payments
9. Advertising
10. Town planning

### 5.1.3 Customer vision

Here it is necessary to emphasize that not only is it important to know the current status of partners with regard to electronic tools, but also to assess those that make use of these



authorities, users that are the target of the solutions and proposals that Parnet-TIC aims to develop and implement at partner administrations.

Below we present results for the questionnaire provided to users of the websites of partners in order to assess the service provided online by the entity, and to determine the profile and needs of these users.

**CUESTIONARIO DE EVALUACIÓN DEL SERVICIO.**

**1- ¿Cómo valora el servicio prestado por nuestra entidad de manera electrónica en los siguientes aspectos?**  
(1- Muy Malo, 2- Malo, 3-Bueno, 4-Muy bueno, 5-Excelente)

- **Sencillez (Facilidad de navegación entre las diferentes pantallas de la web)**

1	2	3	4	5
<input type="checkbox"/>				

- **Rapidez (No es necesario introducir información de manera reiterativa o excesiva)**

1	2	3	4	5
<input type="checkbox"/>				

- **Disponibilidad (Está disponible siempre el servicio, no existen problemas de saturación, mantenimiento,...)**

1	2	3	4	5
<input type="checkbox"/>				

- **Utilidad (Utilidad de prestar este servicio de manera digital,...)**

1	2	3	4	5
<input type="checkbox"/>				

- **Valoración Global**

1	2	3	4	5
<input type="checkbox"/>				

The items analysed in this survey were:

- Simplicity: Ease of navigation between different screens on the web.
- Speed: No need to enter information in a repetitive or excessive way.
- Availability: The service is always available, there are no congestion or maintenance problems.
- Utility: Utility of providing this service digitally.
- Overall assessment.



Each item has been rated with five scores:

- Very poor (1)
- Poor (2)
- Good (3)
- Very good (4)
- Excellent (5)

The analysis is based on the negative evaluation (very poor and poor) compared to the extremely positive evaluation (very good and excellent), weighed up against the intermediate assessment.

We analyzed a total of 93 surveys from the Almería County Council, the Municipal Chamber of Águeda and the A Coruña County Council.

	No. OF RESPONSES
ALMERÍA COUNTY COUNCIL	48
MUNICIPAL CHAMBER OF ÁGUEDA	17
A CORUÑA COUNTY COUNCIL	28
<b>TOTAL</b>	<b>93</b>

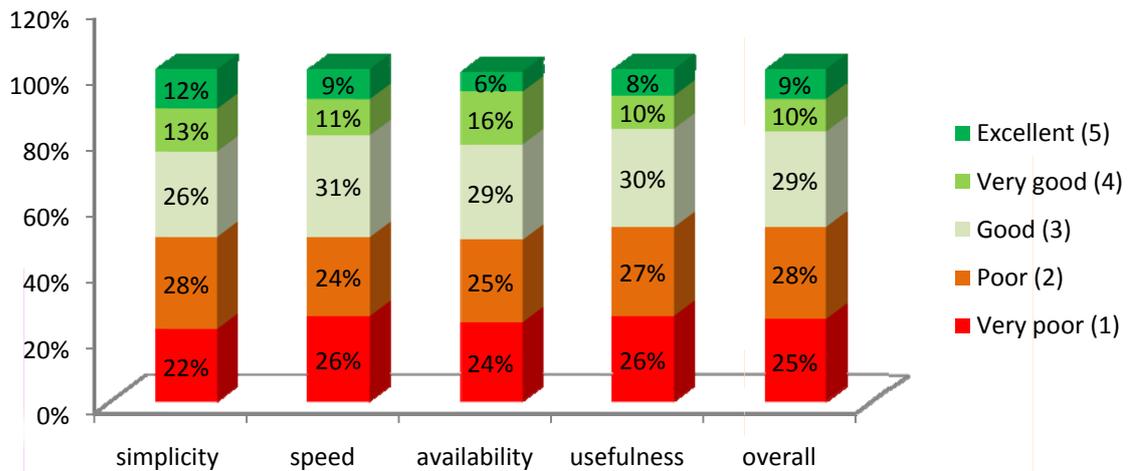
Aware of the limited representation of these results, we detail below the results for the whole of the survey. This allows us to make an approximation on the opinions and perceptions of those that use the websites of these entities.

Overall, we note that:

- 25% of those who answered the questionnaire had a negative opinion on the simplicity of the electronic service. However, 50% consider this aspect as very good or excellent.
- 20% had a negative opinion on the speed of the website and its services, while 50% consider this aspect very good or excellent.



- 22% rate the availability of online services negatively, while 49% considered availability as either very good or excellent.
- 18% had a negative opinion on the usefulness of the information and services online and a 53% rate this as very good or excellent.
- 19% gave an overall negative rating, compared to 53% who gave very positive assessment (very good or excellent).



Source: Own compilation

Below we compare the results of each aspect for the three entities who provided questionnaires.

In this analysis we can see that none of the users who completed the questionnaire from the Municipal Chamber of Águeda gave a negative (very poor or poor) to any of the issues consulted.

### SIMPLICITY OR EASE OF NAVIGATION

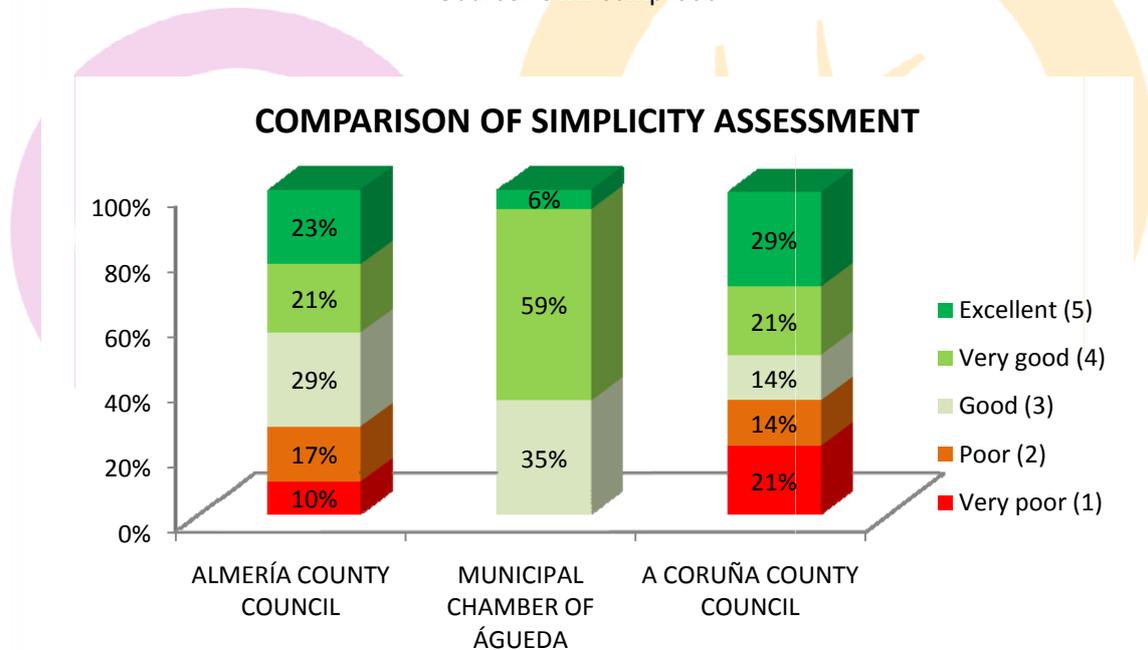
As shown in the chart below, users of the website of the Municipal Chamber of Águeda gave a very positive assessment of the simplicity of its online services, 65% noting that it was very good or excellent, while no-one gave a negative assessment.

The other two institutions with data reveal a positive assessment (very good or excellent) from 44-50% of users, and a negative assessment from 27-35%.



COMPARISON OF SIMPLICITY ASSESSMENT			
	ALMERÍA COUNTY COUNCIL	MUNICIPAL CHAMBER OF ÁGUEDA	A CORUÑA COUNTY COUNCIL
Very poor (1)	10%	0%	21%
Poor (2)	17%	0%	14%
Good (3)	29%	35%	14%
Very good (4)	21%	59%	21%
Excellent (5)	23%	6%	29%

Source: Own compilation



Source: Own compilation

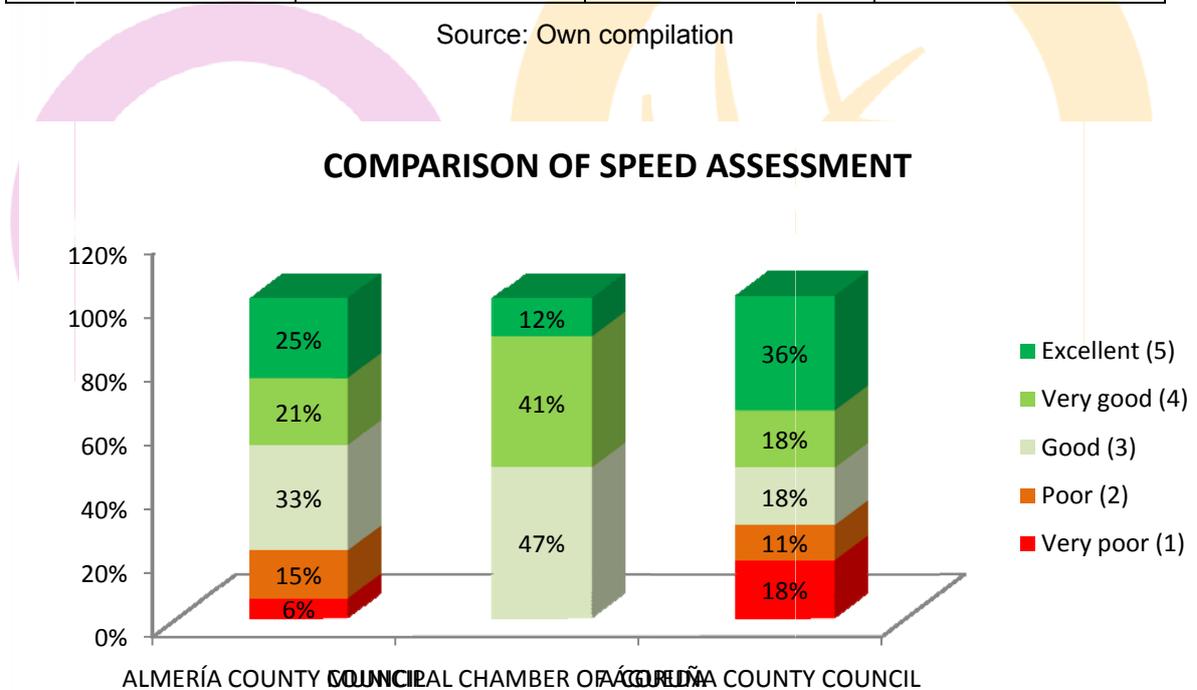
### SPEED WITHOUT ENTERING INFORMATION IN A REPETITIVE OR EXCESSIVE WAY

The speed and ease of navigating without consistently having to enter information is rated negatively by 21% of web users of the Almería County Council website, 29% of those that use of the A Coruña County Council website and none of those that use the Municipal Chamber of Águeda website.



COMPARISON OF SPEED ASSESSMENT			
	ALMERÍA COUNTY COUNCIL	MUNICIPAL CHAMBER OF ÁGUEDA	A CORUÑA COUNTY COUNCIL
Very poor (1)	6%	0%	18%
Poor (2)	15%	0%	11%
Good (3)	33%	47%	18%
Very good (4)	21%	41%	18%
Excellent (5)	25%	12%	36%

Source: Own compilation



Source: Own compilation



### AVAILABILITY OF THE SERVICE WITHOUT CONGESTION PROBLEMS

The assessment of service availability at each entity is variable:

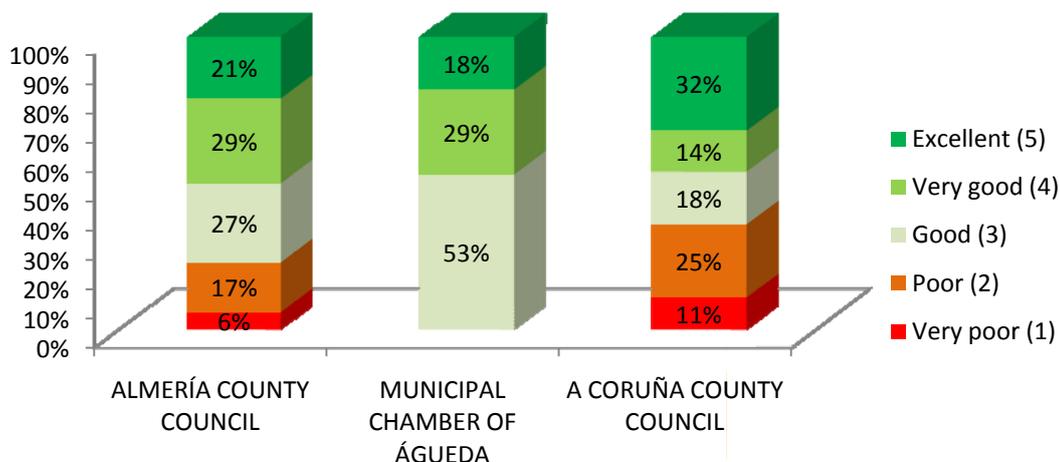
- The Almería County Council was rated negatively by 23% of users who completed the questionnaire.
- No user of the website of the Municipal Chamber of Águeda valued this aspect negatively.
- 36% of users who completed the questionnaire on the website of the A Coruña County Council indicated that availability was poor or very poor.

COMPARISON ON AVAILABILITY ASSESSMENT			
	ALMERÍA COUNTY COUNCIL	MUNICIPAL CHAMBER OF ÁGUEDA	A CORUÑA COUNTY COUNCIL
Very poor (1)	6%	0%	11%
Poor (2)	17%	0%	25%
Good (3)	27%	53%	18%
Very good (4)	29%	29%	14%
Excellent (5)	21%	18%	32%

Source: Own compilation



### COMPARISON ON AVAILABILITY ASSESSMENT



Source: Own compilation

### USEFULNESS OF PROVIDING THIS SERVICE DIGITALLY

The usefulness of the services is valued differently among the three entities:

- In Almería 14% gave a negative assessment, compared to 52% that gave a positive one (very good or excellent).
- In Águeda nobody had a negative opinion and 59% gave a positive assessment (very good or excellent).
- In A Coruña there is a broad negative assessment (32%) compared to significant positive assessment (50% say very good or excellent).

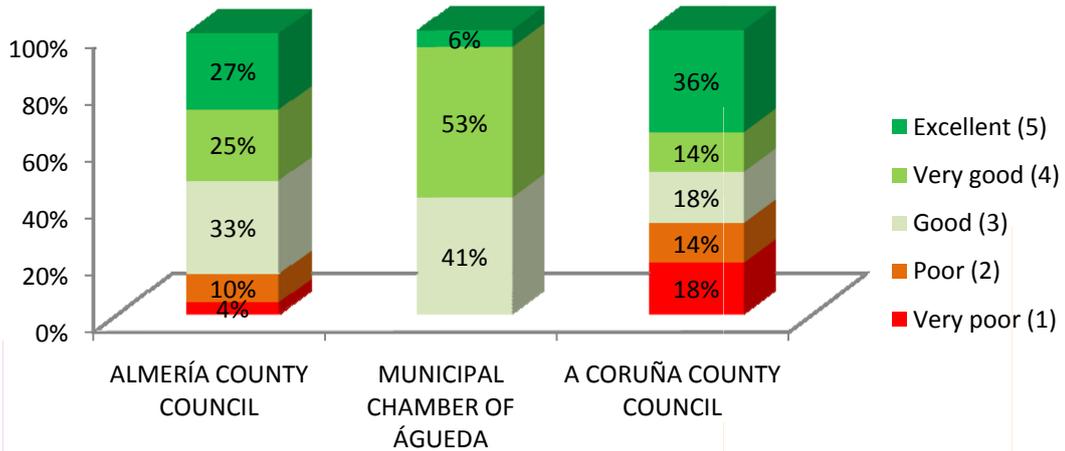
COMPARISON OF UTILITY ASSESSMENT			
	ALMERÍA COUNTY COUNCIL	MUNICIPAL CHAMBER OF ÁGUEDA	A CORUÑA COUNTY COUNCIL
Very poor (1)	4%	0%	18%
Poor (2)	10%	0%	14%
Good (3)	33%	41%	18%



Very good (4)	25%	53%	14%
Excellent (5)	27%	6%	36%

Source: Own compilation

### COMPARISON OF UTILITY ASSESSMENT



Source: Own compilation

### OVERALL ASSESSMENT

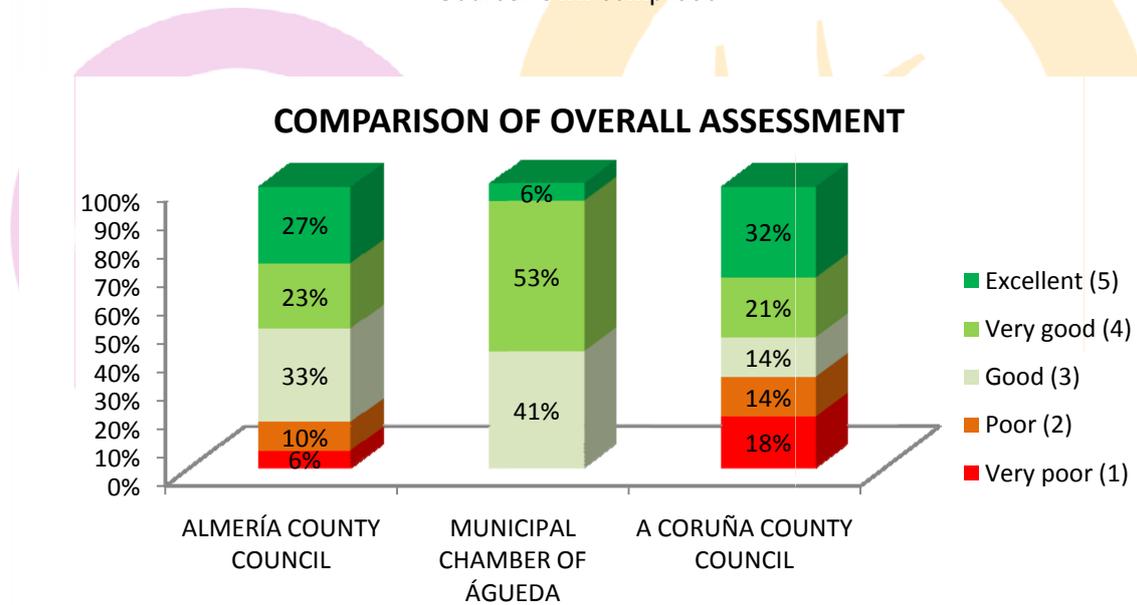
Although more than half of users (between 50 and 59%) of each entity make an overall assessment of the web services as very good or excellent, it is important to pay attention to users that are dissatisfied (negative assessment: very poor and poor); namely:

- 16% of web users of the Almería County Council gave a negative assessment.
- 32% of web users of the A Coruña County Council gave a negative overall assessment of services provided through this channel.



COMPARISON OF OVERALL ASSESSMENT			
	ALMERÍA COUNTY COUNCIL	MUNICIPAL CHAMBER OF ÁGUEDA	A CORUÑA COUNTY COUNCIL
Very poor (1)	6%	0%	18%
Poor (2)	10%	0%	14%
Good (3)	33%	41%	14%
Very good (4)	23%	53%	21%
Excellent (5)	27%	6%	32%

Source: Own compilation



Source: Own compilation



## 5.2 PARNET-TIC project conditioning factors

As a result of the study and diagnosis of the situation and the needs of the participating territories, shown above, we will be able to develop and implement a cross border platform of citizen participation. These tasks will consist, therefore, in the design and implementation of a platform for communication between the different administrative areas of the participating bodies and the public of their territories. It will host tools to enable the public to take part in political decisions, in public policy development and areas of competence of local authorities, including those related to public services and e-government. It will therefore include the introduction of tools at all partners.

The scope of the project will be located in rural areas and its ultimate goal is to improve the quality of life of the inhabitants. Many of the environmental problems are due to abandonment and depopulation or to a misconception of development and town planning. Citizen participation, improved public services and public management itself enhances the efficiency of these services and provides a customised design for their needs. In the experiments to be launched, promotion of the development of territories will be supported from a perspective of respect for the environment and cultural heritage, bearing in mind the importance of these rural environments within the Southwest space.

Based on the knowledge of the characteristics of the population at whom the project is to be targeted, accessibility will be taken into account as well as ensuring there are no barriers for older people or those that are less familiar with the new ICTs, allowing access as universal as possible among these populations. This means that satisfying the needs of the rural area in terms of public administration with an easy design customised to its needs is the first condition that the selected e-government and e-participation proposals must satisfy within the framework of Parnet-TIC.

The second condition concerns the regulatory environment in which the project is developed. The National Strategic Reference Framework in Spain establishes among its strategic priorities the development of "content" and skills in information technologies required in the knowledge economy by creating applications and providing e-government services in particular with regard to interaction with businesses. For Portugal, the strategic priorities are promoting and encouraging knowledge, technology, innovation in society, as well as increasing government efficiency, modernizing public institutions and improving efficiency. In the case of France, the National Strategic Reference Chart sets the strategic guidelines as the development of ICT technologies in the service of the economy and information society.

This project is intended to promote the Information Society in population hubs located in rural areas. These areas have certain disadvantages in accessing new information and communication technologies. Therefore according to the regulatory environment, electronic proposals must pay particular attention to service provision and innovation in rural and less accessible areas, with online service platforms to improve delivery to the public. Local authorities involved in the project will therefore cooperate to promote applications and utilities that bring these tools to citizens and improve local governance. This is consistent with the



strategic priorities of the National Programme of Reforms in Spain, which is aimed at boosting R&D&i (Research + Development + Innovation) and in particular with the Avanza Plan, involving local authorities. Its objectives are to increase awareness of the benefits of the Information Society among citizens, as well as the proportion of people using ICTs in their daily lives; to achieve a fully developed e-government, guarantee the right of citizens and businesses to interact electronically with public administrations and to further digital identity.

The final aim of this project is to improve accessibility, understood as an extension of the Information Society governance and e-government. The Network is being used to set up ICT tools for public management and for service to the public, through experiments in areas of social and economic development.

The aim is to overcome the disadvantages compared to metropolitan areas, based on the needs of different population cores, enhancing the use and deployment of ICTs in the interests of improving services and the design of public policies. Through the project, pilot experiments are being promoted to improve services for citizens and businesses that translate into direct benefits for the population, the connectivity between regions and the joint interchange and development of content.

The schemes set up in rural areas to promote the Information Society have focused on actions to improve access points or targeted at smaller population cores that are more lacking. However, together with the improvement and universalization of telecommunications infrastructures, it is necessary to offer applications and services to the population through ICT tools with direct benefits for the population. The transnational work within the Project allows us to learn together from technological advances and to act locally in rural areas in terms of local management and participation. This area is often not addressed in support programmes, yet there are important gaps in ICT services. That is why we want to use knowledge and the efficient use of existing resources and enhance the development of open source applications in e-government and for citizen participation.

*So, needless to say that a third conditioning factor in the selection of project proposals is that they provide transnational benefits instead of adopting a purely local focus.*

The areas involved want to improve their participation and their accessibility to the Information Society, with direct benefits and effects for businesses and citizens. Within the Southwest space local entities that are project partners are governments that represent territories with mainly rural features. Both in the case of municipal administrations and in the provincial administrations that make up the partnership there is a convergence in their approaches on the importance of a commitment to the use of new ICTs. These are the tools to reach citizens, improve the management of local policies and the provision of services and therefore increase the quality of life in rural areas.



In the four Spanish provinces (Huesca, Almería, Lugo and A Coruña) the Portuguese municipality (Águeda) and the French town (Ville de Pau) programmes and policies are being developed that are committed to improving access to the Information Society. Improvements with regard to the telecommunications network are being put into practice at both local and regional level with innovations that bridge the gap in coverage and access to the Internet. This allows the population living in rural areas to access initiatives such as this one under equal conditions, where quality access to the Internet is essential. Progress has also been made in the development of applications and software solutions by making the digitization of services, consultation and communication tools possible between users-administration.

*Priority will be given to those areas that have a greater benefit to society as a whole, to improve the quality of life, promote equal opportunities and jobs, as well as economic development and promotion of the e-government territory (allocating space for each partner on its web). There will be constant communication between the antennas for the purpose of network cooperation with other institutions and joint learning and improvement.*

Online services to be provided by local project partners will be:

- Dissemination of heritage and tourist information: checking resources and accessibility to information on heritage, for which there will be improvements and applications required to provide virtual tours and available information.
- Telecommuting for residents in locations far from urban centres.
- Online services that facilitate access by groups with more difficulties, and which make it unnecessary to visit in person (information, support procedures, etc.).
- Support services for self-employed and SMEs in their dealings with local government.
- Ability to carry out procedures with the responsible administration (identification, personal mail, private web space,) and check administrative processes.
- Creation of virtual incubators for promoting internationalization in the geographical areas of the project.

The choice of technology must take into account the technical, financial and capital budgeting resources, compatibility with the organizational structure and existing working methods; effects on staff and on the environment, etc.

As part of the budget available for the implementation of the e-government and e-participation are proposals we have:

**e-participation: 82.800 euros**

**e-Administration: 168.000 euros**



This budget includes the development of tools that allow the delivery of public services "online" based on the use of open-source software and implementation at the various participating entities. This task will be performed taking into account the content of the Plan for the creation of a Participation and Digital Services Network in rural towns and its recommendations with regard to the services to be digitalised in each territory.

This task involves designing a web portal which hosts the platform as well as management and maintenance tasks. These tasks would be performed by qualified personnel with the support of outside services.

It will also be a fundamental task of each partner to have a process for dissemination and promotion of the project and the electronic tools selected for use by citizens. To encourage the use of electronic services through training, outreach and advocacy actions, based on a territorial focus and close to the public. This will involve training sessions in each territory for users in their process of inclusion and participation in the network through public presentation days. It will include a dissemination and transfer campaign through actions to publicize the various activities of the project: media campaign, official invitation through press advertisement and mail shot to the scheduled training day, public seminars in the various territories of the Action Plan concerning services to citizens and companies and the platform for citizen participation, meetings with the regional departments responsible for infrastructures, technologies and the Information Society and incorporating technological solutions in ICT policies and programmes at the competent administrative and, finally, production of a CD-R for distribution with the applications developed and sending this to similar bodies outside the partnership.

As to the time constraints of the project, we must note that electronic applications must be ready for use in June 2011. This means the period of external services procurement by partner administrations, the design tasks, development and pilot tests should be carried out from mid-April 2010.

The process of proposed measures, screening and selection will be in a participatory manner, where each partner can include tools that meet their needs, such as administration and promotion of participation by its main users. All activities included in these processes will be interactive.

## 5.4 Conclusions of the internal analysis

In this section we have conducted an internal analysis which allowed us to find out the characteristics of each partner, establishing their skills and limitations on the development of tools for e-government and e-participation.



The communication channels aimed at the public are present at all partners, but not all use e-mail for citizen participation. Only two entities have a plan to encourage participation; no partner offers satisfaction questionnaires and participation in social networks is rarely used.

However, despite the fact that they do not currently have projects to motivate participation and few electronic processing tools, the project partners are convinced that the introduction of electronic processing is the goal to be achieved, leading to a number of improvements and simplification in administrative procedures that will result in models of transparency, efficacy and management efficiency.

As regards the selection of proposals, this choice cannot be considered as a single action but rather a process involving continuous technological research, the choice of appropriate technologies and the implementation of the chosen one. These should align with the diagnosis made of the current status of the partners:

1. Technical difficulty: ability to integrate with other support or interoperability systems.
2. Social organizational structures necessary.
3. Operational scope and powers.
4. Political support for each of the initiatives proposed.
5. Demand from users.
6. Analysis of the use of these mechanisms .
7. Defining the appropriate technological solution for their implementation.



## 6. Diagnostic summary

### Positive aspects

1. European policies are promoting the use and implementation of these new tools of e-government and e-participation.
2. In Spain and Portugal, the use of e-government by citizens is increasing.
3. Increase in number and features of e-government solutions and in particular open-source software.
4. The advantages in providing customised services and setting up forms of e-democracy by local authorities because of their proximity to citizens.
5. Extension and gradual expansion in recent years of the infrastructures and services in telecommunications companies throughout the territory.
6. The relationship needs between citizens and governments are huge and there is a considerable amount of administrative work that citizens must carry out in their daily lives.
7. The various European Union countries are clearly committed to the development of e-government in all its aspects, as one of the key instruments to promote the Information Society and improving the efficiency and processes of Government.
8. Improved levels of information and training among the general public.
9. . Growth of younger population groups, with training and knowledge about ICT.
10. The Internet has become a common tool in everyday life of Spanish citizens.
11. The use of information and communication technologies on certain services promotes the integration of groups with special needs (people with sensory and motor difficulties, people living in rural areas, people whose working hours coincide with those of the Administration, people living in other cities, etc.).
12. All partners track visits to their web sites.
13. Extended use of user authentication using digital certificates.
14. Most partners have a catalogue of procedures.
15. All partners use various channels of communication with the public.
16. On the positive side in citizen participation, e-mail and inquiries / surveys are the most commonly used mechanisms.
17. The vast majority of partners encourage citizen participation.

### Negative or improvement aspects

1. Accessibility problems in rural areas.
2. Flight of the more educated and more dynamic young population to larger cities.
3. Lack of infrastructure and fewer resources to undertake investments.



4. Poor use of electronic participation by partner administrations.
5. Little information on the benefits provided by new technologies.
6. The population complains of the high cost of internet connection.
7. Lack of certainty and confidence of citizens towards information technology or they say they do not want access because they believe that the information stored there is dangerous or harmful.
8. Concentration of private investments in certain geographic areas and non-priority types of services for medium-sized population cores in rural environments.
9. Relatively little use of certain applications such as telematics certification, electronic billing, certifying and electronic archiving.
10. Insufficient use of applications or services such as telematics registration, electronic notifications, document manager and citizens folder.
11. Scattering in the levels of interaction of the various procedures offered to citizens and administrations.
12. Low level in the procedures offered to companies, except taxes and fees.
13. Dispersion of the percentage of the total budget for ICT investment.
14. Little use of digital certificates outside of first tier managers.
15. Only two of the participating partners have plans to promote citizen participation.



## 7. Proposals for action in e-government and e-participation

### 7.1 Screening of proposals mechanism

In order to select the proposals for e-government and e-participation best suited to the constraints of the project outlined above, it was necessary to develop a mechanism to enable this selection to be done in a clear and effective way with participating partners.

The procedure for the evaluation and selection of proposals for e-government and e-participation was conducted in two rounds.

ROUND 1: Exploratory round. Based on a previous questionnaire given to partners asking them for five (5) proposals for joint action in the field of electronic government. In turn, partners were asked to explain a good practice in both e-government and e-participation. The previous activity started the selection process of technological solutions, split into the following phases.

*Stage 1.1. Sending the questionnaire to partners.*

*Stage 1.2. Receiving information from partners by e-mail: Having obtained the results of this first questionnaire, a list was drawn up of all proposals made by the partners.*

*Stage 1.3. Adaptation and consolidation of the information contained in a document for assessment of this. In this stage each partner was given the consolidated list of proposals in the field of e-government and e-participation for them to make assessments on a scale of 1-5. These assessments should correspond to a set of criteria and conditions:*

Is it within the stipulated budget?

Will it benefit most of the partners involved?

What is the impact? Does it fall within the project's objectives?

It adapts to the competence level of the partners.

Does it meet the expected time frames?

What is the risk level of implementation?

*Stage 1.4. Evaluation by the partners of the proposed consolidation document: Once the assessments of the partners were received the results were consolidated by averaging out the score of each proposal.*

*Stage 1.5. Distribution of the overall results of the assessments: the results obtained were distributed to inform each partner involved of the final result.*



*Stage 1.6.* Debate on the results, and selection of initiatives to implement: This stage was conducted on the working panel of 16 December 2009, in Lugo, where the results were discussed.

The proposals for e-government and e-participation were:

### **E-Participation**

1. Georeferenced notices.
2. Satisfaction surveys.
3. Revitalisation of public participation.
4. Enquiries.
5. Carbon emissions measurer / Ecological footprint.
6. The President responds.
7. Participatory Local Agenda.
8. Discussion Forum.
9. Employees' suggestions.
10. Community Intranets.

### **E- Government**

1. Inbound and outbound SMS platform.
2. Home collection management (recycling centre).
3. Virtual market for small business.
4. Georeferenced services.
5. Multimedia manager.
6. e-government basic simulator.
7. Validation of documents.
8. Tourist Portal.
9. Personal file.

Among the discussions generated as a result of the electronic proposals, we drew a series of findings from the partners which helped to know the current status and technological requirements of each partner. Viz., they complemented the surveys carried out with partners which reflected the use of their technologies.



**ROUND 2.** Decisive round: This second part of selection of proposals is a result of the working committee, as this led to both new proposals for e-government and electronic participation as well as details on the functionalities and use of the proposals brought to the table. In this second round the aim is to use this new information to develop a new list of proposals to finally get a selection of electronic tools which the partners can implement.

**Stage 2.1.** Sending the results of the committee for evaluation: This Working Committee led to a new list of proposals for e-government and e-participation, as the discussions of the partners gave rise to amendments and new ideas regarding the proposals previously submitted. At this stage, the partners must make a final assessment on the proposals. This will consist of four sections:

1. Level of Importance to be selected and implemented by PARNET-TIC (from 1-5).
2. It is already in use at their organization (already using this service).
3. Veto the proposal (the solution will not be implemented if it is selected).
4. Considered impossible within PARNET-TIC For example: it is expensive, long term, dependent on the technology of each partner (not a common technology solution), strongly affects the internal organization, etc.

**Stage 2.2.** Distribution of the results of the final assessments: Having obtained the ratings of the proposals from each partner, there was a consolidation of the results at the level of importance, use, veto and impracticality. This final list was circulated to partners for informative purposes.

**Stage 2.3.** Preparation of Master Plan for selected proposals: Having established the final consolidated result, we selected four proposals on e-government and e-participation to develop an implementation plan and to study the resources needed for development as an electronic tool within the administrations involved.

It is important to point out that this process of selection of proposals was conducted in a participatory manner, where each of the partners presented a list of tools and actions to be developed within Parnet-TIC and they themselves were participants in the selection.

## 7.2 Proposal from each partner

Having explained in detail each of the stages and rounds that make up the review process and selection of proposals, we present below the results obtained in the different stages of evaluation to obtain the qualification and final selection of the electronic proposals to be developed within Parnet-TIC.



*Results:*

*Stage 1.4.* Evaluation of proposals by the partners (11 December 2009): this stage consists in the first round of partner participation, where each presented an initial idea of actions they would like to develop within the project. Results are presented as an average level of importance given by each partner, multiplied by 100.





e-participation actions		Evaluation
2	NOTICE GIS. Electronic platform CALL-FREE LINE for suggestions and/or complaints. Concerning georeferenciation, the citizen can ask for or suggest any improvement in the territory of the municipality. To do so, the citizen only needs to locate the problem (georeferenced) and e-send it. The process is intended to be developed in order to accept MMS.	425
1 4	NOTICE GIS. Integration with geographical systems (Google Maps and the like) to let the citizens notify/identify problems in county roads, public equipment, waterworks...	425
4	ENQUIRY. Public enquiry on specific issues. Legal assistance on required procedures and tools. Also applicable for enquiries from County Councils to City Councils.	375
1 2	SATISFACTION SURVEY. A platform intended to create surveys targeted to citizens on e-services. This platform would be used to create surveys, as well as to process them, export them and create model reports from them. It would allow citizens and companies to evaluate services, etc. (like <a href="http://www.encuestasweb.com">http://www.encuestasweb.com</a> )	363
7	NOTICE GIS. County scorecard. It collects and publishes incidents of all description taking place in municipalities (incidents concerning security, urban furniture, etc.). It is suggested to evolve towards a service already in use by the Huesca County Council and intended to receive mobility incidents.	350
2 0	EMPLOYEE SUGGESTIONS. A system for employee suggestion management (which could be used to improve procedures and processes internally, for example).	338
2 5	EXCHANGEA platform for exchange between citizens	338
8	ENQUIRY. Demand channeler. A method allowing to send proposals on new actions from municipalities to their respective county council should be defined: for example, infrastructure or improvement works to be implemented on the next period.	325
2 1	THE PRESIDENT RESPONDS. A system devised to manage the "The President/Mayor responds in 10 days" service. Not personalising it is an option; in that case, the entity / authority would respond.	325
1 5	EXCHANGE Time bank management	320
1	FORUM. A platform for electronic debate concerning municipal plans on territorial planning. As per Portuguese Law, all municipal plans (master plans, town planning plans or territorial planning plans) must be subject to a public survey. This tool offers greater dissemination possibilities and increases the opportunities to submit any suggestions, since they could be done remotely via web.	313
5	TRANSPARENCY. Transparency: the possibility of publishing the budgets and information about the management of the entity. The possibility of publishing on the Internet AV documents on the issues discussed on plenary sessions or decision bodies of the local entities.	313
3	FORUM. An electronic platform for public discussion, criticisms and suggestions regarding the most important projects of the municipality. With this platform, any citizen will be able to submit a suggestion and/or criticism, showing locations intuitively on the provided map and interacting with other citizens and the municipality using a FORUM format.	288
9	ENQUIRY. Official public enquiry system with @firma access	288
1 9	SMEs. Participation and revitalisation of small and medium enterprises	283
6	ENQUIRY. A chance for citizens to suggest items for the order of the day or topics for discussion at the decision bodies of the local entities (commissions, councils, plenary sessions, etc.) and of the County Council.	275
2 2	COMMUNITY INTRANETS. Establishing neighbourhood-level or building-level community intranets	275
1 7	ENQUIRY. Local festivities... decision-making	267
1 1	ENQUIRY. A system for submitting action proposals	257
2 4	PARTICIPATIVE YEARBOOK (WITH A PRIZE?) A participative yearbook reflecting local life	250
1 3	WEB 2.0. A platform for the integration with social networks for the electronic HQs of all different entities.	243
1 6	REGULATIONS. Other: Proposals for a public e-participation regulation (framework regulations, incorporation, etc.).	233



	e-government actions	Importance				
		1	2	3	4	5
9	OUTBOUND SMS PLATFORM. A multi-entity an multi-operator SMS alert system (message packet server)	400				
1 1	XPDL DEFINITION. Definition of XPDL-format e-procedures	400				
2 5	GIS SERVICES. Interactive cartography of the metropolitan area offering information about public services.	400				
1 4	BOOKINGS. Resource booking (sports facilities, library books)	386				
5	INBOUND – OUTBOUND SMS PLATFORM. Asynchronous communications via sinks or automatic information transmission: inbound-outbound SMS, e-mail, etc	375				
1 9	E-GOVERNMENT SIMULATOR.A system to manage and answer electronically all citizen information requests for any procedures that are not computerized or are not directly available on the Internet.	375				
2 4	OUTBOUND SMS. An alert system for citizens (SMS, e-mail, etc.)	375				
1 0	CONTRACTOR REGISTRYA shared system for the contractor registry.	357				
1 3	APPOINTMENTS.A common appointment platform.	357				
2	WORKFLOW. Internal procedure control via workflow defining workroutes, task managers and implementation deadlines, and offering an easy-to-use technical environment, to guarantee that legal deadlines are met and that procedures are not deviated due to unclear interests. This online service will also let the citizens follow their procedures up.	350				
3	OUTBOUND SMS PLATFORM. Sending SMSs to inform about decisions concerning any submitted requests. If a request is subject to a decision, an SMS is sent to the applicant informing him or her about that decision.	350				
8	E-LEARNING. Teletraining. Using existing training platforms to develop a decentralized training programme. The Huesca County Council already has this kind of application for DTT and mobile technology. Improving the range of available contents.	350				
2 3	E-LEARNING. A teletraining tool for e-government training (e-learning)	350				
7	WEB 2.0. Information aggregator. A website gathering, classifying and distributing municipal information in Web 2.0 format and using social networks.	343				
1 2	DOCUMENT VALIDATION. A website for the validation of documents issued by a public authority and with electronic signature. Checking and verification of documents.	329				
2 0	GIS SERVICES. A GIS system showing information, assistance and service centres, as well as other data of interest	313				
4	MULTIMEDIA MANAGER. A multimedia space managing the information generated by the activities of local entities: event agenda, multimedia, documents, etc.	300				
2 8	PERSONAL FILE. An individual electronic file allowing access to all public services	300				
1 6	RECYCLING CENTRE. Recycling centre processes / requests / collection	263				
2 6	DOCUMENT MANAGEMENT. A system to manage press releases and documents (internal or public)	263				
1	WORKS MANAGEMENT. Electronic management of private works licensing. Submitting licensing requests electronically, uploading the procedures in a digital format and making the corresponding technical from a digital basis, allows to compare the different steps of the procedure automatically and quickly and to generate reports on differences.	250				
2 7	WORKFLOW. A workflow system intended to monitor and process issues set for public consultation on the Internet	250				



*Stage 1.6.* Debate on the results, and selection of initiatives to implement: This task, as we have explained above, was performed on a working committee where each partner presented its views, criticisms and level of importance of each of the proposals brought to the table. Here we grouped together similar actions or those that provided the same service to thus evaluate the importance of each service for the participating partners.

Results of the 2nd evaluation of the proposals made at the Lugo session. (17 December 2009)

	E-participation actions	Evaluation
2	NOTICE GIS. Electronic platform CALL-FREE LINE for suggestions and/or complaints. Concerning georeferenciation, the citizen can ask for or suggest any improvement in the territory of the municipality. To do so, the citizen only needs to locate the problem (georeferenced) and e-send it. The process is in tented to be developed in order to accept MMS. Integration with geographical systems (Google Maps and the like) to let the citizens notify/identify problems in county roads, public equipment, waterworks... A platform intended to create surveys targeted to citizens on e-services. This platform would be used to create surveys, as well as to process them, export them and create model reports from them. It would allow citizens and companies to evaluate services, etc.	467
4	ENQUIRY. Public enquiry on specific issues. Legal assistance on required procedures and tools. Also applicable for enquiries from County Councils to City Councils. Demand channeler. A method allowing to send proposals on new actions from municipalities to their respective county council should be defined: for example, infrastructure or improvement works to be implemented on the next period.	417
12	SATISFACTION SURVEY.	350
21	THE PRESIDENT RESPONDS. A system devised to manage the "The President/Mayor responds in 10 days" service. Not personalising it is an option; in that case, the entity / authority would respond.	333
1	FORUM. A platform for electronic debate concerning municipal plans on territorial planning. As per Portuguese Law, all municipal plans (master plans, town planning plans or territorial planning plans) must be subject to a public survey. This tool offers greater dissemination possibilities and increases the opportunities to submit any suggestions, since they could be done remotely via web.	283
20	EMPLOYEE SUGGESTIONS. A system for employee suggestion management (which could be used to improve procedures and processes internally, for example).	267

	E-government actions	Evaluation
9	INBOUND – OUTBOUND SMS PLATFORM. A multi-entity an multi-operator SMS alert system (message packet server)	417
16	RECYCLING CENTRE. Recycling centre processes / requests / collection	417
12	DOCUMENT VALIDATION. A website for the validation of documents issued by a public authority and with electronic signature. Checking and verification of documents.	400
4	MULTIMEDIA MANAGER. A multimedia space managing the information generated by the activities of local entities: event agenda, multimedia, documents, etc.	360
19	E-GOVERNMENT SIMULATOR. Front-office application only. A system to manage and answer electronically all citizen information requests for any procedures that are not computerized or are not directly available on the Internet. These services could include authentication or not.	300
25	GIS SERVICES. Interactive cartography of the metropolitan area offering information about public services.	233
28	PERSONAL FILE. An individual electronic file allowing access to all public services	220

*Stage 2.2.* Results of final ratings: Having grouped the actions by services, valued and debated on the working committee, we obtained a new list of proposals that were sent to partners for evaluation. These scores had to reflect the degree of importance for the partners, compliance with project conditions, use or non-use of the tool, whether to veto the possibility of



implementing it or whether it is impractical. The results of the importance of tools are presented as an average value of each partner multiplied by 100 and the other variables as the percentage of partners who responded positively to these variables.

Results of assessments of the proposals (21 January 2009)

<b>e-participation actions</b>	A) import	B) use	C) veto	D) irre
	1 - 5	Yes	Yes	Yes
1.- GEOREFERENCED NOTICES.	<b>433</b>	33%	0%	0%
3.- SATISFACTION SURVEYS.	<b>383</b>	0%	0%	0%
7.- DYNAMIZATION OF PUBLIC PARTICIPATION.	<b>350</b>	0%	0%	0%
2.- ENQUIRIES.	<b>350</b>	17%	0%	0%
9.- MEASURER OF CARBON EMISSIONS / ECOLOGICAL FOOTPRINT.	<b>300</b>	0%	0%	0%
5.- THE PRESIDENT RESPONDS.	<b>300</b>	33%	0%	0%
8.- PARTICIPATORY LOCAL AGENDA.	<b>283</b>	0%	0%	0%
6.- DISCUSSION FORUM.	<b>250</b>	33%	0%	0%
4.- EMPLOYEES' SUGGESTIONS.	<b>150</b>	17%	0%	0%
10.- COMMUNITY INTRANETS.	<b>133</b>	17%	0%	17%

<b>e-government actions</b>	A) import	B) use	C) veto	D) irre
	1 - 5	Yes	Yes	Yes
1.- INBOUND AND OUTBOUND SMS PLATFORM.	<b>433</b>	33%	0%	0%
7.- RECYCLING CENTRE.	<b>383</b>	17%	0%	0%
8.- VIRTUAL MARKET FOR SMALL TRADE AND SMALL COMPANIES	<b>366</b>	0%	0%	17%
2.- GEOREFERENCED SERVICES.	<b>366</b>	50%	0%	0%
5.- MULTIMEDIA MANAGER.	<b>300</b>	33%	0%	0%
3.- BASIC SIMULATOR OF E-GOVERNMENT.	<b>233</b>	17%	0%	0%
4.- VALIDATION OF DOCUMENTS	<b>233</b>	17%	0%	0%
9.- TOURIST PORTAL WITH ACCOMMODATION AND RESTAURANTS.	<b>200</b>	67%	0%	0%
6.- PERSONAL FILE	<b>183</b>	17%	0%	17%

### 7.3 Proposals finally accepted

As mentioned above, the selection of electronic proposals was made by the partners through a mechanism where they raised and proposed the actions to be implemented under the Parnet-TIC project. Based on these proposals, those actions that may be of interest for the project were selected, considering that:

To do so, before starting these activities in the territories, a phase for review, technological research, development of applications, investments in equipment will be included in the following sections of this Master Plan, along with a detailed control mechanism so that the entities can guarantee continuity using their own resources. In their level of competences, these



local authorities will include the advances in service delivery and citizen participation and will continue cooperation through a commitment to establish the Network.

The tools finally selected have to meet certain conditions: they must help keep the public informed at each participating local authority by publishing podcasts, videos, etc. on the acts by local authorities (plenary sessions, events, etc.). They will include communication tools, e-mail accounts for sending queries, SMS for communication/incidents, switchboard system for user support, chat, etc.; Participation tools: Public consultation mechanisms, including debate and voting tools: forums, blogs, etc. This will allow communication between citizens and local government to be more participatory and be able to directly transmit information concerning the local government and the policies to be put in place.

From the results finally obtained in the second round of the selection process of proposals, two or three of the highest rated e-government and e-participation proposals were chosen that satisfy the economic, timing and usage conditions, etc. of the project. In some cases, administration and participation tools were grouped together as the resources required for implementation are very similar. The proposals finally selected for review are shown below:

1. Inbound – Outbound SMS platform
2. Management of Recycling Centres
3. Territorial information system
4. Electronic inquiries/surveys (e-inquiries)



## 8. Detailed definition of action proposals

This section will analyse each of the proposals finally selected to be implemented at the participating partners. These will be the four most valued actions in the areas of e-government and e-participation. This analysis will involve studying the financial and technological resources, a detailed description of the services provided through the tools, users, managers, features and functionalities and, finally, an implementation schedule.

This stage of review, technology research and application development will reveal the technological infrastructure, investment and minimum human resources managers that the tool must have, which for the purpose of Parnet-TIC will be the project partners.

### 8.1 Inbound – Outbound SMS platform

This service allows the most valued proposal related to e-government to be addressed from the point of view of the Parnet-TIC project partners.

e-Government

1. INBOUND AND OUTBOUND SMS PLATFORM.
7. RECYCLING CENTRE.
8. VIRTUAL MARKET FOR SMALL TRADE AND SMALL COMPANIES.
2. GEOREFERENCED SERVICES.
5. MULTIMEDIA MANAGER.
3. BASIC SIMULATOR OF E-GOVERNMENT.
4. VALIDATION OF DOCUMENTS.
9. TOURIST PORTAL WITH ACCOMMODATION AND RESTAURANTS.
6. PERSONAL FILE.



### *Scope of the project.*

In an effort to simplify the service, we could think about an alternative that does not require installation with the "core" of e-government, rather a more occasional application. In this sense, it could be used to report certain events or actions related to a specific project. One option would be to link it to this project and inform the general public about the various tools available.

### *Brief description of the system / service*

The SMS inbound/outbound platform system will be a notification system through SMS linked to certain events. It must be able to collect input information from the system. This information should be provided through two mechanisms:

1. Responses to SMS sent previously, with an identifier to register the application.
2. Messages sent and simple requests should be governed by an elementary syntax and in this case should not be applied without severe restrictions from the legal point of view.

Various "SMS certificates" pilot services will be able to be performed. This is a relatively new channel for all partners and could serve as a testing mechanism to see the results and therefore a possible future evolution of this mechanism at each partner.

The SMS Certificate is a short text message that acts as proof to third parties and which certifies, in a reliable way, the message contents and the date of sending through a digitally signed receipt. A digital document is generated which records the authenticity of the communication, its content, date and time of sending and finally the date and time of receipt at destination. This document is digitally signed by a certifying agency with a time stamp that ensures that there is no subsequent amendment and is sent to the sender of the communication.

Therefore it is a mechanism that gives legal validity to communications, with the same force as a hard-copy communication by registered post or by bureaufax.

Examples of uses of the service:

#### **SMS Outbound**

- Communications. Activities and cultural events by the various entities.
- Official calls councils, plenary sessions, etc.
- Notices of the tax collection period.
- Notices on the imminent end of the period for tax collection.



- Notifications.
- Revitalisation operations.

### SMS Inbound

- Communications and complaints.
- Mechanism of participation by citizens.
- Mechanism to respond to official communications. Response confirmation or disagreement with records, identifying the phone number and the file code, etc.
- Mechanism to respond to a communication through SMS.

### *Final recipients of the service.*

Citizens. The advantage of the mobile phone is that it is the technological vehicle that best identifies the person. Its use is widespread by citizens and the public is broadly aware of SMS communications. Therefore, it has the huge advantage of being a technology that does not establish training or knowledge barriers for the public, making it especially useful in rural areas. Another major advantage for application in rural areas is the existence of this service outside the deployment of telecommunications infrastructure (just need to have mobile phone coverage).

### *Main managers of the services.*

All the partners except the University of Montpellier.

### *Features and functionalities*

- Multi-platform: This means that the hardware or software that is multi-platform can function similarly on different platforms (different operating systems).
- Open source software: this is the designation of a group of programs that have certain freedoms and obligations which include: freedom to be used (both the program and its code), copied and distributed by anyone. In the case of distribution, this may be a BSD license (freedom to distribute closed source) or GPL (total distribution, but under the terms of having open source).
- Services can be Java enabled.
- Databases for user management.
- Multiuser: Each partner should view a separate application.
- Multilanguage: At least those of the partners: Galician, Spanish, Portuguese.
- Integration with certain milestones and events. Automatic despatches based on dates, based on a specific instruction, etc.



- Possibility of an integration system by each partner with different themes (we recommend these not be integrated with other applications, but rather relatively simple events: association of deadlines with regard to delivery, etc.).
- Automatic validation process for inbound SMS (syntax validator).
- Integration with other applications (integration with e-mail and databases).
- User registration system in SMS communications.
- Defining categories and subcategories of SMS services.
- SMS delivery platform with:
  - Mass sending of SMS.
  - Sending of SMS with integration with the database (name, surname, telephone number, file number, etc.). Personalised SMS.
  - Sending SMS to a single recipient
- Integrating of documentation related to the certified SMS. Proof of sending.
- Management of system users.

#### *Resources required*

##### *Human resources*

- Application manager.
- Application administrator.
- Technicians to answer application enquiries and notifications. This will depend on use but should be integrated with other mechanisms so as not to duplicate resources.
- Integration with the Outbound register in case a record of this communication is required.

##### *Technical resources*

- Computer equipment.
- Application and software modules.
- Base software.
- Integration with telephony operator.
- For SMS certificates.

##### *Other Resources.*

- Training with the tool.
- Promotion and advertising to encourage use.





## 8.2 Management of recycling centre

The "Management of Recycling Centre" service was selected as second in importance by the project partners under the heading of e-government services.

1. INBOUND AND OUTBOUND SMS PLATFORM.
7. RECYCLING CENTRE.
8. VIRTUAL MARKET FOR SMALL TRADE AND SMALL COMPANIES
2. GEOREFERENCED SERVICES.
5. MULTIMEDIA MANAGER.
3. BASIC SIMULATOR OF E-GOVERNMENT.
4. VALIDATION OF DOCUMENTS.
9. TOURIST PORTAL WITH ACCOMMODATION AND RESTAURANTS.
6. PERSONAL FILE.

The proposal, when it was chosen by the members, was described as a management system for the collection of special materials, usually for recycling or reuse (electrical appliances, IT equipment, furniture, etc.). The "Recycling Centre" is the name given to the place where these materials are deposited.

### *Scope of the service.*

The service scope consists mainly of collecting special materials (furniture, electrical appliances, etc.), viz., which because of their size or features fall outside municipal solid waste collection) in areas specially equipped for this (Recycling Centre). This collection is the responsibility of local authorities, usually councils, who often subcontract this to the same companies that perform refuse collection. In general, the recycling centre consists of different areas with different containers for each type of materials to be deposited.

The recycling centres also tend to be dedicated to the scrap materials of small and medium enterprises (industry, commerce, services, etc.) that have an occasional waste problem. Logically this is designed and meant for the public.



It is common for potential service users to be unfamiliar with both the location of Recycling Centres and procedures for their use.

#### *Brief description of the system / service*

The recycling centre will be a system accessible via the Internet. Information must be provided on the location and on procedures for use. It must gather requests for the collection of materials and must handle the response to requests and the monitoring of the collection through to finalisation of the service.

Examples of uses of the service:

- Learn the location of the nearest collection point to deposit small electrical appliances.
- Receipt of applications for the collection of a fridge.
- Provide information on the types of materials included in the service and the different procedures for collection of materials in situ.

#### *Final recipients of the service.*

1. The public in general.
2. Small and medium enterprises that do not have management of waste classified as Urban Solid Waste.

#### *Main managers of the services.*

1. All the partners except the University of Montpellier.
2. Local authorities and other public administrations with those duties assigned.

#### *Features and functionalities.*

The functions of the recycling centre can be divided into two parts: Information on the centre which will be displayed on the Internet and management of the centre.

1. The recycling centre must provide online information about the objects and materials that can be deposited directly at Recycling Centres and about those that offer a collection service: the types of materials, sizes, examples of the materials included and not included, etc. It must also provide images of the recycling centre: text document with the list of locations, static map, online map service (Google maps or georeferenced display system). Information about the different ways to use the collection service: channels of communication, collection requests, confirmations, schedules, etc. As well as FAQs for the user and additional information on how to solve those cases for materials not included in management of the Recycling Centre: telephone numbers, addresses and useful links to redirect to other services and management bodies, etc.



2. With regard to Recycling Centre management: collection, receiving requests and answering requests for information must be through various channels: online forms, e-mail, SMS. For the citizen to really feel his request has been taken into account, it must calculate a response to his request for collection, propose a date, time and place, as well as a confirmation of when the collection will be carried out. Similarly, if there are changes in the programming of the collection, to inform the user or citizen of such changes.

#### General characteristics of Recycling Centre management.

- Multi-platform.
- Open source software.
- Multiuser: Each partner should view a separate application.
- Multilanguage: must include at least the partner languages: Galician, Spanish, Portuguese.
- Management of users.
- Customising the image so the application can be used by another entity.

#### Resources required

##### Human Resources.

- Application manager: This is normally the manager of the area that runs the Recycling Centre.
- Application administrator: Person with in-depth knowledge of the application and who can program, guide and control it. This will normally be the organisation's IT manager.
- Application users: Specialists that use the application and perform application operation.
- Persons in charge of each inquiry: Responsible for a particular query.

##### Technical resources

- Computer equipment.
- Application and software modules.
- Base software.
- Integration with CMS web content managers.





### 8.3 Territorial information system

This service allows you to address two proposals identified by the Parnet-TIC project partners. One would be linked to the e-participation part and other to e-government services.

#### eParticipation

1. GEOREFERENCED NOTICES.
3. SATISFACTION SURVEYS.
7. REVITALISATION OF PUBLIC PARTICIPATION.
2. INQUIRIES.
9. MEASURER OF CARBON EMISSIONS / ECOLOGICAL FOOTPRINT.
5. THE PRESIDENT RESPONDS.
8. PARTICIPATORY LOCAL AGENDA.
6. DISCUSSION FORUM.
4. EMPLOYEES' SUGGESTIONS.
10. COMMUNITY INTRANETS.

#### e-government

1. INBOUND AND OUTBOUND SMS PLATFORM.
7. RECYCLING CENTRE.
8. VIRTUAL MARKET FOR SMALL TRADE AND SMALL COMPANIES
2. GEOREFERENCED SERVICES.
5. MULTIMEDIA MANAGER.
3. BASIC SIMULATOR OF E-GOVERNMENT.
4. VALIDATION OF DOCUMENTS.
9. TOURIST PORTAL WITH ACCOMMODATION AND RESTAURANTS.
6. PERSONAL FILE.



Thus a single application architecture would support two solutions chosen by the project partners: Georeferenced notices as a mechanism for participation and Georeferenced Services in the e-government field.

### *Scope of the project.*

The initial service scope reaches the project partners and the services should be configurable by each organization so they can decide what services are offered and adjust the needs of those spheres. The geographic area may also be limited in the event of preferring a pilot area prior to implementation of this action.

### *Brief description of the system / service*

The regional notification system enables the general public or a subset of that particular audience to send notifications about the territory. The service should have several mechanisms to allow such notifications, including: SMS (hard to have a precise location) + http Forms (on map). This system should be capable of reporting incidents in a flexible way and have close proximity to the public, promoted clearly on the Internet (in a prominent place on the partners' web) with an image or mark linked to each of the partners.

The regional Information system of public services allows various landmarks or areas located geographically to be located online together with related information. The system should be able to represent points, lines and polygons with information related to each of them. The display should be through a web browser, without the need to install services on the equipment of potential customers.

Examples of uses of the service.

#### *Territorial notices*

- Notices of deficiencies in infrastructures: roads, lighting, sanitation, etc.
- System for filing complaints such as complaints relating to works, potential safety problems through the state of infrastructures, buildings in ruins with the possibility of collapse, and so on.
- A description of problems in certain maintenance work.

#### *Territorial information system*

- Publication of places of interest (tourist attractions, museums, etc.).



- Publication of elements of social interest (points of access to social services, places of interest for leisure purposes, etc.).
- Location of customer service points.
- Location of reference points for the citizen, whether public (outside its area of competence) or private. Health centres, pharmacies, etc.
- Location of interesting routes (routes of cultural or natural interest, hiking, etc.).
- Location of trading estates with certain characteristics (areas with access restricted to vehicles, etc.).

### *End recipients of the service*

#### *Territorial notices:*

- Citizens.
- Social organizations: civic associations, business associations, etc.
- Entity suppliers.

#### *Territorial information system:*

- Citizens.
- Social organizations: civic associations, business associations, etc.
- Entity suppliers.
- Entity's employees.
- Local authorities and other public administrations.
- Entities controlled by the partners.

### *Main managers of the services.*

- All the partners except the University of Montpellier.

### *Features and functionalities.*

- *Features of the enquires application:*
- Multi-platform
- Open source software
- Multiuser: Each partner should view a separate application.
- Multilanguage: At least those of the partners: Galician, Spanish, Portuguese.
- A single geolocation engine for both entities.



- Adapting to different locations and different geographical zones (UTM-29, UTM-30 or UTM-31).
- Territorial notices
  - Definition of categories and subcategories of territorial notices.
  - Definition of information related to each category (name of contact person, e-mail address to send queries for each category, etc).
- Territorial information system
  - Display interface. This would integrate basic mapping (Google satellite, results, etc.) and would integrate the layers that have been defined as categories to display.
  - Data loading interface connected to the display.
  - Contents loading interface.
  - Definition of the data structure associated to each item.
  - Display of an element as a point (coordinates).
  - Management of categories and subcategories.
  - Definition of visible and invisible fields.
  - The possibility of exporting from the database.
  - The possibility of linking this data structure to points, lines or polygons.
  - Ability to load external layers (Web Map Services) offered by other entities, such as cadastre, etc.
  - Possibility of integrating Google maps orthophotos as background layer.
  - Ability to obtain the data as KML files (integration with Google Earth).
- Management of system users.

#### *Website features (notices and information)*

- Viewing layers/legend
  - Activation of layers
  - Viewing of layers
- The ability to make inquiries (open format)
  - General enquiries
  - Browse by active layer
- Maps zone
  - Display of landmarks on the map
  - Loading of icons on the map itself linked to each landmark
  - Navigation



- Zoom
- Latitude and longitude
- Scale
- Utilities
  - Navigation
  - Zoom to full map
  - Zoom to marked area
  - Place search
  - Other searches
  - Show information about the selected landmark

### *Resources required*

- *Human resources.*
- Application manager.
- Application administrator.
- Technicians to answer application enquiries and notifications. It will look for a specialist with knowledge of the sphere defined for the application.
- Specialists to collect and update information that is loaded into the GIS. Since it is an application where the key lies in the records to be shown on the map, it would be ideal to ensure that the information is current.

### *Technical resources*

- Computer equipment.
- Application and software modules.
- Base software.

### *Other Resources.*

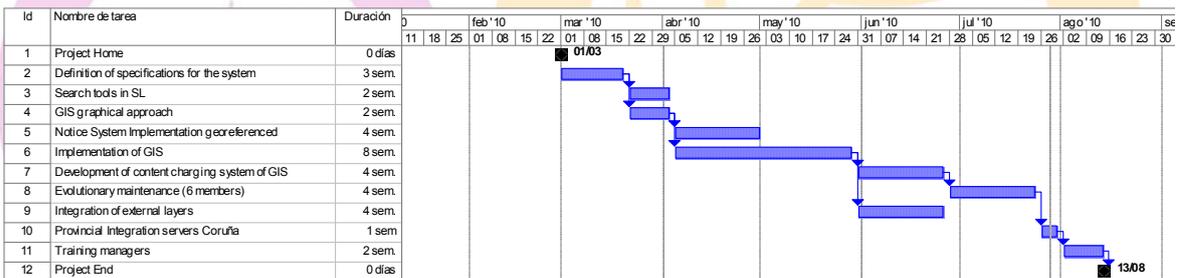
- Training with the tool.
- Promotion and advertising to encourage use.
- Information Resources (recipient directories, etc.).
- Services for the creation of samples, segmentation, etc.
- Advisory services / support for the design of enquiries.
- Typology consultancy and participation procedures.



Budget estimate

	Hours Project Manager Profile	Hours Analyst Profile	Hours sheduler profile	Graphic designer hours profile	Hours trainer profile	Other cost	Total per task
Definition of specifications for the system	80	80					12.800,00 €
Search tools in SL							- €
GIS graphical approach				40			2.000,00 €
Notice System Implementation g	8	20	120				9.320,00 €
Implementation of GIS	20	60	250				21.000,00 €
Development of content charging	8	20	150				11.120,00 €
Evolutionary maintenance (6 members)	20	72	300				24.840,00 €
Integration of external layers			120				7.200,00 €
Provincial Integration servers Coruña	8	20					2.120,00 €
Training managers					48	5.400,00 €	11.160,00 €
Advertising and Outreach							
<b>Total</b>	<b>12.960,00 €</b>	<b>19.040,00 €</b>	<b>56.400,00 €</b>	<b>2.000,00 €</b>	<b>5.760,00 €</b>	<b>5.400,00 €</b>	<b>101.560,00 €</b>

Planning and timetable





### 8.4 Electronic inquiries (e-inquiries)

This service allows you to address two proposals identified by the Parnet-TIC project partners within the sphere of e-participation.

1. GEOREFERENCED NOTICES.
3. SATISFACTION SURVEYS.
7. REVITALISATION OF PUBLIC PARTICIPATION.
2. INQUIRIES.
9. MEASURER OF CARBON EMISSIONS / ECOLOGICAL FOOTPRINT.
5. THE PRESIDENT RESPONDS.
8. PARTICIPATORY LOCAL AGENDA.
6. DISCUSSION FORUM.
4. EMPLOYEES' SUGGESTIONS.
10. COMMUNITY INTRANETS.

#### Scope of the project.

The initial scope of the project reaches the project's partner institutions.

#### Brief description of the system / service:

System for generation of questions in order to gather information and opinions of citizens on the Internet. The service should be clearly advertised on the Internet (a website) with an image/brand and linked to each of the partners.

Examples of uses of the service.

- Checking the name for a public work: a pavilion, park, community centre, etc. This could be done in several stages: (1) consultation on possible names (nominated) (2) voting on a certain number of selected proposals (finalists).
- Consultation / receipt of proposals on the draft regulation.
- Consultation with users on satisfaction of using the entity's services (with key).



- Ability to generate a random query related to a particular event (pending completion of a procedure and a survey on the appraisal of the service with a subset of users of that process).

#### *End recipients of the service.*

- Citizens.
- Social organizations: civic associations, business associations, etc.
- Local authorities and other public administrations.
- Entities controlled by the partners.
- Employees of the entity and groups of workers (managers, departments, etc.).
- Entity suppliers.

#### *Senior managers (creators of the consultations)*

- All the partners except the University of Montpellier.
- The departments of the partners.

#### *Secondary managers (creators of the consultations)*

- Local authorities and other public administrations.
- Entities controlled by the partners.
- Social organizations (optional) (these would need to be recorded in the system. Not recommended as a first step).

#### *Features and functionalities.*

##### Features of the enquires application

- Multi-platform
- Open source software
- Multiuser: Each partner should view a separate application.
- Multilanguage: At least those of the partners: Galician, Spanish, Portuguese.
- Different types of questions: single answer, multiple, value scale, etc.
- User management
- Control of identification of respondent: anonymous or personal (by key, etc.).
- Customize the look with templates and styles
- Printable version of the survey
- Definition of routes depending on the answers



- Multiple simultaneous surveys
- Deadlines for automation surveys
- Make a single query or queries at various stages, etc.
- Sending and managing e-mail invitations and reminders.
- Possibility for participants to save partial answers and continue the survey later
- Import and export in several formats: text, CSV, SPSS, etc.
- En masse data entry (identification, keys, etc
- Processing of results and graphical display.

#### Website features

- View open and closed consultations (finished)
- Display of the supporting documents to the query (if available)
- Display of the results achieved at the end of the consultation
- Display or non-display of the answers given individually
- Search query: by words or by categories (years, topics, entity type, etc.)
- Subscriptions as recipient / panellist
- Links to other sites involved: complaints and suggestions, web queries, etc.
- Information on data privacy policy and disclaimer (transparency)

#### *Resources required*

##### *Human Resources.*

- Application manager. This will normally be person in charge of civic participation.
- Application administrator. Person with in-depth knowledge of the application and who can program, guide and control it. Users can be supported in the application
- Application users Specialists that operate the application and perform monitoring and control of the consultations
- Persons in charge of each inquiry. Responsible for a particular query.

##### *Technical resources*

- Computer equipment.
- Application and software modules.
- Base software.
- Integration with CMS managers or internal applications.



Other Resources.

- Training with the tool.
- Promotion and advertising to encourage use.
- Information Resources (recipient directories, etc.).
- Services for the creation of samples, segmentation, etc.
- Advisory services / support for the design of enquiries.
- Typology consultancy and participation procedures.

Budget estimate

	Hours Project Manager Profile	Hours Analyst Profile	Hours scheduler profile	Graphic designer hours profile	Hours trainer profile	Other cost	Total per task
Definition of specifications for the system	20	50					5.300,00 €
Search tools in SL							- €
Implementation of the query tool	20	20	80				8.000,00 €
Proposed Development graphic and navigation	8	20		40			4.120,00 €
Website Implementation (6 members)	20	48	180				15.960,00 €
Parameterization and testing tool	20		120	40			11.000,00 €
Training managers					48	5.400,00 €	11.160,00 €
Publicity and Dissemination							
<b>Total</b>	<b>7.920,00 €</b>	<b>9.660,00 €</b>	<b>22.800,00 €</b>	<b>4.000,00 €</b>	<b>5.760,00 €</b>	<b>5.400,00 €</b>	<b>55.540,00 €</b>

Planning and timetable

Id	Nombre de tarea	0		feb '10			mar '10				abr '10				may '10			jun '10									
		11	18	25	01	08	15	22	01	08	15	22	29	06	12	19	26	03	10	17	24	31	07	14	21	28	
1	Project Home																										
2	Search tools in SL																										
3	Definition of specifications for the system																										
4	Implementation of the query tool																										
5	Proposed Development graphic and navigation																										
6	Website Implementation (6 members)																										
7	Parameterization and testing tool																										
8	Training managers																										
9	End project																										



## 8. 6 Other proposals not connected to the PARNET-TIC project

These proposals arise from the analysis carried out with each of the partners in the survey mentioned above, which assessed the current situation of administrations in issues of electronic tools and new technologies. These proposals can be listed as follows:

1. For the proper functioning of local authorities there will be a minimum of two profiles of key personnel.
  - Political representative, whose supreme chief is the President or the Mayor/ess according to the administration in question.
  - Higher-level specialists at local authorities: Secretary and controller
2. To perform a procedure or electronic service from the authorities it is a prerequisite that at least the President or Mayor/ess and the Controller and Secretary have and use the electronic signature.
3. It is also necessary to evaluate the reason for the lack of use of electronic certificates, identify whether it is because of lack of information, because it is not within their duties or because of reservations on their use. Once the possible causes are known, the steps necessary to put this in place should be taken.
4. For the proper performance of the follow-up, parameterization, improvement and control of the websites and/or internet channels, it is necessary to have a team of human resources appropriate to the institution and the number of procedures to be developed and implemented.
5. To provide electronic formalities in procedures to identify users it is essential that governments work in one area that provides the user with total security and confidence. Includes (single institution without user ID) must therefore work towards providing a method of identification of citizens and in providing security in the procedures offered.
6. For public participation procedures it will be necessary to encourage participation in social networks, using the phone to operate as a unified information processor, which could be used as an intermediate step between traditional processing and e-government, SMS alerts to users, establish Newsletter communication systems (e-mails with the most relevant news headlines). Moreover, the administrations should:
  - Define procedures.
  - Provide greater transparency to the process.



- Move towards a model of e-democracy.
- The mechanisms of citizen participation must offer a response, the results must be published and should be taken into account when making decisions.

## 8.7 Procurement

To carry out the process of hiring outside services for the implementation of the proposals selected in Parnet-TIC, it is necessary to prepare specifications that indicate the technical specifications described above.

Procurement will take place as follows:

1. Proposals for electronic participation with an amount of 55,540 euros and a difference over the authorised budget (82,800 euros) of 27,260 euros. This difference may be used for pilot testing of the consultation system chosen as an e-participation action. (See Annex 1)
2. The proposals for e-government will be over two contracts: a) Territorial information system (59,160 euros), b) Recycling Centre (50,000 euros) and c) SMS Platform (58,840 euros). (See Annex 2)

The procurement of the e-participation activities will be a task for the Coruña County Council and the e-government proposals will be dealt with by INLUDES.

## 8.8 Conclusions on the proposals for action

The implementation of the actions detailed above will involve the mobilization of resources that have been listed in the preceding paragraph, with the appointment of technical staff required and the procurement of services and purchase of equipment to operate the services in different areas. At the end there will be a transnational network that will integrate a Data Processing Centre and a network of 12 antennas in the different territories, and various services operating in each territory.

Coordinated by the Lead Partner, whose headquarters will house the Data Processing Centre, there will be several antennae in the different territories. As support, this network will have the organizational and coordination tasks for the monitoring and exchange of information. Therefore, the Network will involve joint management work at transnational level and local delivery of services in different territories.

The personnel structure and technical facilities of the Centre and the antennas will also serve as infrastructure for implementation of the Transnational Platform for Public Participation. A person responsible for the maintenance of the resources used in the actions will be assigned to each partner. Their duties will mean they deal with these services and their users, reinvestigating,

disseminating and monitoring. The contents of the consultation and communication tools are provided and managed locally (by allocating space for each partner in this web).

This group of tasks is targeted at short training sessions (a minimum of one per territory) for the general public, to know that it exists, how to access and use it. All the services and resources developed will offer the fundamental premise of simplicity and accessibility for all groups. This training will demonstrate the advantages of the information society by using the services created.

A guidebook will be published for the use and dissemination of these services in the four languages of the partnership (Spanish, Galician, Portuguese and French).

Likewise, the actions related to e-government will be the responsibility of the partner INLUDES, which will be responsible for getting external agents, suppliers of the tools necessary for proper installation and use by each partner. The e-participation activities will be the responsibility of the Coruña County Council. (The specifications of the proposals are detailed in the annex).

## 9. Balanced scorecard of the project

Control of project management, essentially based on different levels of indicators will give us an idea of how they are progressing in various activities including the development of electronic tools that have been selected from Parnet-TIC for implementation. This will be a way in which it seeks to identify possible deviations from the objectives in order to take appropriate corrective actions.

Therefore, we made a scorecard for each one of the actions selected by measuring the following categories: Promotion and revitalization of the tool, level of use, scope of the project, visibility of the tool, incidents, complaints and suggestions.



Project: SMS sending & receiving platform

Categories	Indicators	Frequency of analysis
Promotion - Revitalisation	Number of presentations	Monthly
	Number of persons attending the presentations	Monthly
	Number of advertisements	Monthly
	Number of persons hit by the advertisement	Monthly
	Number of media used	Monthly
Level of usage	Number of enquiries about the service	Monthly
	Citizens using the tool	Monthly
	Number of sent SMS	Monthly
	Number of received SMS	Monthly
Project scope	Number of received premium messages	Monthly
	Delay between procurement and implementation	Specific. Project end
	Number of services with SMS communications	Specific. Project end
Visibility of the tool	Weight of all media used for tool awareness purposes	Monthly
	Media appearances (excluding advertisements)	Monthly
	Number of civil servants affected by the service	Monthly
Incidents	Number of incidents	Monthly
	Incidents vs sent/received SMS ratio	Monthly
	Solved incidents	Monthly
	Average response time to incidents	Monthly
Complaints and suggestions	Number of complaints	Monthly
	Complaints vs sent/received SMS ratio	Monthly
	Number of answered complaints/suggestions	Monthly
	Average response time to complaints/suggestions	Monthly



Project: territorial information system + recycling centre + georeferenced notices

Categories	Indicators	Frequency of analysis
Promotion - Revitalisation	Number of presentations	Monthly
	Number of persons attending the presentations	Monthly
	Number of advertisements	Monthly
	Number of persons hit by the advertisement	Monthly
	Number of media used	Monthly
	Number of enquiries about the service	Monthly
Level of usage	Number of website visits	Monthly
	Number of appointments made for waste collection	Monthly
	Number of web-received georeferenced notices	Monthly
	Number of SMS-received georeferenced notices	Monthly
Project scope	Delay between procurement and implementation	Specific. Project end
	Number of square km covered by the system	Specific. Project end
	Number of available categories for the tool (sports centres, libraries, leisure centres...)	Specific. Project end
	Number of categories for georeferenced notices	Specific. Project end
	Number of recycling centres identified by the tool	Specific. Project end
Visibility of the tool	Weight of all media used for tool awareness purposes	Monthly
	Media appearances (excluding advertisements)	Monthly
	Number of civil servants affected by the service	Monthly
Incidents	Number of incidents	Monthly
	Incidents vs georeferenced notices ratio	Monthly
	Incidents vs recycling-centre collection ratio	Monthly
	Solved incidents	Monthly
	Average response time to incidents	Monthly
Complaints and suggestions	Number of complaints	Monthly
	Complaints vs georeferenced notices ratio	Monthly
	Complaints vs recycling-centre collection ratio	Monthly
	Number of answered complaints/suggestions	Monthly
	Average response time to complaints/suggestions	Monthly



Project: electronic surveys and enquiries

Categories	Indicators	Frequency of analysis
Promotion - Revitalisation	Number of presentations	Monthly
	Number of persons attending the presentations	Monthly
	Number of advertisements	Monthly
	Number of persons hit by the advertisement	Monthly
	Number of media used	Monthly
Level of usage	Number of questions regarding the enquiry system	Monthly
	Number of website visits	Monthly
	Average number of participants per survey	Monthly
	Finished survey vs started survey ratio	Monthly
Project scope	Registered users	Monthly
	Delay between procurement and implementation	Specific. Project end
	Number of enquiries made	Specific. Project end
	Number of surveys made	Specific. Project end
	Average survey time	Specific. Project end
Visibility of the tool	Number of service-related or procedure-related surveys	Specific. Project end
	Weight of all media used for tool awareness purposes	Monthly
	Media appearances (excluding advertisements)	Monthly
Incidents	Number of civil servants affected by the service	Monthly
	Number of incidents	Monthly
	Solved incidents	Monthly
Complaints and suggestions	Average response time to incidents	Monthly
	Number of complaints	Monthly
	Number of answered complaints/suggestions	Monthly
	Average response time to complaints/suggestions	Monthly



## 10. Conclusion

The PARTNET-TIC project arose from the need to reduce the digital divide faced by villages located in rural areas and the need to provide efficient and modern solutions in the local governance of these territories. These areas are faced with many of the shortcomings typical of rural environments in terms of resources, infrastructure, facilities and accessibility to the information society

Through the transnational cooperation strategy of this project, the beneficiary institutions want to improve service provision and public participation in their respective areas of operation and advance, in their role as local governments, in the active incorporation of these territories into the Information Society.

Therefore, this project is aimed at the implementation of technologies to serve citizens in rural towns to test methods of e-government and e-administration.

The master plan aims to provide a basis for the description of processes, the activities involved in development, selection and deployment of electronic actions to be developed as a result of Parnet-TIC.

To this end, before starting their activities in the territories, a phase of studying the internal needs of each partner was required, as well as an analysis of the regulatory, social, political and technological environment where the project is being developed, technological research, the need for application development, investment in equipment, together with a detailed control mechanism so that partners can maintain their continuity using their own resources.

The finalisation of this research stage brought about the conclusion of the public administration and participation actions that Parnet-TIC seeks to develop and set up at the administrations.

It is important to note that these proposals reflect a range of needs for improvement that these administrations highlighted in the internal study conducted for each partner. These needs were actions such as improved performance of IT equipment, telecommunications services, internal IT applications, open source software tools, where all these shortcomings have answers in the proposals selected for implementation:

1. Inbound – Outbound SMS platform
2. Management of Recycling Centres
3. Territorial information system
4. Electronic inquiries/surveys (e-inquiries)



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