



**TUSCANY**

**REGIONAL REPORT ON IS**

**14<sup>TH</sup> JULY 2010**

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## 1. Overview

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### 1.1 Introduction

Building a “full” Information Society in Tuscany capable of maximizing the opportunities new technologies was the bet of the previous period of the regional government (2005-2010) and will be the commitment of the next one too.

Tuscany Region is aware Information Society plays a fundamental role for the development of the regional economy and civil rights of every citizen, and it is through the Net and thanks to the Net if our region could improve internal competitiveness and build a fully grown idea of citizenship.

Needs and urgency manifested in recent years by citizens and businesses have progressively found in the scale and the regional dimension appropriate responses and protection, thanks to the capacity of local administration to grasp and understand the request and the needs of our territory. To resolve many issues related to competitiveness, simplification, public participation, access to knowledge, Tuscany institutions jointly decided to invest in IS and in the dissemination and use of new technologies as levers to induce and facilitate an effective organizational change in public administration and its processes, preparing Tuscany to the challenges ahead.

This “track” mustn’t involve only few innovative pioneers: innovation and research have to walk together and serve regional community bringing ideas, proposal and solutions for local enterprises and families. Include, involve, spread, making the system: these have been and will be the key words to our commitment. With this belief we have worked against the digital divide, creating the necessary infrastructures, as first, and achieving the “*Regional Programme for the promotion and development of electronic administration and information society 2007-2010*” (§3.2).

Through the Regional Programme, also called e.Toscana, Tuscany managed own investment policy, giving a regional dimension to IS topics and collecting approvals and financing sources by public and private stakeholders. During the government period, the Programme has produced significant infrastructure solutions and services, a whole result that, in some cases, is really difficult to measure through quantitative or qualitative indicators. Recent important achievements such as the change in the organizational culture of the public institutions, the progressive - and often uneasy - entry of the e-government within local authorities, the planning and the wide consultation for IS actions, the stress and exploitation of project skills and the achieving of a “team spirit” among the public administrations, cannot be measured in quantitative terms, but are still a pillar of the future Tuscany.

The Regional Programme involved associations too (manufacturing and professional), expecting the development of technological investments as lever for development investments and organizational changes. Main objective is fostering, through IS, the strengthening of the general conditions for regional development so to increase the competitiveness as a whole system, and reaching a model where Region, local public administrations, associations and business stakeholders work together for efficiency increasing of public services for citizens and enterprises.

Finally the programme focused on new services request, integration and qualification, on digital divide removal and on straightening and diffusion of a free and wide citizenship into the regional information society.

Excellent results derived from the broadband project (aimed to connect the whole territory), but many things are anyway to do, particularly concerning training and, more generally, the capability of every citizen to see and prepare itself for the future: at this purpose, following report shows a non-homogeneous status, like “spots on the leopard skin”. This is surely the area where institutions have

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to focus own efforts and don't look only at successful cases: this means don't limit oneself to observe 4 families on 10 are well connected with the Net, but ask why 6 families on 10 are not connected yet.

## 1.2 Socio-economic data

The region of Tuscany is located in the centre of the Italian peninsula and is the fifth largest region in Italy.

Tuscany is located between the regions of Liguria (north-west), Emilia-Romagna (north), Marche and Umbria (east) and Lazio (south). It is bordered to the west and south by the Tirrenian sea, and to the north and east by the Apennine mountain chain. The region covers a total surface area of 22,992 km<sup>2</sup>, 7.6% of national territory making it the fifth largest region in Italy.

The regional capital is the city of Florence. Since 1992, Tuscany has been divided into 10 administrative provinces: Arezzo, Florence, Grosseto, Livorno, Lucca, Massa, Pisa, Pistoia, Prato and Siena. The region is further divided into 287 local council administrative areas, therefore dividing competences between three levels of administration: regional, provincial and local council. The Tuscan territory also includes the islands of Elba, Gorgona, Capraia, Pianosa, Montecristo, Giglio and Giannutri.

The region of Tuscany has a population of 3,677,048 inhabitants (30<sup>th</sup> in EU25) with population density of 160 in./km<sup>2</sup>, lower than the national average. The birth rate is also low with the current demographic growth rate standing at -0.3 / 1000 resulting in a rapidly aging population throughout the region.

The Regione Toscana is the authority responsible for the representation of the regional territory as a whole and the Regional Council is the decision making-representative organ whose role is to express the political and administrative policy of the Region. The Regione Toscana was born in 1970 and built as an autonomous entity with its own powers and responsibilities. Internal organisation is controlled by the Statute, the modified version of which has been in vigour since the 12th of February 2005. Within the constitutional system of the Italian Republic, the Regione Toscana's role concerns the decentralisation of power, reinforcement of democracy and promotion of local autonomies. The Region's institutional structure is composed of the Regional Council, the Executive Council and its President.

Tuscany lays claim to a dynamic, diversified economy based around a market which covers 7% of the Italian population and over 400,000 working companies so distributed: 12% Agriculture, 16% Manufacturing, 15% Buildings, 52% Services. Tuscan manufacturing is based around a unique economic model which made up of several kinds of industrial structures, including on the one hand large companies and on the other a large number of Small Medium Enterprises (SMEs).

Tuscany:

- has a GDP of 103.074 M€ (2007)
- represents a key entry/exit point for products to the Italian market and an important distribution point for the Mediterranean and EU.
- economic system is characterised in particular by the size and geographical / sector based distribution of manufacturing plants and service sector, although industry remains important in terms of GDP percentage and employment. On the other side, agriculture has a small economic weight but is characterised by good output of high quality products and maintains an important role in environmental measures and landscape preservation.
- industrial system is not only composed of manufacturing: various high tech segments, such as pharmaceuticals and biotechnology, electrical and electronic appliances, robotics and opto-electronics have recently gained increasing importance.

The key factor is the presence of universities (5), research institutes and a "critical mass" of sector based experts.

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Concerning education 145,590 pupils enrolled in schools for the 2006/2007 school year in Tuscany. Each year in Tuscany around 22,500 secondary school students succeed in gaining their high school diploma. In the academic year 2006/2007, 126,287 students enrolled in Tuscany universities and 21,581 received the degree. Of the students attending Tuscan universities, just over 88,000 are resident in Tuscany, while around 33,000 come from other Italian regions and a further 4,613 from abroad. 44% of students attending university in Tuscany succeed in getting a degree, compared with 36% nationally. In recent years the regional government has designated considerable resources to guarantee the right to an education for all both by sustaining educational activity and by experimentation through general interventions such as integrated area projects. The government aims to guarantee the right to study, to guidance and training, and to further education.

1.3 Regional SWOT Analysis

Tuscany is among the most advanced on e-government services development in Italy and has a good overall level in ICT penetration among households. Nevertheless less comforting is the level of presence and use of these technologies in industrial sector, which represents the relatively weaker stakeholder for information society and regional knowledge development. Situation changes at European level, where in some fields appears a significant gap with the more advanced regions.

This is particularly important for the relevant role of public administration place in relation to the overall development of information society, which must be supported to allow the creation of a territorially homogeneous and diffuse services system, together with accompanied by investment to stimulate the supply by ICT companies in Tuscany.

Regional ICT development is strictly related to the national choices and strategies. EU regional policies and results on Information Society show how can be worth or not inside a national classification among local regions, but not

Following tables resuming the SWOT of the Information Society state of the art in Tuscany.

Strengths	Weakness
<ul style="list-style-type: none"> <li>+ Governance and networking capacity among institutions, particularly expressed in through RTRT (§ 3.1.1).</li> <li>+ Regional coordination ability to on infrastructure development, security and information systems issues.</li> <li>+ Wealth of human resources, presence of university centres and skills.</li> <li>+ Growth of multimedia communication system promoted by the Fondazione Sistema Toscana.</li> <li>+ Good level of e-government development.</li> <li>+ Consolidated project framework thanks to the e.Toscana development plan (§ 3.2.1).;</li> <li>+ Local institution directly involved on IS development</li> <li>+ High level of coordination between municipalities, including small</li> </ul>	<ul style="list-style-type: none"> <li>- Local policies too much focused on e-government and poor crossed integration with ICT.</li> <li>- Lack of a clear ICT competencies division among local organizations.</li> <li>- Presence of territorial areas with a moderate interest on ICT issues and lack of internal technical expertise in small municipalities.</li> <li>- Lack of critical mass for the development of a "corporate culture".</li> <li>- Lack of large companies able to aggregate on ICT issues and the presence of SMEs firms dimension in which there is a content use of ICT;</li> <li>- Lack of networking activity among small enterprises;</li> <li>- Low level of research investment in private sector</li> <li>- Low level of networking activity for</li> </ul>

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<p>municipalities, through associative systems too; + Strong role and participation guaranteed by associations, voluntary services and third sectors.</p>	<p>technology transfer between research centres and private companies</p>
Opportunities	Threats
<ul style="list-style-type: none"> <li>✓ <i>Concurring to the competitiveness challenges with the typicality of our territory and quality</i></li> <li>✓ <i>High identifiability of the Tuscany brand</i></li> <li>✓ <i>High level of coherence between Regional and EU policies on IS</i></li> <li>✓ <i>Development of an interregional coordination on IS (tools, rules, standards, methodologies)</i></li> </ul>	<ul style="list-style-type: none"> <li>✗ <i>Globalization forces economic systems to an high innovation rate</i></li> <li>✗ <i>Globalization supports low costs production instead of high quality productions</i></li> <li>✗ <i>Lack of a common national framework with adequate funding resources</i></li> <li>✗ <i>Weakness due to the small average dimension of Tuscan enterprises</i></li> <li>✗ <i>Lack of capacity in increasing the value of creativeness</i></li> </ul>

## 2. The Information Society in Region: information and data

### 2.1 Diffusion of the main instruments

#### 2.1.1 Use of the PC

The spread of personal computers in Tuscan society proceeds in parallel with the evolution of overall technological equipment families, a trend that follows largely the trajectories outlined in previous years.

In 2008 around 47.9% of Tuscan families have got a Personal Computer: this data (+2,5% respect to 2005) is in line with national data and puts Tuscany in the central part of the Italian list.

Families and ICT tools [%]:		
	Tuscany (value 2008)	Italy (value 2008)
Personal Computer	47.9	50.1
TV color	96.3	95.4
Internet Access	41.3	42.0
Cable TV/DTD	23.3	23.8
Broadband connection	26.8	27.6
Mobile phone	92.2	88.5

Tuscany continues to grow the percentage of households owning the phone (from 88,6% in 2007 to 92.2% 2008), DVD player (from 58.0% to 61.1%), the digital decoder land (from 19.7% to 23.3%) and access to the Internet via the broadband connection (from 22.9% to 26.8%).

Together with the widespread PC's availability in families accompanies, the number of users is improving. The percentage of citizens using a personal computer goes from 39.8% in 2005 to 44.8% of 2008, placing our region values similar to the National (equal to 44.9% in 2008). Remains however high (although decreasing) the percentage of citizens which declare to have not used the PC in the last year.

Among the Tuscan citizens who use the personal computers makes it generally daily (24.8%) or one or several times a week (15.0%). Appears low, however, the percentage of citizens who use PC only a few times a month or few times a year (5.0%).

People and PC bent [%]:	
	Tuscany (value 2008)
<b>Uses the PC:</b>	44.8
- every day	24.8
- more time in a week	15.0
- few times in a month	3.7
- rarely	1.3
<b>Has followed a PC course</b>	32.9

As for the rest of the country, even Tuscan citizens housing remains the privileged place for PC use (89,1%). Following is the workplace (46.3%), the houses of friends (21.0%), the place of education (school, university) (19.2%) and other places (16.6%).

Concerning the mode acquisition of computer skills, the Tuscans are still to prefer the learning informal environments, confirming as already noted in previous years. The

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ISTAT survey for 2008 shows that only 32.9% of citizens of our region have acquired their skills by participating in training course; against the 66.2% declares to be self made in PC skills.

Analyzing enterprises appears that in 2008 Tuscany - as in Italy and Europe - the dissemination of basic computer technology among companies with at least 10 employees stands at levels approaching the saturation. The 96.0% of Tuscan companies, in fact, has and uses the personal computer, result in line with the national value (96.2%). The PCs ownership doesn't change in Tuscan enterprises during the last 5 years, but its usage by employees is growing: the share of employees using the PC at least once a week has risen from 35.3% in 2005 to 43.5% of 2008.

ICT introduction in Tuscan economic system is related to many factors, as business size, territorial location and economic activity. Concerning the PC and Internet usage (enterprises with 10 employees at least) the analysis shows that the National discrepancy between the production units is much more related to the features of different economic activities, rather than the business size or territorial location.

Enterprises (10 employees at least) and PC [%]		
	Tuscany (value 2008)	Italy (value 2008)
Enterprises with PCs	96.0	96.2
Employees using PC one time a week at least	43.5	41.9

### 2.1.2 Internet

Tuscany families having Internet access from own home are around 41,3%, in line with the national average. The main reason to not have Internet at home is the lack of capacity in using the instrument (39.0% increasing data respect 2005), although it is certainly not negligible the percentage of families that does not have access network because this isn't useful or interesting (30% decreasing data). There is an economic reason too: some Tuscan families haven't an Internet access due to the high costs of the needed tools (8.8%) and the high cost of connection (9.2%).

Why families hasn't an Internet access at home (main reasons) [%]		
	Tuscany (value 2008)	Italy (value 2008)
Lack of capacity	39.0	40.6
Is not useful or interesting	30.0	25.2
Costs (hardware, connection)	18.0	24.2
Use Internet in other places	13.5	12.9

In the International context Tuscan families - and Italian in general - are still few "tech." Indeed, if we consider the percentage of households with at least one component between 16 and 74 years who owns a Internet access from home, Tuscany (and Italy) shows an apparent delay to the main European countries. However, the percentage of people who use Internet continues to grow – by 34.4% in 2005 to 41.0% in 2008 - and the share of users is in line with the national figure (even 40.2% in 2008).

Concerning the regional economic system, Internet diffusion affects about the wholeness of the Tuscan enterprises with 10 employees at least (92.3%, in line with the National average of 94.1%). In recent years, the percentage of firms connected to



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Internet remained stable while the percentage of employees who use personal computers connected to the network continued to grow, rising from 22.6% in 2005 to 33.2% of 2008 (31.5 the national data).

Enterprises and Internet (10 employees at least) [%]		
	Tuscany (value 2008)	Italy (value 2008)
Enterprises connected to Internet	92.6	94.1
Employees using Internet one time a week at least	33.2	31.5

The specific sector of production can affect the data, as shows the following table:

	Manufacturing value 2008)	Building value 2008)	Services value 2008)	Total value 2008)
Enterprises connected to Internet	90.4	94.6	94.3	92.3
Employees using Internet one time a week at least	28.8	21.5	40.6	33.2

The technological equipment of Tuscan companies, of course, not exhausted in the presence of personal computers and the Internet, but includes other tools and technologies, some declining, others in expansion. Concerning the type of used networks in 2008 the 17.9% of Tuscan enterprises with at least 10 employees uses a corporate internal network (intranet), the 17.1% an extranet, the 69.8% a LAN (Local Area Network) to connect computer together and 18.2% a wireless LAN.

ICT technologies inside the enterprise (10 employees at least) [%]		
Technology	Tuscany (value 2008)	Italy (value 2008)
Intranet	17.9 (decreasing)	21.2
Extranet	17.1 (decreasing)	14.3
LAN	69.8 (increasing)	70.6
Wireless LAN	18.2 (increasing)	19.8
Open source operative systems	12.7	12.9
Digital sign	21.8	21.2

Finally while Internet with broadband is increasing in Tuscany (see §2.1.4) mobile and wireless connectivity is always a "niche" sector used by few people. In 2008, citizens (6 years and over) who during the last year are connected to the Internet: 23.4% used a laptop with wireless links cables (WIFI), 6.4% a mobile phone UMTS, 6.3% a mobile phone GPRS and 4.8% a palmtop.

Concerning enterprises, following table summarizes preferred instruments and tools for Internet accessing.

Instruments for Internet accessing: Citizens [%]	
Instrument	Value (2008)
Mobile (GPRS)	6.3
Mobile (UMTS)	6.4

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Palmtop	4.8
Laptop (wireless)	23.4

Instruments for Internet accessing: Enterprises [%]	
Instrument	Value (2008)
Modem (analogical)	14.9
ISDN	22.8
Broadband	79.6
Wireless	14.1

### 2.1.3 Broadband

The presence of appropriate telecommunication infrastructure – enabling fast and efficient communication between citizens, businesses and PA - reduces the risk of digital divide and is an essential item for enterprises competitiveness and the quality of lives of citizens. According to the latest report published by Ministry of Economic Development, broadband coverage in Italy involves 94% of the population. The data is in line with the European average, although it's a lower value respect to France, Great Britain (99%) and Germany (96%).

In our country broadband coverage is total in urban areas, but it stops to 82% in rural areas due to the combined effect of two limiting factors: on the one hand, the low population density does not encourage, in a market logic, investments in infrastructures, on the other geographical conditions increase the costs.

To ensure greater uniformity in the territorial spread of broadband, Tuscany Region has started with the project "Broadband in Tuscan rural areas", which foresees activities in 195 municipalities.

In the latest years the spread of the Internet connection through broadband has affected the whole Tuscany society. Nevertheless the broadband penetration is been slower in households (since 12.9% in 2005 to 26.8% in 2008, in line with national data) and fastest among companies with at least 10 employees (from 57,0% of 2005 to 79.6% in 2008, in line with national data) and, especially, among local authorities (from 41.2% 2005, 84, 6% in 2007, really higher respect to national data):

Broadband [%]		
	Tuscany (value 2008)	Italy (value 2007)
<b>Territorial coverage</b>	94	94
<b>Use and diffusion in:</b>		
- <b>households</b>	26.8	27.6
- <b>enterprises (10 employees at least)</b>	79.6	81.1
- <b>PA</b>	84.6	60.0

The territorial analysis shows different levels of broadband penetration: on the one hand it reflect the gap in coverage, but on the other a different propensity in ICT using in each region too. The differences with Europe are still relevant and confirm there is a delay of Tuscan and Italian families than other European countries also regarding the dissemination of broadband: if we consider the percentage of families (age between 16-74) having a broadband Internet access, we have a whole value of 30%, similar to the national data (31%) but really lower than EU27 (49%).

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The gap doesn't exist, on the contrary, concerning broadband diffusion in enterprises where the whole data (79.6%) is similar to the national (81.1%) and the EU27 (81%).

Broadband diffusion has recently involved SMEs too, which are less inclined to technological changes and encounter a greater difficulty to understand ICT innovation value. If we focus on manufacturing firms, normally small enterprises, we can observe:

- Broadband is less diffused related the whole data for enterprises with 10 employees at least (35.2 against 79.6%)
- Broadband diffusion has increased from 2006 (27.2%) and 2008 (35.2%). This is an important data compared to the parallel economic crisis.

ICT main instruments in manufacturing [%]		
Instruments	Value (2006)	Value (2008)
PC diffusion	49.8	49.8
Internet	38.0	40.9
Broadband	27.2	35.2

The level of ICT skill (broadband, PC usage, etc..) in manufacturing system is highly affected by manufacturing sector and related features, instead of geographical placement. Following tables shows the situation sector by sector and according to the geographical collocation of the enterprise:

Broadband diffusion related to manufacturing sector [%]	
Sector	Value (2008)
Publishing	73.5
Services	63.2
Mechanic	57.0
Dockyards	56.5
Metal products	59.0
Repairing	58.3
Glass	48.0
Gold	49.9
Ceramic	44.5
Clothing	38.7
Leather goods	39.2
Furnishing	36.0
Textile	34.1
Building	29.0
Footwear	33.2
Foodstuffs	21.9

Broadband diffusion in manufacturing SMEs related to placement [%]	
Area	Value (2008)
Florence	41.7
Siena	38.1
Livorno	39.8
Pisa	36.5
Grosseto	36.5

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<b>Empoli</b>	30.5
<b>Massa - Carrara</b>	31.8
<b>Prato</b>	34.9
<b>Pistoia</b>	31.0
<b>Arezzo</b>	31.4
<b>Lucca</b>	29.8

The level of broadband penetration is particularly high in local government. In 2007, in fact, all provincial governments, all mountain communities and 84, 6% of municipalities have got a broadband access to the network. Concerning municipalities the value is highly over the national average (84.6% against 58.9%), while respect to the other Italian regions, Tuscany appears as 2<sup>nd</sup> just behind the Emilia-Romagna.

## 2.2 The ICT market

The global economic crisis has run over the ICT market, slowing the expansion phase that characterized previous years. In 2008 the increase of total turnover (+4.4%) is more moderate than growth rates of previous years (+5.5% in 2006 and 2007). The contraction in world demand for ICT products and services by households, businesses and governments public – natural consequence of the international scenario– involved both the field of Information Technology that the area of telecommunications.

In 2008 European ICT turnover (EU 27) grew by 3.2%, the half respect to the 6.3% of most Asian countries. The Italian ICT market – which contributes to 8,9% of total European turnover - closed 2008 slowing further its dynamic growth. The registered increase in turnover compared to 2007 stands at 0.1% and forecasts for 2009 indicate a contraction of the domestic market of 1, 3%. As in Europe, the ICT market has stopped in Italy too, due to the telecommunications sector, which between 2007 and 2008 has contracted of 0.2%. Holds, however, the area of information technology, although in Italy the IT market was affected by the crises of other European countries. Between 2007 and 2008, in fact, the Italian IT sector grew by only 0.8%, 3 percentage points less than the European average.

In Italy, Tuscany takes up a good position among regions: with the 5.6% of the total market is sixth in the ranking after Lombardy Lazio, Piemonte, Emilia Romagna and Veneto regions.

### 2.2.1 ICT enterprises

In Tuscany, in 2008, over 8.500 ICT enterprises result active, as the 2.3% of the whole. Relating to the category of production, ICT enterprises are divided in three macro areas: general or communication services (e.g. telecommunication, informatics and related activities) which includes 6.248 enterprises (73%), services related to ICT products (e.g. hardware trading, communications instruments, tools rent) which includes 1.653 enterprises, ICT manufacturing (hardware production, cables, communication devices, TV,..) which includes 680 enterprises.

ICT enterprises [N°]	
	Value (2008)
<b>ICT enterprises</b>	8.581
- <b>General services and telecommunication</b>	- 6.248
- <b>Services related to ICT</b>	- 1.653
- <b>ICT manufacturing</b>	- 680

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Percentage of ICT enterprises on total	2.35%
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Between 2005 and 2008 ICT enterprises are increased by 4.9%, but their distribution is not homogeneous on territory. Indeed there is an high density of ICT enterprises in the areas of Florence, Pisa and Prato, while results a lower presence in the south Tuscany (Grosseto) . Concerning the legal form, ICT enterprises are split in two main typologies: on the one hand joint stock or limited companies, which in 2008 represent 36.7% of the whole and are increased by 14.2% compared to 2004; other individual companies, that accounting for 35.7% and during the time period increased by 10.4%.

Concerning the weight of the ICT sector in regional economy, the analysis indicate that in 2007 Tuscan enterprises producing goods and services in the ICT sector occupied over 37 000 800 jobs, 3.2% of overall employment. Inside ICT sector the 60% of people are employed in general services and telecommunication. Finally ICT sector concur with 8.0% to the regional GDP, against the 8.8% of the national value.

**2.2.2 ICT into the Public Administration**

Starting from 2000, public administration in Italy is strongly affect by a deep innovation and informatization process. Through the ICT and digitalization processes, PA aims to contain public expenditure, to enhance competitiveness and to improve the quality of life of the citizens. In this context Tuscany is proceeding to strengthen local PA:

- through the ICT application to achieve e.government objectives
- through the development of advanced services for users (citizens and enterprises), according to the Lisbon Strategy

Since 2007 regional and local administration in Tuscany are characterized by an high level of technology equipment related to the national average, thanks to dedicated policies aimed to invest in ICT.

Each PA has 85 PCs for every 100 employees in media, and this value enhance in mountain communities (120) and in local provinces (100).

Connectivity level is the higher in Italy: all PAs (except for 5 municipalities) have got an internal network, which is also wireless for 41% versus a national average of 21.6%. concerning external networking (Internet) all PAs are connected and a percentage of 86.1% through the broadband. Many public institutions in Tuscany foreseen ICT training for their employees: in 2007 15.2% of municipalities organized courses (8.2% in Italy).

Technology equipment in local PA	
Equipment	Value (2007)
<b>Personal computers for 100 employees:</b>	[N°]
- whole average	85
- small administration (local municipalities)	82
- big administration (provinces, metropolitan area)	100
- mountain communities	120
<b>Broadband:</b>	[%]
- whole average	86.1
- small administration (local municipalities)	82.0

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- big administration (provinces, metropolitan area)	100
- mountain communities	100
<b>Wireless LAN:</b>	[%]
- whole average	41.0
- small administration (local municipalities)	40.2
- big administration (provinces, metropolitan area)	50.0
- mountain communities	40.0
<b>Intranet:</b>	[%]
- whole average	49.8
- small administration (local municipalities)	48.9
- big administration (provinces, metropolitan area)	100
- mountain communities	35.0

Tuscany administrations presents also an high level of computerization of institutional, back-office and management activities (related to the national average) and a good leaning towards opensource solutions and tools (59% against 35.2% of national average).

In 2009, the ICT penetration in local government is further enhanced both concerning the internal activities (management) and the provision of services. Following table shows a picture the level of computerization in main management activities according to the dimension of the PAs

Level of computerization for management activities in PA [%]						
Management activity	Municipalities (value 2009)			Provinces (value 2009)		
	Computerization by net	Local computerization	None	Computerization by net	Local computerization	None
Personnel	66.7	31.2	2.1	77.8	22.2	0.0
Accounting	76.7	22.5	0.8	100.0	0.0	0.0
Payments	65.1	28.0	6.9	55.6	33.3	11.1
Contracts	22.5	46.8	30.7	33.3	44.4	22.2
Calls and competitions	29.0	38.8	32.2	55.6	44.4	0.0
Registry office	77.4	20.1	2.5	-	-	-
Administrative acts and resolutions	69.5	25.0	5.5	100.0	0.0	0.0
Management control	30.1	37.8	32.1	62.5	25.0	12.5
Taxes	67.5	31.2	1.3	44.4	55.6	0.0
Public Relations Office	24.2	23.7	52.1	75.0	25.0	0.0
Computerization level in local entities/services linked to the PAs [%]						
Activity	Value					
Centres for employment	88.9					
Employment informative system	100					
Territorial planning	87.5					
Viability	62.5					
School building	50.0					
Environmental authorization	50.0					

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Computerization level increases together with the dimension and the population of each territorial entity. The growth is regular for municipalities until 15.000 inhabitants, while rears up clearly in the range between 15.000 and 50.000 inhabitants, where PAs reach a computerization level almost absolute for internal management activities. Nevertheless, in this context, the “public relations offices” suffer a delay in their growth, because only a 27% are managed also thought PC and ICT in small municipalities, while the data increase (without anyway reach the wholeness) for medium and bigger PAs (80%-90%).

Full computerization involves also activities and local entities or structures derived from specific tasks of PAs. This is the case of the centres for employment (88.9% of computerization), viability (62.5%), environmental authorization (50%), etc..

While management activities computerization is quickly involving all public administrations (back office), the offering of advanced services for citizens and enterprises (front office) is gradually developing in Tuscany. Particularly between 2007 and 2009 is quickly increased the number of municipalities which:

- have activated a front office for enterprises (called SUAP – Sportello Unico per le Attività Produttive) as web service (not only physically),
- offer a payment on line service,
- integrate in own work flow an e.procurement system for suppliers.

Between 2007 and 2009 has increased the percentage of administrations equipped with computerized SUAP - more than 64% in 2009 - although only in 13.8% of cases, the type of computerization foresees electronic authorizations issue. Particularly SUAP are been activated by the 79.2% of municipalities (half in associated management) and by the 65% of mountain communities: nevertheless population covered by SUAP services is around 87,2%, because all big municipalities have activated it. Nevertheless SUAP computerisation (web services) is far to be homogeneous: only the 60% of PAs having a SUAP web front office manage documents among different offices by the net or exchange data with users (citizens, enterprises) in electronic way, and only the 10% delivers authorizations to the enterprises by the net.

PAs having a SUAP [%]		
Type of PA	Value (2007)	Value (2009)
Municipalities	64.3	79.2
Mountain communities	50.0	65.0
PAs having a web SUAP [%]		
Type of PA	Value (2007)	Value (2009)
Municipalities	42.3	57.4
Mountain communities	45.0	61.5
<b>Total percentage of population covered by SUAP services</b>	87.2%	

Since 2005 e.procurement diffusion is around doubled every two years. E.procurement is particularly used in big administration, where the greater number of inhabitants cause more difficulties in suppliers management: around 90.9% of bigger municipalities (more than 50.000 inhabitants) use e.procurement systems, against the 58.6% of medium (15-50.000 inhabitants) and the 20-40% of the smaller one (less than 15.000 inhabitants).

PAs using an e.procurement system [%]		
Type of PA	Value (2007)	Value (2009)
Municipalities	22.4	36.7

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<b>Mountain communities</b>	30.0	45.0
<b>Provinces</b>	60.0	77.8

Finally only few PAs get ready on line payment services for citizens and/or enterprises. Only 16.7% of municipalities in 2009 offers this service (with a low level of growth respect to 2007), while it is just at the beginning in mountain communities and provinces.

PAs allowing on-line payments [%]		
Type of PA	Value (2007)	Value (2009)
<b>Municipalities</b>	14.0	16.7
<b>Mountain communities</b>	0.0	15.0
<b>Provinces</b>	0.0	11.1

## 2.3 IS: services and customs

The diffusion of ICT tools attends to a growing custom in connecting to the network every day and everywhere for daily activities. Citizens use Internet according to three twisted mainstreams: firstly they strengthen activities traditionally performed using the net, then come out new functions and new range of activities, finally they change own habits according to the new tools, particularly in the field of communication and information activities.

### 2.3.1 Internet and the citizens

A recent analysis carried out by ISTAT (National Institute of Statistic) shows that 76.3% of Tuscany web users use Internet to send/receive email, 66.1% for searching information on goods/services, 56.5% for learning, 53.5% for searching information on online services, 44.6% for booking travel and holidays, 39.2% for reading or downloading news and papers, 34.6 for health information, 29.3% to download software, 28.7% for home banking services.

Main "traditional" ways for Internet use [%]		
Activity	Tuscany (value 2008)	Italy (value 2008)
<b>Send/receive email</b>	76.3	76.1
<b>Searching on goods and services</b>	66.1	66.3
<b>Learning</b>	56.5	58.3
<b>Other searching activities</b>	53.5	53.0
<b>Travel and holidays</b>	44.6	43.2
<b>Reading news, papers</b>	39.2	38.4
<b>Health information</b>	36.4	35.7
<b>Downloading software</b>	29.3	28.1
<b>Home banking</b>	28.7	28.3

Next to the traditional ways to use Internet, new activities and reasons are appearing. The wide spread of the new communication systems among people (as social networks, blogs, communities) or tools (chats, messaging, net phone) are causing new ways of socialization and a new vision for Internet usage.

In detail, 25.1% in 2008 Tuscan citizens aged 6 and more using Internet reads blog or blog, 21.1% sends messages chat, newsgroups or forums question, 20.1% uses services instant messaging. Is more moderato the use of Internet to phone (14.8%), video calls (14.3%) and to create and or manage weblog or blog (8.1%). Internet is



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also a increasingly useful tool for exchange and / or share digital content: 16.1% of Tuscan Internet users charges self made content (text, images, photos, etc..) on web sites for sharing; 8,8% uses peer to peer to exchange music, 4.2% use podcast service to receive video files and audio. The spread of the Internet, finally, is helping to change the use of more traditional instruments, especially with respect to of information and communication activities.

This change effect has affected other activity sectors too: in 2008, 38.4% of citizens used Internet for reading online news instead of newspapers and magazines; 29,0% downloaded videos and movies instead of buying or renting DVD; 20.5% downloaded music instead of buying CD, 16.4%, finally, used the web for radio listening.

Arising ways for Internet use [%]		
Activity	Tuscany (value 2008)	Italy (value 2008)
Uploading contents	16.1	15.7
File sharing (peer to peer)	8.8	10.1
Podcast services	4.2	6.5
Reading weblogs	25.1	28.5
Messaging	21.1	22.3
Writing on weblogs	8.1	7.8
Phoning	14.8	15.5
Videophoning	14.3	15.9
Downloading video/DVD	29.0	29.2
Downloading music	20.5	22.3
Listening radio	16.4	17.0

The electronic commerce is another new growing sector for Internet use. Recent analysis confirm that is increasing people who buy and sell product and services through the net. In 2008 1 citizen on 3 (32.6%) bought or ordered goods and services one time at least, more than national data (29.3%). Following table resumes the more purchased goods through the net from Tuscan and Italian citizens.

E.commerce: more purchased goods and services by Internet [%]		
Goods	Tuscany (value 2008)	Italy (value 2008)
Books and papers	36.9	27.9
Travel and holidays	35.9	35.6
Clothes, sport wares	27.3	25.8
Phone charges	23.3	25.7
Film, music	22.2	20.4
Hi-tech tools	20.8	22.0
Home wares	19.3	15.0
Tickets	18.5	18.0
Software	14.8	17.9
Hardware	13.5	16.2
Financial services	6.6	6.3
Foodstuff	6.4	4.2

### 2.3.2 Internet and the enterprises

Enterprises in Tuscany use Internet mainly to access to financial and banking services (83.1%), to public administration web sites (76.2%) and to have marketing and market

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information. Together with these traditional web activities are gradually increasing the purchase of digital information and services (45.8%) and of post-sale services, as invoicing and accounting services (36.4%). It's always low the percentage of enterprises using Internet for e.learning or training courses for employees. All indicators have anyway booked an increase between 2005 and 2008, even if, due to the economic crisis, since 2007 all activities are quite settled .

Main Internet utilizations from enterprise (10 employees at least) [%]		
Activity	Tuscany (value 2008)	Italy (value 2008)
Access to financial, banking services	83.1	85.9
Access to PA services	76.2	81.8
Market information purchase	57.1	61.2
Digital services purchase	45.8	50.3
Post-sale services purchase	36.4	42.0
E.learning, training	14.2	16.9

In 2008 more than 1 enterprise on 2 (55.5%) has got an institutional web site. The value proves that Tuscany has a delay respect to the national average (58.1%), particularly to the north of Italy, and to the EU average (64%). Main web site services concern catalogue and price list consultation (30.7%), while more advanced services, as purchase order on line, product's customisation, etc., involve today less than 10% of enterprises. Following tables resumes the percentage values of the main web site services.

Services offered by enterprise (10 employees at least) web sites [%]		
Service	Tuscany (value 2008)	Italy (value 2008)
Catalogue, price list consultation	30.7	33.3
Purchase order, booking on line	13.4	13.5
Job's announcement	5.0	6.1
Product's customisation	4.1	4.1
On line payments	3.3	3.6
Web contents/layouts customisation	2.9	2.9

Internet spreading, and more generally, ICT spreading among enterprise has facilitated and encouraged both internal integration processes and integration processes among them too. In first case, in 2008 the 42% of enterprises share information and data on received sale orders automatically through the net, while the 34% make the same thing with transmitted purchase orders. Concerning the second case around 36% of enterprises use the automated data exchange, so share automatically information among own different information and data management systems (34.8% is the national data), using mainly XML standard. Following table resumes the main reasons for enterprise to use automated data exchange.

Main reasons for enterprises to use automatic data exchange [%]	
Activity	Value (2008)
Giving payment orders	80.9
Receiving digital invoices	80.0
Sending/receiving information on products	68.2
Sending purchase orders to suppliers	60.5
Receiving purchase orders from customers	60.2

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Data exchange with PA	43.1
Sending/receiving transport documents	41.8
Sending digital invoices	32.7

Concerning the supply chain management, so the management of the whole value production chain, from the suppliers to the customers, in 2008 in Tuscany, only the 22% of enterprise exchange regularly information along the whole chain, particularly through the web site.

Finally the percentage of enterprises which use e.commerce for purchasing products is around 26%, against the national data of 28.2%, but for the 80% of these enterprises through e.commerce they perform only the 5% of their purchases. Lesser (5%) is the percentage of enterprises which use e.commerce for selling products.

### 2.3.3 Focus on PA services

Internet spreading has modified relationships among public administrations and citizens too. Around 37.1% of citizens using Internet contact own PAs only by web instead of physically going to the front office. In 2008 Tuscan citizens used Internet for having information (29.9%), for downloading (22.7%) or sending documents (10.8%).

Web relationships between citizens and PA [%]		
Action	Tuscany (value 2008)	Italy (value 2008)
Having information	29.1	28.9
Downloading modules	22.7	21.7
Sending documents/modules	10.8	10.6
Prefer on line contact with PA	37.1	35.2

Also in enterprises environment web procedures are increasing in relationships with public administration: if we focus on enterprise with 10 employees at least, in 2008 used Internet at this purpose. More in detail: 68.1% for information acquiring, 67.1% for documents downloading, 35.7% for performing web form and (38.8%) procedures. E.procurement, even if with a growing trend, is restrict to a few number of firms (9.0%).

Web relationships between enterprises (10 employees at least) and PA [%]		
Action	Tuscany (value 2008)	Italy (value 2008)
Having information	68.1	74.1
Downloading modules	67.1	71.0
Sending documents/modules	35.7	41.7
Web procedures	38.8	41.3
e.procurement	9.0	8.9
Global on line contact with PA	76.6	

Focusing on manufacturing firms, only 16% in 2008 had an online contact with PAs. Related to 2007 is finally decreasing the percentage of firms which prefer to contact PAs through the front offices (from 8.7% to 7.1%), while is increasing the percentage of who prefer to employ external consultant (from 7.4% to 9.3%).

## 2.4 Digital divide

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In Tuscany, as more generally in the whole nation, spread and use of technological assets presents features and elements of strong heterogeneity. In particular, the presence of base ICT tools in households depends on family features themselves and can be explained by generational, socio-cultural and economical factors. Generational factor is the more important: presence of under ages increases the probability that a family has got a computer (76.4%), an Internet access (66.6%) or a broadband connection (45.9%).

Generational factor for digital divide in households [%]				
Tuscany value (2008)	Households features			
	Presence of an under age	Only aged people	Other	Total
Have a PC	76.4	6.1	53.5	47.9
Have an Internet access	66.6	4.3	46.2	41.3
Have broadband	45.9	1.9	29.9	26.8

Nevertheless people age, even if remains the main, is not the only featuring factor for digital divide.

#### 2.4.1 Gap features

As for generational factor, the educational level of the householder can determine a higher or lower family bent to have technological tools. Indeed families where the householder has got a degree have more frequently PCs or Internet in their home and the percentage is almost triple (82.2%) respect to a family with an householder with a low educational level (33.5%).

Educational factor for digital divide in households [%]				
Tuscany value (2008)	Educational level of householder			
	High (University degree)	Medium (High school)	Low (Primary school)	Total
Have a PC	82.2	64.3	33.5	47.7
Have an Internet access	71.0	56.4	28.6	41.3
Have broadband	43.1	39.3	17.8	26.8

Moreover gap features for digital divide can be also due to the job of householder. At this purpose in Tuscany there are two distinct situation: on one hand families where the householder has an high level job position (manager, director, entrepreneur, practitioner, etc..) with an high bent for technology, on other hand families where the householder works as worker or craftsman, with a lower bent for ICTs and related tools.

Job factor for digital divide in households [%]					
Tuscany value (2008)	Householder's job				
	Manager and entrepreneur	Employees	Worker and trainees	Craftsmen	Total
Have a PC	79.8	78.5	53.8	60.2	47.9
Have an Internet access	74.4	72.5	43.4	49.1	41.3
Have broadband	48.1	49.6	26.3	38.2	26.8

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If technologies diffusion in households is strongly affected by generational, educational and job factor, similarly happens for ICT tools utilization. Generational factor is the crucial one yet: ICT users are mainly young people and capacity in ICT use decreases when age increases. This happens both in PC and in Internet use, and, with lesser but significant gaps, gender is a decisive factor for digital divide too: spread analysis shows as men are generally more inclined to use ICT.

Age and gender factor for digital divide in PC use [%]			
Tuscany value (2008)	PC use		
	Male	Female	Total
6 – 10 years	57.3	52.5	55.1
11 – 14 years	90.5	82.7	86.3
15 – 19 years	94.0	84.6	89.4
20 – 24 years	77.3	79.4	76.1
25 – 34 years	72.1	65.8	69.1
35 – 44 years	61.8	62.4	62.1
45 – 54 years	61.1	49.1	54.8
More than 55 years	18.2	9.2	13.3
<b>Tuscany Total</b>	<b>49.5</b>	<b>40.5</b>	<b>44.8</b>
Age and gender factor for digital divide in Internet use [%]			
Tuscany value (2008)	Internet use		
	Male	Female	Total
6 – 10 years	19.8	20.2	20.0
11 – 14 years	75.0	78.5	76.8
15 – 19 years	94.2	83.9	89.2
20 – 24 years	76.8	71.1	74.1
25 – 34 years	69.2	64.1	66.8
35 – 44 years	56.4	58.3	57.4
45 – 54 years	57.2	44.6	50.5
More than 55 years	15.5	7.1	10.9
<b>Tuscany Total</b>	<b>45.2</b>	<b>37.1</b>	<b>41.0</b>

As for the ownership, educational level and householder job determines ICT utilization too. The use of PC and Internet - calculated among Tuscan citizens 25 years and more – shows a linear relationship with the education level: it is around 80% for citizens with a high education level (degree), but falls between 61% and 64% among graduates. The utilization rates among citizens with a low levels of education (not more than the primary school level) do not go beyond 18%, showing an enormous gap compared to the citizens who have a bachelor's degree.

Concerning jobs, main technology users are managers, directors and employees: this fact probably is strictly related to a more common PC and Internet use in their working and daily activities. Workers and craftsmen are lesser users of ICT tools.

Educational factor for digital divide in ICT utilization [%]				
Tuscany value (2008)	Educational level of householder			
	High (University degree)	Medium (High school)	Low (Primary school)	Total
Use of PC	81.8	64.3	18.3	39.5
Use of Internet	79.0	61.2	15.0	36.3
Job factor for digital divide in ICT utilization [%]				
Tuscany value	Householder's job			

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(2008)	Manager and entrepreneur	Employees	Worker and trainees	Craftsmen	
Use of PC	80.0	88.3	42.6	47.3	
Use of Internet	78.8	83.7	37.7	41.7	

Finally, concerning mobile connectivity and tools, in 2008 we observe that among citizens using Internet, 23.4% used a wireless laptop (WIFI), 6.4% an UMTS mobile phone, 6.3% a GPRS mobile phone and 4.8% a palmtop. In this case the crucial factor is the gender: male are greater users of mobile connectivity for Internet accessing.

Gender factor in mobile connectivity in Internet utilization [%.,2008]			
	Male	Female	Totale
Wireless laptop	26.0	21.3	23.4
Mobile (UMTS)	7.3	4.4	6.4
Mobile (GPRS)	7.2	4.8	6.3
Palmtop	6.8	3.1	4.8

## 2.4.2 From traditional services to web services

Many citizens use the net for activities of everyday life. On the one hand traditional and consolidated activities are reinforcing, other are emerging new activity areas and / or new ways to perform traditional actions. Traditional Internet activities involve different groups of people using ICT, while new activities concern more specific targets. Age is not always an important factor, particularly for traditional activities: emails, for example, are equally usual for young and aged people (75.2% between 15-19 years and 71.7% for over 60). Data and gaps gradually change when we analyze the use of Internet for not ordinary activities, as, for example booking travels (40-50% versus 37%).

Gender is not a crucial factor: as appears in the following table, men and women make the same use of Internet with comparable percentage.

Gender factor in Internet utilisation ways [%., 2008]		
Activities	Male	Female
Sending / receiving email	76.8	75.6
Searching information about goods and services	70.5	61.1
Travelling	44.6	44.6
Reading / downloading news, papers	39.8	38.6
Using bank services	32.6	24.2
Searching job	12.7	13.3
Searching health information	31.8	41.7

Some ordinary Internet activities seem more connected to the people's job: sending an email or reading news/papers, for example, are more common activities for managers and entrepreneur instead of workers.

Job factor for digital divide in ICT utilization [%]					
Tuscany value (2008)	Job				
	Manager and entrepreneur	Employees	Worker and trainees	Craftsmen	
Sending / receiving email	90.9	82.9	67.7	80.2	

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Searching information about goods and services	54.2	49.1	35.0	23.4	
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Nevertheless Internet spreading concur to the growing of new way of communication and socialization particularly attractive for youths: this is the case of Skype for video and phone calling or of the success of blogs, chats, and, more recently, social forum as Facebook and Twitter. Here we observe a peak of utilization between 15-17 years (61%) while the percentage quickly decreases with the age (11% for 35-44 years).

In 2008 around 25% of citizens used Internet for buying goods and services. Deepening this data, we observe that buyers are mainly men (31.2% against 18.4%) and the percentage is strictly related to the job and the level of education.

Educational factor for e.commerce [%]					
Tuscany value (2008)	Educational level				
	High (University degree)	Medium (High school)	Low (Primary school)		
E.commerce use	32.7	26.7	20.5		
Job factor for e.commerce [%]					
Tuscany value (2008)	Job				
	Manager and entrepreneur	Employees	Worker and trainees	Craftsmen	
E.commerce use	36.9	27.0	26.5	18.7	

Finally focusing on relationships between citizens and public administration through the web, we observe that in 2008 is increasing the provision and the use of PA services.

In this case too gender is not a crucial factor while we can observe really different approaches relating to educational level of the citizen and job, as it results from the following tables.

Educational factor in virtual relationships with PAs [%]					
Tuscany value (2008)	Educational level				
	High (University degree)	Medium (High school)	Low (Primary school)		
Utilization of PA services	51.2	42.1	24.4		
Job factor in virtual relationships with PAs [%]					
Tuscany value (2008)	Job				
	Manager and entrepreneur	Employees	Worker and trainees	Craftsmen	
Utilization of PA services	49.8	44.9	43.2	42.4	

### 3 The Information Society in Region: governance and policies at local and regional level

#### 3.1 The governance of the Information society in Region

The Information Society in Tuscany formally starts with the publication in the BURT (the Official Bulletin of the Tuscany Regional Acts) of the Regional Law n° 1 of 26th January 2004 (LR 01/2004) "Promotion of electronic and information *society and knowledge in the regional system*", which represents the first attempt to rule the theme.

With this law, in the context of institutional cooperation, the Tuscany Region (RT) aimed:

- I. to facilitate the process of organizational and technological innovation of public administrations in the region, towards administrative simplification and the quality and accessibility of public services,
- II. to promote the development of the information and knowledge society in the regional area in order to foster social development and quality of life improvement, personal and professional fulfilment as well as modes of active citizenship.

The subject of this law was also the regulation of the Tuscany Region Data Communication Network (RTRT) as the permanent means of coordination of the regional system of local authorities and of cooperation between the system itself and other public and private parties in the fields as over defined.

Inside RTRT, the Region has the task of promoting, co-financing and managing the technological infrastructure of the Network, including basic services and applicative cooperation. The Region supplies, by means of specific agreements with other state members of the Network, all services for the execution of the activities and the pursuit of the Network's aims, including the secretarial activities.

Besides Region takes care of the planning, building, prevention, monitoring and evolution of the state connectivity system in its own territory, coordinating with planning and application solutions adopted at national level in order to permit the coherent development of the system.

The Regional Government adopts, at the recommendation of the Steering Committee, suitable regulations containing technical rules necessary for achieving the aims

##### 3.1.1 The RTRT and its organization

RTRT represents today many things at same time:

- It is a **network of institutions**, as created, managed and developed not only by the Tuscany Region, but in part by the entities who first invested in this project and acceded since 1997.
- It is a **model of relationships** between different actors based on the concept of shared goals, cooperation and partnership, able to produce and sustain innovation processes.
- It is a **technological Infrastructure** large capacity, spread throughout the region, interconnected to the Internet, interoperable, as meeting the standards promoted by CNIPA (first AIPA), the Public Connectivity System (formerly Unified Network of Public Administration).
- It is especially an **opportunity** for regional development:



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- for the establishment of new relationships between public administrations and between them and citizens, businesses and society more generally, technological innovation and the internal organizational entities,
- for the promotion of Tuscany resources (land, culture, business, etc. ...);
- for small and medium enterprises in technological innovation, and more.

Through the RTRT, Tuscany government works to establish e-government methods in order to simplify, to integrate and to render more transparent internal procedures, as well as to make services to the public and to business more efficient. At same time RTRT contributes to the implementation of an organic and unitary strategy for the development of the information and knowledge society.

The following organizations belong to the Regional Network: regional agencies and organizations, public health organizations and, via specific agreement, single or associated communes, the provinces, the districts that are recognized by regional law, the metropolitan area, the mountain communities.

The RTRT acts through the following organizational structure:

- I. **Assembly** - The Assembly is composed by representatives of participating entities and it has a general strategic and proposing function with regard to the activities and projects of the Network. The Assembly regulates its organization with acts passed by a majority of its members. The Assembly nominates the Steering Committee and governs its membership.
- II. **Steering Committee** - The Steering Committee has a strategic and directive role in the activities of the Network. The Committee promotes the evolutionary development of the Network and negotiates with the parties the rules of their participation. The Committee, presided by the President of the Regional Government or his/her representative, is composed by not more than thirty representatives: a representative of the Council of the local authorities and a representative of each of the associations of local bodies are also part of the Committee. The Committee shall remain in office for the entire period of office of the legislature which nominated and governs the committees working and organisational methods by deeds of absolute majority of its members.
- III. **Network Coordinator** - The Coordinator looks after the relations between the Network and public and private organisations within the parameters of the decisions made within the Network itself and coordinates the totality of technical and organizational resources used. The Steering Committee regulates the functions of and the criteria with which the Network Coordinator is nominated; the duration of the mandate of the Coordinator cannot exceed that of the Strategy Committee. The Network Coordinator is expected to provide all information relative to the activities and working of the Network to the specific commissions of the Regional Council whenever it is required.
- IV. **Technical and operative Directorate** - The technical and operative Directorate has a directing role and other functions assigned to it for the definition of standards with regard to the Network, for its connection with other networks, for system interoperability and applied cooperation. Directorate predisposes the Plan of action in order to ensure its adoption, and drafts the annual Monitoring Document of the Network's activities with a view to the approval of the Plan itself. The Steering Committee regulates the functions of, the make-up, and the way in which the Technical and operative Directorate is nominated and organized.

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V. **User Observatory** - In order to encourage the effectiveness of the regional public administration data communication services the User Observatory is constituted at the Technical operative Directorate office. The Steering Committee regulates the composition and the way in which the User Observatory is organized ensuring a coordinated relationship between it and the other organs of the Network and the participation within it of the various economic and social components of civil society. It also ensures methods by which the User Observatory can pass information on the results the Observatory's activity to the Regional Council. The Regional Council shall nominate two members of the Observatory.

### 3.1.2 Principles and guideline criteria

In pursuit of the aims as set out before in §3.1 point I, the Region and the parties referred to the RTRT act in conformity to the following principles and guideline criteria:

- a) coordinated development of state data systems, improvement and sharing of state data property, both to be pursued according to models of institutional cooperation defined in this law and the promotion of the inter-operativeness between all state authorities at a territorial level in order to encourage interaction and cooperation, including within the ambit of the public system of connectivity, and to guarantee and protect the power of local authorities and the data and IT coordination of data between the state authorities in the regional area;
- b) making effective and efficient use, for the purposes of the present law, of territorial or thematic groupings, including unified city networks, and also of the links with territorial divisions of the State administration;
- c) utilization of open information and documentary standards in exchanges between public administrations and in reference to data to be made available to the public;
- d) conformity to regulations for the safeguarding of the individual and other parties with regard to the treatment of personal data, as well as with regard to the data's legitimate proprietor;
- e) quality of data in terms of correctness, up to datedness, completeness and coherence, as well as integration with its electronic management including via the use of electronic marking and encrypting techniques;
- f) care of security of data, systems, networks and services via the adoption of appropriate technical and organizational measures;
- g) diffusion of electronic identification tools and of access procedures to data communication services;
- h) diffusion of data communication procedures for the purchase and supply of goods and services on the part of public administrations, respecting the specificity and the development of local markets;
- i) promotion, support and preferential utilization of solutions based on open code source programs in accordance to the principle of technological neutrality, so as to make possible the interoperability of components produced by a plurality of suppliers, their re-use, the optimization of resources and to guarantee the full comprehension of the data treatment process.

In pursuit of the aims as set out before in §3.1 point II, the Region and the parties referred to the RTRT act in conformity to the following principles and guideline criteria:

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- a) effective use of institutional, economic and social actors as producers of information and of electronically shared material;
- b) education in the informed use of the information and statistical data held by public administrations;
- c) education in the informed use of the Network and of tools in particular with regards to the advantages connected to the use of free and open code source programs;
- d) adoption of measures, technological standards and development practices that encourage social inclusion and guarantee accessibility, with particular attention being paid to different abilities and the promotion of the user-friendliness of information systems;
- e) incentives, qualification and coordination of web services for a balanced socio-economic development of the regional territory, including via the creation of assisted access points;
- f) support for families, schools and other social categories in the gaining of tangible access possibilities to services provided with technological and telecommunications tools;
- g) project creation and the adoption of measures aiming at the inspiring of user-confidence in the network's diverse uses;
- h) utilization of information and telecommunications technology in such a way as to stimulate the economic development of the area in terms of competencies, in terms of the qualifying of professional opportunities, of innovation and the advancement of learning;
- i) stimulation of the businesses that operate in the information and telecommunications technology sector for the development of quality services via accrediting as well as qualifying and demand organization procedures;
- l) effective and efficient use of the knowledge and scientific resource pool in order to promote cultural and technological transferral and social and productive innovation.
- m) promotion and protection of domain names of authorities and regional territories.

### 3.2 Local and Regional policies and objectives

#### 3.2.1 Overview and main themes/areas of activity

For the implementation of the LR 01/2004, was approved by Regional Council the "Regional Programme for the promotion and development of electronic administration and information society 2007-2010" in order to assist the process of organizational innovation and technological PA Tuscany, digital inclusion and development of regional competitiveness.

The Regional Programme is divided into four thematic areas which cut across the sectors of activity in the region, which constitute the backbone and define objectives, actions and specific results to be achieved:

- ❖ **e.community** - policies for access and participation: activities that have reply to the topic of network, its services and its fields of knowledge, seen as an opportunity to exercise citizenship rights in an environment and safe spaces within which encourage participation and knowledge sharing;

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- ❖ **e.services** - policies for the provision of community services: actions to increase organizational innovation and use of Information and Communication Technologies in a PA that aims to offer efficient services to citizens and businesses, transparent and integrated;
- ❖ **e.competitiveness** - policies for sustainable economic development: interventions to enhance the value and competitiveness through the use of Information and Communication Technologies and their use in the production chain - marketing - sales;
- ❖ **Qualifying Infrastructures:** actions to supplement and enhance the technological infrastructure of RTRT (see §3.1.1) through the deployment of broadband, sharing guaranteed levels of service, the creation of interoperable and secure.

The program is a natural continuation of previous planning period – called *e.Toscana Plan* - and includes important innovative elements and additional meanings, as:

- ❑ *Interventions across the sectors:* the information society is a cross-cutting matter and for that reason is by its nature "cross" (inter-sectoral). One of the most complex item for results achieving in the regional context is the coordination of policies, interventions, resources, competing in various General directorates and their impacts on the territory. The program therefore aims also to systematize the whole planned actions, creating a common framework designed to show and share underway actions within the Region, giving a regional organic action and an orientation to public and private stakeholders involved in this field.
- ❑ *Extension of the period:* the new programming period is linked to the regional legislature. This demonstrates that the development of society is now a specific policy, provided by the Government Programme and linked to other actions of the legislature. The extension of the programming period to five years (the previous e.Toscana Plan was linked to the Extraordinary Plan funding for the period 2003 -2005) provides an additional and important scope for the deployment and monitoring of actions;
- ❑ *Broadening of themes:* the recognition of the cross matter and its importance for Europe's growth in terms of competitiveness and quality of life, makes possible and necessary to include new themes in the Programme, such as research, broadband to citizens and businesses, justice, education, creating platforms for offering services, etc.. These new fields arise from an analysis of territory needs and testify as in every traditional sector there isn't need to intervene on the diffusion of new technologies.
- ❑ *Increased maturity:* this program makes use of experience in the realization of the e.Toscana Plan and others, both in terms of the definition of activities, both in terms of administrative and technical tools in achieving goals. It rises also in a more organic national context, thanks to the enactment of specific laws and the new framework for regional cooperation. It follows a structure and content of interrelation between interventions much more organic and responsive to the identified needs.
- ❑ *Monitoring of interventions:* the definition of indicators able to measure the progress of interventions, the consequences of actions and the achievement of policy set objectives, is a focus element of the program. Were therefore provided a set of indicators and a monitoring methodology to regularly check the evolution of projects and their reflections in the fields where they work. These indicators have been identified taking into account the necessity of having to coordinate with the results of field surveys conducted in Europe and at national level benchmarking activities.

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- ❑ *Window on Europe*: program opens itself to Europe. This requirement, although it was present in previous plans too, rises here through specific lines of action aimed at enhancing Tuscany by promoting its planning and expanding networks of exchange and partnership which it participates. In this context is very important the regional interest in participating in the Seventh Framework Programme and investing in research and technology transfer through own universities.
- ❑ *New tools for Program implementation*: the program got tools and operational administration to achieve the objectives. These tools represent an evolution from the previous period, as they can achieve objectives and disseminate activities, through the relevant actors and stakeholders in the territory, the shared standards, cooperation frameworks and strengthened governance.

Following the four Programme thematic areas are deepened.

### **3.2.2 E.Community**

The Program aims to promote the use of the new technologies to make 'effective' the exercise of the old and new digital rights to the widest number of Tuscan citizens, ensuring social inclusion of people currently away from applications and services offered by the society. They must also be structured and promoted the rights of nationality in regard to capacity of citizens to consciously act as workers, consumers and / or producers in new the net economy ways.

#### **3.2.2.1 Objectives**

- ❑ promote the free knowledge exchange as an essential public good, meanwhile guaranteeing the appropriate protection of intellectual and free use of its products;
- ❑ build a digital community (e-community) using ICT for the simplification of the relationships and the development of new ways of communication, participation and democracy;
- ❑ develop new participation and democracy ways and increase the PA transparency (digital citizenship), even with the promotion of specific programs in these areas;
- ❑ ensure the identity protection, privacy and security of persons and transactions network, creating an organizational framework and a computerized environment able to achieve and ensure public confidence and promoting and implementing initiatives for the " culture of privacy" dissemination in Tuscany;
- ❑ promote the spread of info-desks for a better interaction between citizens and businesses with the public administration and public access points to Internet, designed to allow use of on line services, with information and assistance to users;
- ❑ ensure to the minorities the understanding and access to information society services;
- ❑ increase ICT skills by the identification of high value applications and services for different segments of the population.

#### **3.2.2.2 Topics**

E.Community area is divided into 6 topics:

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1- Fighting digital divide - Digital divide is caused by both objective conditions related to factors such as the area where people lives, the accessibility by the communication infrastructure, etc.. and subjective conditions, related to personal characteristics of people excluded from society, mainly as age, education level, income level. This factors produce situations increasing the risk of divide persistence and spread. It is therefore necessary to identify and organize specific enforcement actions, focused both on territories and to the weak population groups.

Policy objectives	Actions
Fostering formation and learning initiatives and projects focused on e.government: applications and services use	<input type="checkbox"/> Training courses for citizens, SMEs, schools, etc.. <input type="checkbox"/> Promotion of open source tools <input type="checkbox"/> Help on site actions at the public Internet point
Increasing awareness initiatives of the ICT tools and services opportunities particularly focused on weak groups of population	<input type="checkbox"/> Creation of a public framework focused on barriers removing (physical, cultural, economic) in digital services usage

2- Fostering participation and democracy - Good policies require a decision-making involvement more aware, informed and of good quality. Tuscany Region is activating regulatory instruments to facilitate the participation and having already developed significant experiences in the field of cooperative governance. A significant example is represented by the formation process of the first regional law for participation in Italy. It must therefore be developed and tested tools and digital platforms to support participation and democracy, including 'electronic voting'. ICT are able to sustain this virtuous path and give better instruments for participation.

Policy objectives	Actions
Citizens and associations involvement in public policy building procedures	<input type="checkbox"/> Make available ICT instruments to oppose to digital divide <input type="checkbox"/> Foster every citizen participation initiatives through ICT <input type="checkbox"/> Carry out electronic vote testing <input type="checkbox"/> Spread local/regional good practices <input type="checkbox"/> Participate in FP7 project initiatives
ICT's use for strengthening citizen involvement in local policy life cycles	
Sensitization initiatives for an aware use of the informative public assets	

3- Promoting citizen and consumer rights - Protecting the rights of citizenship is a central element in regional policies for the information society. The growth of social cohesion, conceived as "an essential actor of the people welfare " and founded on great values (social justice, rights, integration) able to characterize the regional identity, is a primary requirement for development. The digital divide, caused by differences in the ability to access and use new technologies, generates new gaps in citizen rights. Nevertheless technologies are also able to counter these trends, offering new opportunities for integration and growth through solutions for e-inclusion. The foreseen actions identify actions to counter the violation of rights, promoting solutions through both the development of the justice tools that the orientation of citizens and their associations.

Policy objectives	Actions
Defend citizen rights through information and services access	<input type="checkbox"/> Create an e.framework able to direct citizens (immigrants too) through the different justice

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Defend consumer rights through electronic platforms able to manage contentions	levels, instruments, procedures
Promote immigrant integration through their orientation to the Italian law with ICT tools	<input type="checkbox"/> Support civil rights and consumer associations and integrate in a common framework their ICT tools and services

4- Promoting the privacy's culture – Privacy is a right of every citizen. The innovation in public administration, through the ICT, increases databases and the currency of uncontrolled personal information threatening the loss of own privacy. The regional programme aims to ensure a respectful relationship with citizens, making technology a freedom tool and not a discrimination one.

Policy objectives	Actions
Promote a wide awareness about citizen rights and how to protect them	<input type="checkbox"/> Realize and spread a "guide" on citizen rights <input type="checkbox"/> Spread through RTRT and its partner knowledge and methodologies on privacy protection <input type="checkbox"/> Good practices exchange
Promote a "privacy" culture	
Coordinate regional management procedure and ICTs to ensure a good level of security in data protection	

5- Information services for citizens – The regional project "URP network" (note: URP is the front office for public relationships) offers available tools to achieve an effective communication system between public administrations, so that may expose useful information for citizens about administrative and public procedures, responsibilities, times and tracking tools. Since this information come from more administrations, the citizen has the opportunity to access to single system able to drive him through the complexity of the procedures. In addition, operators can manage own URP database of expertises or access to the databases of other entities, thus becoming a reference and services point complete and integrated.

Policy objectives	Actions
Guarantee a wide spread of the information, focusing on citizen needs instead of PA	<input type="checkbox"/> Various actions to improve the quality of traditional information services for citizens through the ICT <input type="checkbox"/> Invest in URP network <input type="checkbox"/> Set up help and assistance services <input type="checkbox"/> Create and spread a common methodological framework
Measure the customer satisfaction	
Offer high quality, quick and reliable services	

6- PAAS (Assisted Access Point to Internet Services) – In Tuscany the creation of the PAAS born as result of the common commitment of region, municipalities and citizens associations, and offer to the citizen the opportunity to have a free public access point to Internet together with a training or a simple assistance to the usage of public web services given by a dedicated staff. Together with the main function to assist people in learning the use of the more common internet tools, each PAAS is able to provide feedbacks about the quality and the accessibility of each public service, giving in this way useful indication about how to improve services and procedures. To ensure an easy and quick exchange of information and practices, Region has created the PAAS network and a dedicated web environment where citizen can acquire information about where find the nearest PAAS and what it is.

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Policy objectives	Actions
Improve and extend the PAAS network, particularly in small and isolated municipalities	<input type="checkbox"/> Accredited PAAS also as PA services information points <input type="checkbox"/> Create a PAAS (at least) in every municipality <input type="checkbox"/> Use the PAAS for e.democracy initiatives <input type="checkbox"/> Improve/accredited as PAAS also private internet points, according to specific requirements
Integrate PAAS network with other initiatives against the digital divide	
Use the PAAS as citizen expression and participation points to the local policies too	

#### 3.2.2.3 Result indicators

Topic	Indicators
<b>Fighting digital divide</b>	<input type="checkbox"/> N° of users knowing web and open source opportunities <input type="checkbox"/> N° of local entities having an accessible web site <input type="checkbox"/> N° of schools using web tools for education and training
<b>Fostering participation and democracy</b>	<input type="checkbox"/> N° of local entities using e.democracy good practices provided by the regional catalogue <input type="checkbox"/> N° of PAs using e.democracy tools for policy building <input type="checkbox"/> N° of funded project on FP7
<b>Promoting citizen and consumer rights</b>	<input type="checkbox"/> Realization of the common platform for citizen orientation and guide to own rights
<b>Promoting the privacy's culture</b>	<input type="checkbox"/> Realization of the regional web portal for privacy <input type="checkbox"/> N° of activated training course on privacy <input type="checkbox"/> Activation of the good practices catalogue
<b>Information services for citizens</b>	<input type="checkbox"/> N° of local entities having an information front office for citizens already integrated with local URP and compliant with regional standards
<b>PAAS</b>	<input type="checkbox"/> N° of municipalities with PAAS <input type="checkbox"/> N° of users of PAAS <input type="checkbox"/> N° of services provided by PAAS <input type="checkbox"/> N° of activated PAAS

#### 3.2.2.4 Competencies

Topic	Regional responsible(s)
<b>Fighting digital divide</b>	<input type="checkbox"/> General Directorate for organization and informative services <input type="checkbox"/> General Directorate for educational policies and cultural heritage
<b>Fostering participation and democracy</b>	<input type="checkbox"/> General Directorate for organization and informative services <input type="checkbox"/> General Directorate for presidency
<b>Promoting citizen and consumer rights</b>	<input type="checkbox"/> General Directorate for organization and informative services <input type="checkbox"/> General Directorate for Presidency
<b>Promoting the privacy's culture</b>	<input type="checkbox"/> General Directorate for organization and informative services
<b>Information services for citizens</b>	<input type="checkbox"/> General Directorate for organization and informative services



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PAAS	<input type="checkbox"/> General Directorate for organization and informative services <input type="checkbox"/> General Directorate for presidency
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3.2.3 E.services

ICT in services, particularly in public administration should not be understood solely in terms of provision of telematic services to end users, but is especially in the ability of PA to provide comprehensive, transparent and integrated services to citizens and businesses through the use of all available channels, starting by traditional branches. Technological innovation is a powerful engine for innovation in public administration because promotes organizational integration, simplification of processes and procedures, more effective internal communication, simple and integrated relationships among PAS and towards citizens and companies.

3.2.3.1 Objectives

- Ensure full integration of local backoffice systems in PA, through the fulfilment of the infrastructures, security systems, authenticated access and compliance cooperation
- Offer an integrated on line services system for citizens and enterprises
- Integrate also e.services provided by non public entities with RTRT systems.
- Foster the technical and administrative cooperation

3.2.3.2 Topics

E.Services area is divided into 5 wide topics:

1- Service infrastructures – The improvement of the public services and the tuning of the administrative processes require infrastructures to support shared service with effectiveness and economic efficiency of e-government development. The Tuscany Region, in collaboration with the local public administration, is directly committed to the creation of such infrastructure. In this regard, following platforms are identified as strategic service infrastructure for digital administration development:

- E.procurement
- On line payments
- Document and workflow management
- Innovation and training

Their activation will bear advanced services by the local public administration

Policy objectives	Actions
Realize an e.procurement framework and foster its use among RTRT entities	<input type="checkbox"/> Realization and activation of the platform <input type="checkbox"/> Definition and use of common standards and procedures
Give to citizen and industries the opportunity of secure on line payments	<input type="checkbox"/> Realization and activation of the platform <input type="checkbox"/> Creation of incentives
Foster the use of common standard instruments and procedure to electronically	<input type="checkbox"/> Tuning of all PA's management systems <input type="checkbox"/> Activation of document management common

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document management	solutions
Increase skill and competences on IS inside the PA Provide PA of innovative solution to support decisions	<input type="checkbox"/> Development of specific tech solutions for PA (DSS, organizational procedures, laws,...) <input type="checkbox"/> Development of training initiatives

**2- Public utilities** – Provided services by public utilities highly affect the citizen quality of life. Indeed they provide indispensable service to the whole population and can qualify the efficiency of the whole regional system.

Policy objectives	Actions
Improve CRM efficiency	<input type="checkbox"/> Activate integrated projects with/for public utilities <input type="checkbox"/> Activate services in multichannel modality <input type="checkbox"/> Activate on line common payments systems
Facilitate relationships among industries through ICT for transparency and efficiency	
Integrate public utilities with the regional e.governemnt programme (IS programme)	

**3- School** – Learning system foresees educational training activities through specific formal structures (school, universities), but also informal centres where people can learn out of a planned and mandatory educational course. Tuscany wish to improve own educational system with the integration of new ways to teach and learn based on broadband connection.

Policy objectives	Actions
Offer a technological framework for educational services for children, youth and senior people	<input type="checkbox"/> Create a new technological platform for learning <input type="checkbox"/> Plan and create tools and infrastructure to support it <input type="checkbox"/> Reinforce the local information centres for youth
Improve educational system with specific territorial centres	
Guarantee a secure navigation on Internet for childs Invest in broadband and e.learning methodologies	<input type="checkbox"/> Certificate web providers <input type="checkbox"/> Acquire/create tools for teachers and students to safety operate lessons on web

**4- Health and telemedicine** – Trough the territorial plan for Health, Tuscany has activated an innovative process to manage the regional health system, which represents, as everywhere, the main consumer and producer of innovation technology. The Plan foresees three main activity branches:

- Health informative system, focused on knowledge, planning and monitoring
- Realization of digital cooperation networks among health operators
- Telemedicine services

Policy objectives	Actions
Make health system information fully accessible	<input type="checkbox"/> Integrate existing informative systems <input type="checkbox"/> Arrange information focusing on patient and creation of the "regional medical folder" <input type="checkbox"/> Creation of the regional CUP (Unique booking Centre)
Enlargement of telemedicine and health home assistance services	
Provide interoperable systems	

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	<input type="checkbox"/> Test of the electronic health certification
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5- Cultural heritage – ICT are fundamental also for cultural heritage fruition, valorisation and preservation. Regional planning binds significant resources for projects aimed to integrate ICT in cultural heritage topics, including:

- Virtual libraries catalogue
- Museums quality
- Informative systems of the historic-artistic, environments and archeological constraints
- Cultural heritage valorisation and protection

Policy objectives	Actions
Enhance the attendance of regional cultural heritage on web	<input type="checkbox"/> Digitalization of historical items (books, images, museums, archaeological parks)
Monitoring museums and thematic parks	<input type="checkbox"/> Smart access to cultural heritage by the web and broadband connection
Foster the ICT integration	<input type="checkbox"/> ICT trainings for cultural heritage operators

**3.2.3.3 Result indicators**

Topic	Indicators
<b>Service infrastructures</b>	<input type="checkbox"/> N° of contracts through e.procurement systems <input type="checkbox"/> N° of service on line payable <input type="checkbox"/> N° of PA with document management systems <input type="checkbox"/> N° of e.learning services <input type="checkbox"/> N° of training courses
<b>Public utilities</b>	<input type="checkbox"/> N° of merged entities/public utilities in a common system <input type="checkbox"/> N° of users
<b>School</b>	<input type="checkbox"/> N° of activated services <input type="checkbox"/> N° of accesses/users
<b>Health and telemedicine</b>	<input type="checkbox"/> N° of accesses/users <input type="checkbox"/> N° of telemedicine services <input type="checkbox"/> N° of assisted patients <input type="checkbox"/> N° of e.certifications
<b>Cultural heritage</b>	<input type="checkbox"/> N° of library services <input type="checkbox"/> N° of inserted records in Internet <input type="checkbox"/> N° of accessible databases

**3.2.3.4 Competencies**

Topic	Regional responsible(s)
<b>Service infrastructures</b>	<input type="checkbox"/> General Directorate for organization and informative services <input type="checkbox"/> General Directorate for economic Development <input type="checkbox"/> General Directorate for Finance <input type="checkbox"/> General Directorate for educational policies and cultural heritage
<b>Public utilities</b>	<input type="checkbox"/> General Directorate for organization and informative services

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	<input type="checkbox"/> General Directorate for economic Development <input type="checkbox"/> General Directorate for educational policies and cultural heritage <input type="checkbox"/> General Directorate for organization and informative services <input type="checkbox"/> General Directorate for Presidency
<b>School</b>	<input type="checkbox"/> General Directorate for educational policies and cultural heritage <input type="checkbox"/> General Directorate for organization and informative services <input type="checkbox"/> General Directorate for Presidency
<b>Health and telemedicine</b>	<input type="checkbox"/> General Directorate for Health <input type="checkbox"/> General Directorate for organization and informative services
<b>Cultural heritage</b>	<input type="checkbox"/> General Directorate for educational policies and cultural heritage <input type="checkbox"/> General Directorate for organization and informative services

### 3.2.4 E. Competitiveness

Transformations accompanying IS growth are causing deep changes into the economic systems and production networks. In this running for innovation ICTs play a key role, making possible the creation of more competitive frameworks and the creation of intangible value. To support competitiveness, Tuscany programme foresees two categories of intervention:

- Actions aimed to facilitate relationships among PAs and industries/SMEs: transparency, administrative simplification and efficiency, smart procedures, etc..
- Actions aimed to foster growth and employment, through technological platform of integrated services and knowledge

#### 3.2.4.1 Objectives

- Fostering regional training capability to support new competencies, to facilitate change processes, to improve human resources
- Carrying on accreditations process of e.government services and solutions to stimulate the ICT market growth
- Improving institutional cooperation among PAs, economic systems, associations etc... and strengthen through ICT Tuscany features (welfare, tradition, quality of life, services)
- Supporting ICT research and networking with EU stakeholders
- Improving local excellences through ICT as qualifying item for competitiveness and development

#### 3.2.4.2 Topics

E.Competitiveness area is divided into 10 topics:

1- Tourism – Tuscany has recently increased ICT involvement in touristic sector aiming to offer integrated service to visitors and local operators. Particularly region is actually working with associations and local institution in creating a common

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framework where to join , standardise and realize tools and services covering the whole territory..

Policy objectives	Actions
Foster through ICT Tuscany attractive features (traditions, quality of life, cultural heritage, ..) Improve ICT services for tourists	<input type="checkbox"/> Benchmarking and foresight activities <input type="checkbox"/> Improve booking on line services <input type="checkbox"/> Creation of the main framework <a href="http://www.turismo.intoscana.it">www.turismo.intoscana.it</a>
Simplify administrative procedures for local operators	<input type="checkbox"/> Foster telematic sending of data and information by touristic operators

2 - Commerce – Tuscany supports products and patterns which valorise human resources and foster the development of the regional GDP. Furthermore Region promote the introduction and use of the ICT for e.commerce as key factor for competitiveness.

Policy objectives	Actions
Foster innovation and modernization in commerce	<input type="checkbox"/> Creation of the “natural trade centre” inside the historical city centre
Promote ICT (knowledge and use) in PMI	<input type="checkbox"/> Integrate operators in commerce networks

3 – Services for development and simplification – Taking advantage of ICT development, Tuscany aims to facilitate relationships between enterprises and administrative procedures, using the same tools for monitoring and verifying subsequently too.

Policy objectives	Actions
Simplify administrative procedures between PA and SME through the ICT Use electronic format instead of paper, create web front office Foster multichannel procedures	<input type="checkbox"/> Foster the SUAP <input type="checkbox"/> Use technology transfer centres as facilitator of the ICT use in SME <input type="checkbox"/> Foster unification of the procedure and common standards in PA

4 – Cooperation among PA and professional/enterprise associations–

Associations cover a key role in services providing to own associates (SME, professionals, citizens), producing a wide data and information flow which needs to be integrated. Cooperation between associations and PA through ICT common framework can rise an important role for regional development.

Policy objectives	Actions
Foster solutions for a PA/associations cooperation Involve association in IS Build common ICT frameworks	<input type="checkbox"/> Realize common ICT projects <input type="checkbox"/> Good practices exchange and re-use <input type="checkbox"/> Realization of a knowledge common framework

5 – Job development - New technologies open new job opportunities: besides to rationalize company processes and favourite a better efficiency in work demand/offer, they give the opportunity of decentralize an activity and create new professional roles.

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Policy objectives	Actions
Foster infrastructure for teleworking, particularly in mountain or low density areas Increase telematic knowledge Support job demand through ICT	<input type="checkbox"/> Creation of teleworking centres and teleworking networks <input type="checkbox"/> Creation of integrated web front offices for job demand/offer for the whole regional area

6 – GIS and e.mobility - The full accessibility of the whole territory and an integrated framework for regional mobility are surely two key factors for development growth through new technologies. In Tuscany exist lots of environmental, city planning and territorial archives GIS based and is now necessary merge and use them for a new generation of services based on geographical information.

Policy objectives	Actions
Rationalization of the GIS databases Evolution of the GIS information systems for new services Offer qualifying for territorial accessibility and e.mobility through specific services	<input type="checkbox"/> Realization and/or updating of regional territorial archives <input type="checkbox"/> Adoption of common standards and instruments at regional level <input type="checkbox"/> Realization of on demand e.mobility services

7 – Research and technology transfer - ICT research and regional technical centres improvement are central objectives for IS regional programme. Tuscany aims to play an important role inside the FP7 and the ERA scheme (EU Research Area) for ICT topics

Policy objectives	Actions
Accredit at EU level regional research on ICT Foster ICT technology transfer to SMEs	<input type="checkbox"/> Support regional TT networks (e.g Enterprise Europe Network-EEN) <input type="checkbox"/> Participation in EU project frameworks (FP7) <input type="checkbox"/> Creation of a regional ICT marketplace

8 – Knowledge and cooperation networks - Globalisation is outlining changes in business procedures through new, net and knowledge economy. Knowledge management and technology transfer rise as key factor for competitiveness and development and no one company can afford to stay outside of network of cooperation.

Policy objectives	Actions
Facilitate TT processes Foster networking activities Promote cooperation initiatives among SMEs and between SMEs and research centres	<input type="checkbox"/> Creation of networking activities, virtual enterprises and virtual organizations through ICT <input type="checkbox"/> Creation of virtual benchmarking and foresights platforms <input type="checkbox"/> Development of pilot projects

9 – Base information systems for enterprises - Knowledge diffusion needs of base, free, updated and easily available information. Regional administration wish to develop the role of innovation facilitator for competitiveness also supporting specific actions for information improvement.

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Policy objectives	Actions
Allow to entrepreneurial system an easy access to the information on: financing opportunities, public-private partnerships, technological excellences, PA procedures, marketing	<input type="checkbox"/> Support and fund specific actions/projects to replicate on regional scale (databases, mapping, observatories, marketing)

**10 – Marketing** - Territorial marketing as leverage for economic development and competitiveness: Tuscany aims to promote the whole territory in a one system to attract investments and create new job opportunities.

Policy objectives	Actions
Give to investors enjoyable information about region and its features Increase the attractive value of industrial and touristic areas Fostering marketing systems at regional level	<input type="checkbox"/> Foster local marketing initiatives only if integrated in the regional system <input type="checkbox"/> Diffusion of ICT tools <input type="checkbox"/> Integration with GIS services/tools

#### 3.2.4.3 Result indicators

Topic	Indicators
<b>Tourism</b>	<input type="checkbox"/> N° of operators sending data <input type="checkbox"/> N° of projects with touristic associations <input type="checkbox"/> N° of users of tourism promotion web sites
<b>Commerce</b>	<input type="checkbox"/> N° of natural trade centres realized <input type="checkbox"/> N° of services provided and users
<b>Services for development and simplification</b>	<input type="checkbox"/> N° of integrated on line front offices <input type="checkbox"/> Completeness of provided services (life cycle procedure)
<b>Cooperation among PA and professional/enterprise associations</b>	<input type="checkbox"/> N° of projects promoted by associations <input type="checkbox"/> N° of entities using services provided by the catalogue of re-use
<b>Job development</b>	<input type="checkbox"/> N° of teleworking centres <input type="checkbox"/> N° of employed people in teleworking centres <input type="checkbox"/> N° of activities located in teleworking centres <input type="checkbox"/> N° of services and users provided for job demand/offer
<b>GIS and e.mobility</b>	<input type="checkbox"/> N° of integrated GIS archives <input type="checkbox"/> N° of services and related users <input type="checkbox"/> N° of practitioners inscribed to service <input type="checkbox"/> % of coverage by e.mobility services <input type="checkbox"/> N° of vehicles using e.mobility services
<b>Research and technology transfer</b>	<input type="checkbox"/> N° of funded FP7 projects <input type="checkbox"/> N° of discoveries used/inserted by/in regional catalogue for re-use
<b>Knowledge and cooperation networks</b>	<input type="checkbox"/> N° of TT networks <input type="checkbox"/> N° of tech regional platforms for benchmarking and foresight <input type="checkbox"/> N° of VE/VO
<b>Base information systems for enterprises</b>	<input type="checkbox"/> Realization of informative systems

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<b>Marketing</b>	<input type="checkbox"/> N° of projects inserted in the regional catalogue <input type="checkbox"/> N° of local activated public-private relationships
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**3.2.4.4 Competencies**

Topic	Regional responsible(s)
<b>Tourism</b>	<input type="checkbox"/> General Directorate for organization and informative services <input type="checkbox"/> General Directorate for Economic Development
<b>Commerce</b>	<input type="checkbox"/> General Directorate for organization and informative services <input type="checkbox"/> General Directorate for Economic Development
<b>Services for development and simplification</b>	<input type="checkbox"/> General Directorate for organization and informative services <input type="checkbox"/> General Directorate for Economic Development <input type="checkbox"/> General Directorate for educational policies and cultural heritage
<b>Cooperation among PA and professional/enterprise associations</b>	<input type="checkbox"/> General Directorate for organization and informative services <input type="checkbox"/> General Directorate for Economic Development <input type="checkbox"/> General Directorate for educational policies and cultural heritage
<b>Job development</b>	<input type="checkbox"/> General Directorate for organization and informative services <input type="checkbox"/> General Directorate for educational policies and cultural heritage
<b>GIS and e.mobility</b>	<input type="checkbox"/> General Directorate for organization and informative services <input type="checkbox"/> General Directorate for environmental and territorial policies <input type="checkbox"/> General Directorate for Economic Development <input type="checkbox"/> General Directorate for Health
<b>Research and technology transfer</b>	<input type="checkbox"/> General Directorate for organization and informative services <input type="checkbox"/> General Directorate for Economic Development <input type="checkbox"/> General Directorate for educational policies and cultural heritage <input type="checkbox"/> General Directorate for Health <input type="checkbox"/> General Directorate for environmental and territorial policies
<b>Knowledge and cooperation networks</b>	<input type="checkbox"/> General Directorate for organization and informative services <input type="checkbox"/> General Directorate for economic Development
<b>Base information systems for enterprises</b>	<input type="checkbox"/> General Directorate for organization and informative services <input type="checkbox"/> General Directorate for economic Development
<b>Marketing</b>	<input type="checkbox"/> General Directorate for organization and informative services <input type="checkbox"/> General Directorate for economic Development



### 3.2.5 Qualifying infrastructures

Strategic Programme areas need of crossed actions to achieve preliminary conditions for their efficiency. In this context are included technological and knowledge infrastructures.

#### 3.2.5.1 Objectives

- Complete the RTRT technological infrastructure giving the opportunity:
  - o to the citizens to have a broadband connection in own home
  - o to guarantee high quality level of IS services
  - o to foster interoperability among ICT applications
  - o to improve security and privacy
- Foster a cultural and organizational change among Tuscany IS stakeholders

#### 3.2.5.2 Topics

This area is divided into 6 topics:

1- Public system of regional connectivity – RTRT guarantees a coordinated development of the PA's information systems, giving the opportunity to all partner institutions to enter into the regional IS system.

Policy objectives	Actions
Ensure to all RTRT partners information access and common services	<input type="checkbox"/> Strengthening of the RTRT network facilities <input type="checkbox"/> Development of a regional VoIP framework
Activate common services to ensure economy and efficiency	
Define and spread common standards	

2- Interoperability framework – To ensure administrative simplification and costs breakdown is necessary make available a cooperation model and common standards for data exchange, based on a “common language” and rules. For this purposes Region has created CART (model for a cooperated operability) adopting standards for data exchange comply with national ones.

Policy objectives	Actions
Creation of a technical community among PAs	<input type="checkbox"/> Wide involvement on CART <input type="checkbox"/> Creation and adoption of the standards
Creation of common work procedures based on common languages and standards	

3- Security and authenticated access – The progressive diffusion and use of e.government services and systems will ask for a improvement of the security levels for access and people identification. For this purpose RTRT framework will adopt PKI (public Key Infrastructure) for digital certificate management.

Policy objectives	Actions
Ensure security and privacy in data exchange	<input type="checkbox"/> Realization of an unique access point for an authenticated access to services <input type="checkbox"/> Diffusion of digital sign <input type="checkbox"/> Training courses for PAs, jobs, school
Improve the security level of the information systems	

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**4- Broadband public services** – To reduce digital divide Tuscany Region has by far reinforced own broadband capability, reaching isolated and mountain areas too. To complete the job, also public- private partnerships are foreseen.

Policy objectives	Actions
Ensuring broadband services to the whole territory Foster new tech solutions for PAs Accept private collaboration too when is suitable from an economic point of view	<input type="checkbox"/> Realizing a broadband observatory <input type="checkbox"/> Improve broadband network <input type="checkbox"/> Promote projects for optimization of public infrastructures and adoption of new technologies

**5- Centres of competency** – To improve own capacity PA needs of high level competencies as reference for internal activities and development. At this purpose Region aims to identify and ensure competency centre where addressing questions and requests related to specific fields of ICT and e.government topics.

Policy objectives	Actions
Improve the regional network of competencies Create a collaborative approach between PAs and centres	<input type="checkbox"/> Define areas and topics where to focus competency centres activity <input type="checkbox"/> Extend existing centres to EU collaboration <input type="checkbox"/> Create a competency centre for opensource

**6- Regional framework for e.learning** – The TRIO e.learning platform, created and promoted by Tuscany Region for lifelong learning, has now to be spread to more users and updated with new training courses.

Policy objectives	Actions
Qualifying people professional capability Ensuring learning and courses by long distance Giving tech tools to PAs for supporting innovation	<input type="checkbox"/> Strengthening of the training offer <input type="checkbox"/> Realisation of specific qualifying courses (health, tourism, commerce, administration, building, etc.) <input type="checkbox"/> Agreements with associations

**3.2.5.3 Result indicators**

Topic	Indicators
<b>Public system of regional connectivity</b>	<input type="checkbox"/> N° of RTRT entities <input type="checkbox"/> N° of local PAs using VoIP
<b>Interoperability framework</b>	<input type="checkbox"/> N° of entities involved in CART <input type="checkbox"/> N° of applications e.Toscana compliant <input type="checkbox"/> N° of standards realized
<b>Security and authenticated access</b>	<input type="checkbox"/> N° of authenticated accesses <input type="checkbox"/> N° of services with authentication
<b>Broadband public services</b>	<input type="checkbox"/> Qualitative and quantitative analysis on regional broadband <input type="checkbox"/> N° of citizens/enterprises with access to broadband
<b>Centres of competency</b>	<input type="checkbox"/> N° of applications e.Toscana compliant <input type="checkbox"/> N° of entities using competency centres

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<b>Regional framework for e.learning</b>	<input type="checkbox"/> N° of citizens/enterprise using courses <input type="checkbox"/> N° of available courses <input type="checkbox"/> N° of provided hours
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**3.2.5.4 Competencies**

<b>Topic</b>	<b>Regional responsible(s)</b>
<b>Public system of regional connectivity</b>	<input type="checkbox"/> General Directorate for organization and informative services
<b>Interoperability framework</b>	<input type="checkbox"/> General Directorate for organization and informative services
<b>Security and authenticated access</b>	<input type="checkbox"/> General Directorate for organization and informative services
<b>Broadband public services</b>	<input type="checkbox"/> General Directorate for organization and informative services <input type="checkbox"/> General Directorate for Economic Development
<b>Centres of competency</b>	<input type="checkbox"/> General Directorate for organization and informative services
<b>Regional framework for e.learning</b>	<input type="checkbox"/> General Directorate for organization and informative services <input type="checkbox"/> General Directorate for educational policies and cultural heritage