Ευρωπαικό Πρόγραμμα : Τοπική Ατζέντα Ψηφιακής Συγκλισης, DLA

Έκθεση σχετικά με την Κοινωνία της Πληροφορίας για την Περιφέρεια Δυτικής Μακεδονίας

Το πρόγραμμα DLA έχει ως κύριο σκοπό να βελτιώσει τις περιφερειακές πολιτικές σε θέματα ψηφιακής σύγκλισης και να αναπτύξει δράσεις που σχετίζονται με την εφαρμογή νέων τεχνολογιών πληροφορικής και επικοινωνιών στο δημόσιο τομέα. Για την επίτευξη του στόχου αυτού, το πρόγραμμα ενθαρρύνει την ανταλλαγή καλών πρακτικών σε ανάλογα θέματα, ενώ παράλληλα ενισχύει τη δημιουργία ενός δικτύου συνεργασίας για την επικαιροποίηση και τη βελτίωση της γνώσης σχετικά με τις τεχνολογίες της πληροφορίας και των επικοινωνιών. Μεταξύ άλλων στη συνάντηση παρουσιάστηκε αναλυτικά η υφιστάμενη κατάσταση της Περιφέρειας Δυτικής Μακεδονίας σχετικά με τους δείκτες που αφορούν στην ηλεκτρονική διακυβέρνηση, στην προσβασιμότητα στο διαδίκτυο, στην ηλεκτρονική μάθηση, και στη παροχή ηλεκτρονικών υπηρεσιών.

Στο επόμενο διάστημα θα αναπτυχθεί μέσα από διαδικασία ανοιχτής διαβούλευσης μια γενική Ατζέντα Ψηφιακής Σύγκλισης που θα μπορεί να μεταφερθεί σε όλες τις Περιφέρειες και μια κοινή μεθοδολογία η οποία θα μπορεί να ενσωματώνει την Ατζέντα Ψηφιακής Σύγκλισης στις τοπικές συνθήκες (Τοπική Ατζέντα Ψηφιακής Σύγκλισης - DLA). Αυτά θα υλοποιηθούν τόσο με την ανάμειξη των τοπικών φορέων στη διαδικασία ανάπτυξης της Τοπικής Ατζέντας Ψηφιακής Σύγκλισης καθώς και με την ανταλλαγή Καλών Πρακτικών μεταξύ των εταίρων του προγράμματος.

Η παρούσα έκθεση αφορά στοιχεία που καταγράφηκαν για την Περιφέρεια Δυτικής Μακεδονίας σχετικά με την εφαρμογή πολιτικών για την ανάπτυξη της ευρυζωνικότητας. Το παρών κείμενο τίθεται σε δημόσια διαβούλευση. Παρακαλούμε για οποιαδήποτε σχόλια σχετικά με προτάσεις για την προώθηση πολιτικών που θα συμβάλουν στην καλύτερη ανάπτυξη της ευρυζωνικότητας στην περιοχή της Δυτικής Μακεδονίας επικοινωνίστε με την ομάδα υλοποίησης του έργου στο Email: dla@uowm.gr .

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The case of West Macedonia

1. Introduction

The public policies that were applied to promote the entry of the country into the Information Society (IS), draw resources initially from the European Union and the 3rd CFS. The main guidelines were developed in the Operational Program for the IS. It was one of the biggest relevant Programs in Europe, not only in economic terms, but also in terms of content, actions and policy measures it included. It constituted so far the main tool for the implementation of the national strategy for the IS building on actions that supported a more rapid diffusion of new technologies in socio-economic activities of the country and forced citizens and enterprises into the digital economy. Its objective was to create a critical mass of users, infrastructures (in all sectors and particularly in the Public Sector), electronic services and mechanisms that would support the growth of the IS in Greece. These cores could contribute to the effort of ICTs diffusion in all Regions and to their better economic exploitation, in order to improve the productivity and competitiveness of the Greek economy.

The actions through the Operational Program were mainly initiated at a national level and were funded by the Regional Operational Programs. The implementation of the actions has yielded certain tangible results so far for the Region of West Macedonia.

In the field of reforming the Public Sector, some significant actions have taken place, such as the creation of Citizen Service Centres (KEP) and the development of taxisnet. These actions contributed to an increase of the electronic services provided to citizens and firms, leading to an improvement of citizens' everyday life.

Regarding the diffusion of new technologies to firms, subsidizing equipment had some positive results in encouraging the adoption of ICTs- especially by SMEs- at various levels: first, at the stage of connectivity (connection and familiarization with the internet as a business tool), and second in various stages of the process of e-business (e-commerce, adoption of integrated information systems managing operational resources, internal management and business administration, etc.). An adequate number of firms were benefited by these subsidies, as it is mirrored on the improvement of the relative indexes of e-business watch. Apart from actions that involved a direct aid to the SMEs, the Program included other actions as well, that indirectly contribute to this goal. Promotion of electronic commerce projects in the local societies mediated by chambers, e-procurement, and the promotion of entrepreneurship in new economy sectors (TANEO) are some initiatives that facilitated this process and contributed to the familiarization of entrepreneurs with ICTs.

The new interventions and policies within the framework of the 4th Programming Period are placed upon the Program of "Digital Convergence". The primary objective of this Program is to contribute to the realization of a "Digital leap" to the productivity and quality of life, utilizing the ICTs and Internet. Furthermore, it has a strong peripheral dimension, as it aims to address the digital gap within these areas.

The actions, which are included in this Program, in combination with the actions that are already financed by the 3rd CFS, the digital services that can be implemented through Public Private Partnerships and motives for investments on new technologies via the new law on investments, form the set of actions that characterize the course of the country to the digital era. Two basic priorities are identified: a) improvement of productivity and b) improvement of the quality of life through the information technologies and faster internet. The six individual objectives concern the promotion of: a) the use of ICTs by firms, b) the public digital services to the enterprises via the restructuring of the pubic sector, c) the entrepreneurship in sectors that incorporate new technologies, d) the support of ICTs sector in Greece, e) improving the everyday quality of life of citizens via new technologies and f) digital services that facilitate the citizens and have cost saving benefits.

In the following SWOT analysis table, the possible characteristics, the weaknesses, the opportunities and the threats that characterize the local and generally the domestic ICT sector are summarized.

Table 1.1 SWOT analysis regarding ICT

Strengths	**Weaknesses**
• Training and education of human resources of the ICT sector • Experience and know-how from the implementation of large scaled ICTs projects • Research cores at the universities	• Excessive number of enterprises, small in size • Lack of specialisation and market segmentation • Limited R&D • Lack of private core network (telecommunications) • Limited digital content • Extroversion of a small degree • Non smoothened course of demand • Intense price competition and no differentiation
Opportunities	**Threats**
• Technological convergence of information technology and telecommunications • Increase of foreign demand: Balkans, neighbouring markets • Progressive increase of demand, especially from the enterprises • Public investments in broadband infrastructures • New services of added value	• Intensification of ICTs sectors in neighbouring countries • Delay of complying with the EU institutional framework in telecommunications • Lack of more efficient mechanisms in implementing the ICT projects by the Public • Off the shelf solutions from abroad (threat for small enterprises)

• Diffusion of ICTs in other sectors of the economy • Restructuring actions • Investments of large Greek companies from various sectors in neighbouring countries • Operation of all ICT projects implemented during the period 2000-2006	

2. The Information Society in the Region of West Macedonia: information and data

This chapter presents the information Society descriptive statistic for the Region of West Macedonia.

2.1 Diffusion of the main instruments

This part of the report presents the statistics that show the big penetration of the Internet and the common PCs in households and in enterprises. Through the years, the number of the households and the enterprises, that use a PC for their own other activities, is significantly increased. However, there is a small portion of families, which do not use the Internet for many reasons, such as the cost and the disability to use it. There are many people who have attended courses about learning how to use the PC. The fact that many families and enterprises in local/mountain and big municipalities are using a broadband connection such as DSL is also very important. The information presented in the following sections is partially depicting the picture in the Region of Western Macedonia. Where relevant information was not available for the Region of West Macedonia, general information for Greece are presented. The statistics are taken from the National Observatory of the Information Society, 2009.

2.1.1 Use of the PC

This section presents the indicators about the use of PCs within families and enterprises. As can be seen, 29% of the families interviewed have a PC and one out of two people use it every day. Additionally, 75% of the enterprises in the Region of WM use a PC for their everyday activities. The indicators about the use of PC are presented in the following table.

Table 2.1 Use of PC

	Indicators	Unit
	How many families have a PC	29% (National level)
	How many people use the PC:	50% (National level)
-	**every day**	49% (Region of Western Macedonia)
-	**more time in a week**	32% (Region of Western Macedonia)
-	**few times in a month**	8% (Region of Western Macedonia)
-	**never**	11% (Region of Western Macedonia)
	How many enterprises (10 employees at least) have a PC	75% (Region of Western Macedonia)
	How many employees use the PC one time a week at least	37% (National level)
	How many people has followed a PC course	8% (National level)
	Other regional additional/distinctive indicator	

2.1.2 Use of the Internet

This section presents the indicators about the use of the Internet within families and enterprises in the Region of Western Macedonia and at a national level. As can be seen 39,4% of the interviewed families have an Internet connection. Most of the Internet users are between the age of 16 and 24. Moreover, almost one out of two enterprises (10 employees at least) use an Internet connection, and additionally there is a significant portion of them who actually have a private LAN. The indicators about the use of the Internet are presented in the following table.

Table 2.2 Use of Internet within families and enterprises

	Indicators	Unit
	How many families have an Internet connection at home	26.2% (Region of Western Macedonia)
	Which are the main declared reasons to not have Internet at home:	
-	**Unable to use it**	27% (National level)
-	**Cost**	11% (National level)
-	**Accesses to Internet From another place (work,..)**	4% (National level)
-	**It.s not so interesting**	28% (National level)
	How many enterprises (10 employees at least) use Internet for own activity	52,8% (National level)
	How many employees (private sector) use Internet one time a week at least	34,4% (National level)
	How enterprises (10 employees at least) accesses to Internet:	
-	**Modem**	7% (National level)
-	**ISDN**	27% (National level)
-	**Broadband**	83%(National level)
-	**Wireless**	32% (National level)
	How many enterprises (10 employees at least) has a LAN (Local Area Network)	42% (National level)
	Where people access to Internet:	
-	**home**	81% (National level)
-	**work/school**	39%/13% (National level)
-	**public access points**	% **?**
-	**other**	16%/15%(National level)

2.1.3 Use of Broadband

This part presents the indicators about the families and the enterprises, which have a broadband connection. Almost one out of four families have a broadband, such as DSL connection at home. Moreover, there are many enterprises (39,5% of the interviewed) at a national level, which actually own a broadband connection for their own activity. In addition, almost one out of two households in mountain municipalities have a broadband connection. The indicators about the use of broadband connection are presented in the following table.

Table 2.3 Use of Broadband Internet within families and enterprises

	Indicators	Unit
	Regional coverage	%
	How many families have a broadband connection at home	23% (National level)
	How many enterprises (10 employees at least) have a broadband connection for own activity	39.5% (National level)
	How many Public Authorities have a broadband connection:	%
-	**Small PA (local /mountain Municipalities)**	53% (of the households in mountain municipalities have a broadband connection)
-	**Other PA (Region, provinces, big municipalities)**	26,2% (of the households in the Region of West Macedonia have an Internet connection in general)

2.2 The ICT market

The following paragraphs present the ICT market is made, based upon statistical data taken by the National Observatory of the Information Society (2008 and 2009). Statistics drawn by the Managing Authority of Western Macedonia for the period 2000 – 2009 are also presetned.

2.2.1 ICT enterprises

The number of enterprises which are involved with the ICT Sector, is quite small, just 45 (not included the enterprises in mobile business). The number of 45 comprises just over 0,5% of the total number of enterprises in the region, 88% are involved in services and trade.

Table 2.4 ICT enterprises

	Indicators	Unit
	How many enterprises work on ICT sector	**45**
	How many enterprises in (according to OECD macro-areas):	
-	**ICT manufacturing (manufacture of hardware, cables, communication devices, TV, etc..)**	**2 %**

-	**Services related to ICT (trading of hardware, communications instruments, etc..)**	**88 %**
-	**General / untangible services (telecommunication, informatics and related activities)**	**10 %**
	How many people work on ICT sector	**57 ***

* Taking into account that the average number of employees at National Level is 63 people.

2.2.2 ICT into the Public Administration

It is acknowledged that the Regional Operational Programs (since 1993) as well as National policies promoting the ICT in the Public Sector, affected the image and capacity of all Public Authorities (PAs) in the country.

The implementation of ICT projects has proven the significance of the use of ICT tools in all the processes in the Public Sector. As stated below, the majority of LANs are wire (Fiber optic technology) and the most popular services are in accounting, and payment and registry services. All those occur despite of the size of the Regional Authorities.

What is of a great significance is the limited use of applications such as e- procurement and on-line payment as well as decision – making tools.

Table 2.5 ICT into Public Administration

	Indicators	Unit
	How many PCs every 100 employees	-
-	**Small PA (local /mountain Municipalities)**	85-90
-	**Other PA (Region, provinces, big municipalities)**	100
	How many PA has an Intranet (LAN):	
-	**Small PA (local /mountain Municipalities)**	100%
-	**Other PA (Region, provinces, big municipalities)**	100%
➔	**Of which how many are wireless LAN:**	
-	**Small PA (local /mountain Municipalities)**	1,5%
-	**Other PA (Region, provinces, big municipalities)**	1,0%
	How many local PA (municipalities) manage through PC:	

- **Personnel**	95-100%
- **Accounting**	95-100%
- **Payments**	95-100%
- **Contracts**	35%
- **Calls**	12%
- **Registry office**	95-100%
- **Administrative acts and resolutions**	40%
- **Management control**	5%
- **Taxes**	10%
How many bigger PA (Region, Provinces) manage through PC:	
- **Personnel**	95-100%
- **Accounting**	95-100%
- **Payments**	95-100%
- **Contracts**	62%
- **Calls**	20%
- **Registry office**	75%
- **Administrative acts and resolutions**	21%
- **Management control**	3%
- **Taxes**	1%
How many PA have a Public Relations Office on web	
- **Small PA (local /mountain Municipalities)**	0%
- **Other PA (Region, provinces, big municipalities)**	2%
How many PA have a front office for enterprises on web	
- **Small PA (local /mountain Municipalities)**	10%
- **Other PA (Region, provinces, big municipalities)**	60%
How many PA use e.procurement	
- **Small PA (local /mountain Municipalities)**	0%
- **Other PA (Region, provinces, big municipalities)**	0%
How many PA allow on line payments	
- **Small PA (local /mountain Municipalities)**	0%
- **Other PA (Region, provinces, big municipalities)**	10%

2.3 IS: services and customs

This section presents descriptive statistics on the extent to which citizens and enterprises are using the internet.

2.3.1 Internet and the citizens

The extent to which citizens are using the Internet is presented in Table 2.6. The main activities with which citizens are involved when they are connected to the Internet is:

sending emails, searching information on products and goods, searching for travel and holidays, and downloading.

Table 2.6 Internet and the citizens

	Indicators	Unit
	How many people use Internet for:	% among people using Internet *
-	**Email**	62%
-	**Searching info on products and goods**	70%
-	**Searching info on travel and holidays**	70%
-	**Searching health info**	4%
-	**Other search activities**	45%
-	**Learning**	6%
-	**Downloading**	58%
-	**Home banking**	14%
-	**Blogging**	31%
-	**Chat / communities**	35%
-	**Phone**	16%
	* Percentages are presented at National Level	
	Focusing on people which purchasing by Internet, how many buy	
-	**Books, papers**	7%
-	**Travel, holidays**	38%
-	**Clothes**	0%
-	**Films, music**	5%
-	**Phone recharges**	0%
-	**Software**	10%
-	**Tickets**	45%
-	**Hardware**	31%
-	**Electronic devices**	60%
-	**Foodstuff**	%
-	**Financial services**	0%
		%
	Other regional additional/distinctive indicator	

2.3.2 Internet and the enterprises

The extent to which enterprises in are using the Internet is presented in Table 2.7. The main activities with which enterprises are involved when they are connected to the Internet are mainly for PA services. Whereas those enterprises which are having a website they use for publishing catalogues and prices.

Table 2.7 Internet and the enterprises

	Indicators	Unit
	How many enterprises (10 employees at least) use Internet for:	% among enterprises using Internet *
-	**Commerce (buying/purchasing)**	%*
-	**Banking or financial services**	%
-	**PA services**	78%
-	**Achieving market information (e.g. prices)**	%
-	**Achieving digital information and services**	%
-	**E.learning**	6%
	How many enterprises (10 employees at least) have a web site	65%
	Which services/information they offer by the web site:	
-	**Catalogues and prices**	55%
-	**On line purchasing / booking**	20%
-	**On line payments**	19%
-	**Working request**	21%
-	**Product customization (by customer)**	20%
	How many enterprises (10 employees at least) use ICT for data management. Example:	
-	**Receiving digital invoices**	8%
-	**Sending digital invoices**	20%
-	**Sending/receiving information on products**	%
-	**Supplying management**	%
-	**Customer management**	%
-	**Data exchange with PA**	(only those which do business with the PAs) %
	* Percentages are presented at National Level	

2.3.3 Focus on PA services

Table 2.8 presents the data for the purposes that people are using PA web services.

Table 2.8 PA services

	Indicators	Unit
	How many people use PA web services for:	
-	**Asking information**	91%
-	**Sending documents/forms**	66%
-	**Downloading documents/forms**	88%
	How many enterprises (10 employees at least) use PA web services for:	%
-	**Bureaucratic procedures**	%

-	**E.procurement**	%
-	**Asking information**	
-	**Sending documents/forms**	Needs further elaboration %
-	**Downloading documents/forms**	As above %
	***** Percentages are presented at National Level	

2.4 Digital divide

In the region of West Macedonia, there has been lack of funding (or investment) regarding the aspect of **'digital divide'**. The research (in the region) has shown that:

- At a regional level, there are significant deviations examining the urban areas in contrast with the remote ones. In the first case, the use of Internet exceeds **85%** where as the corresponding percentage in the remote areas hardly reaches **50%**.
- The use of Internet is higher among males than females, is higher where the standard of living (or level of education) differs significantly.

2.4.1 Gap features

The research has shown particular gap features within the categories of the different ages and the different gender explored. There is a notable gap in the use of PC and internet between people in younger ages and older people. The figures also show that males are using pc to a greater extent compared to females (see Table). Regarding the professional level of people it is shown that a workman is using less the PC or the internet when compared to directors of companies or entrepreneurs or employees.

Table 2.9 Use of PC according to age/gender

Use of PC according to age/gender		
Age	**Male**	**Female**
0-10 years	45%	40%
10-20 years	85%	79%
20-35 years	87%	80%
35-45 years	79%	68%

45-55 years	70%	58%
More than 55 years	64%	58%
Total	72%	63%

Table 2.10 Use of Internet according to age/gender

Use of Internet to age/gender		
Age	**Male**	**Female**
0-10 years	0%	0%
10-20 years	92%	84%
20-35 years	96%	87%
35-45 years	78%	64%
45-55 years	68%	61%
More than 55 years	44%	38%
	%	%
Total	76%	67%

Table 2.11 Use of PC/internet according to professional level

Use of PC/Internet according to job/professional level		
	PC	**Internet**
Director, entrepreneur	86%	80%
Employee	72%	65%
Workman	52%	48%

Table 2.12 Use of PC/internet in a family according to grade level of householder

Use of PC/Internet in a family according to grade level of the householder		
	PC	**Internet**
High level (university degree)	82%	79%
Medium level (high school)	64%	52%
Low level (primary school)	45%	34%

2.4.2 From traditional services to web services

Following the transition from traditional services to web services it is obvious that most people are using the web for sending email or searching information. There is a relatively small percentage of people who are searching or buying products online or using home banking. It also shown that people with medium and higher level education are using the internet for buying online.

Table 2.13 Use of Web according to age/gender

How many male/female use the web for:		
Indicator	**Male**	**Female**
Email	68%	62%
Searching information on web	70%	74%
Searching/buying travel/holiday on web	38%	33%
Using home banking	12%	7%
Looking for a work	Needs further elaboration %	%

Table 2.14 Buiying online according to grade level

Who buy on line according to grade level	
Indicator	**Unit**
High level (university degree)	34%
Medium level (high school)	67%
Low level (primary school)	5%

3. The Information Society in the Region of West Macedonia: governance and policies at local and regional level

This part discusses the local and regional policies on the area of ICT, and presents the results envisaged from the policy interventions in the Region of West Macedonia.

3.1 Local and Regional policies and objectives

The main goal of a regional policy in the European Union is economic and social cohesion. This is based on financial solidarity, whereby more than 35% of the Union's budget is transferred to the less-favoured regions. Those regions in the Union lagging behind in their development, undergoing restructuring or facing specific geographical, economic or social problems are to be put in a better position to cope with their difficulties and to benefit fully from the opportunities offered by the single market and the various funding opportunities.

Regarding the region of West Macedonia, since the year of 2000, explicit importance has been attached to **the promotion of the Information Society**. The new

information and communication technologies are a substantial implement for open and effective administration and for improving the competitiveness of business.

The Region's vision is: "Live in a digital region – Do business innovatively - Participate in the regional development".

"Live in a digital region" : Digital technologies constitute more or less, part of every activity in life , work , entertainment. The development of digital information and communication is vast and fast. We should also take into consideration that new fields of applications will appear in contrast with the already existing ones. Education, work, transactions, information, and cooperation are certain sectors that will be transformed under the influence of new technologies.

"Do business innovatively" : The entrepreneurship and competitiveness are regarded as two (2) of the basic axes of the European vision on regional development and the quality of all the European citizens' life.

The region of Western Macedonia believes that new technologies will be able to act as catalysts to the empowering of business and their competitiveness. Target is the increase in business and competence based upon tools of informatics and communication by creating extended opportunities of development in the region.

"Participate in the regional development": The process of an intergraded development is laborious and presupposes specific aims and close cooperation between the state, the region and the local partners.

Challenges

The main regional challenges that the actors face are :

- ✓ Reverse the decreasing course in the business sector.
- ✓ Face the consequences that come from a deprived region such as West Macedonia is considered to be.

- ✓ Improve the quality of life by taking advantage of the Information & Communication Technologies.

Strategic Approach

The regional strategy for ICT is in line and synergy with the national and European policies and regulations and particularly in line with:

- ✓ *The Lisbon Strategy*
- ✓ *The European Strategic guidelines for the Cohesion*
- ✓ *The i2010 Strategy*
- ✓ *The 7th Program framework in R&D*
- ✓ *The National Digital Strategy 2006 – 2013*
- ✓ *The National Strategic Reference Framework 2007 – 2013*
- ✓ *The National Program of reforms*

The Information Society has given the opportunity to major regional actors to promote new ideas which led to new skills and new work methods. **The Regional Operational Program 2000 – 2006 and the Business Plan for "The Information Society in the Region" in particular, has been an innovative tool needed to promote regional competitiveness**.

It has been a great and unique challenge to make effective use of such major funding sources. The previous ROP's priority axes of action were as follows :

- Education and Culture;
- Public administration and quality of life;
- Employment and Social Integration; and
- Digital Economy and Communications.

During the period 2000 – 2006, the budget allocated by the region's Operational Programme, reached almost the amount of **8,5 m€** with the total spending approaching **54 m€**.

Nowadays, West Macedonia is implementing the Regional Operational Program 2007 – 2013.

The goals and main objectives of Greece reflected to the regions as well, and are tackled in the '**Digital Strategy 2006- 2013**'. The fundamental aim of the strategy is to use information technologies for achieving higher productivity in the economy and for improving citizens' quality of life, so as to materialize a ―Digital leap.

The essential difference compared to previous practices is that the new strategy is not centred on specific projects per organisation but on prescriptions of services to be offered. There is an open admission that the country has not been able to follow other Member States in taking full advantage of Information Technologies. **Six (6)** are the basic orientations of the strategy – **four (4)** of them focus on productivity and two on the quality of life:

- Promotion of ICT in enterprises;
- Supply of digital services to enterprises and restructuring of the public sector;
- Strengthening of the ICT sector;
- Promotion of entrepreneurship in ICT related activities;
- Improvement of daily life through ICT; and
- Design of digital services for the citizen.

The common denominator for all of the above is **fast broadband Internet connectivity. The path to the 'Digital Leap'**, involves 65 new actions. **Emphasis is placed** on **the development of systems for electronic procurements, on significant broadband improvements, on information campaigns** and **the sensitization of the citizens to new technologies**. A most practical priority of this strategy –that took effect by the year 2008 – **is the supply of enterprises with five (5) certificates that are at the top of their demand**, and **the provision of the top 20 services to the citizens**. These actions are critical for taking the digital leap.

Regarding the period following 2008, the design contemplates **the setting up of one-stop electronic points** with the aim to further accelerate services to enterprises. Also, **the restructuring of the public sector** will automate procedures and **new technologies will be better integrated into the educational system**.

Regarding the region of WM, the Priority Axis "**Digital Convergence**', specifies strategy and actions aimed at the efficient utilization of Information and Communication Technologies (ICT) in the period 2007-2013. **Amongst the main interventions, is**:

- The improvement of digital/online services to enterprises and re-engineering of relevant public administration processes; the promotion of Internet and ICT usage by enterprises; the development of digital/online services for Citizens.

The specific Priority Axis is structured along the following **two priorities - goals:**

Priority 1 : Improved productivity through the use of ICT.

Specific objectives of this priority include:

- Improved ICT penetration in production processes combined with the development of innovative business practices targeting small and medium sized enterprises (SMEs). Emphasis will be placed on using the country's corporate human capital through the development of digitised educational material and the development of platforms and applications that manage and disseminate business content ("Business Gateways");
- Increased use of ICT in day-to-day company operations;
- The development of ICT applications to encourage entrepreneurship among women and people with special needs.

Priority 2 : Improvement of citizens' daily life through the use of ICT.

Specific objectives of this priority include:

- Equal access of citizens to ICT use and knowledge;
- Increased availability of digital public services;
- The elimination of "digital gaps" caused by factors such as geography, age and gender;
- Streamlining and digitisation of frequently used public services (especially the services included in the strategy "i2010") as well as services offered by local public sector organisations;
- Encouraging citizens to take part in community activities through the development of ICT applications targeting NGOs;
- Promoting the cultural heritage of the region;
- Development of ICT applications and services and services that offer equal access for women and people with special needs.

3.2 Result indicators

The following table presents information with regard to results indicators of the policy interventions in the Region of West Macedonia. The main priority axes which correspond to the above strategic targets, are:

1. Empowering entrepreneurship

   ✓ Further incorporation of ICT with the business sector
   ✓ Extent digital services of Public sector to the field of the SMEs
   ✓ Create a favourable environment for undertaking initiatives which aim at the development of ICT in the region

Table 3.1 Expected outcomes in terms of empowering entrepreneurship

Indicators	
Description	*Target Value (expressed in % or in Nos)*
% of SMEs (10+) that access Internet	***95%***
% of SMEs (<10) that access Internt	***56%***

% of SMEs (10+) that have broadband connection	***85%***
% of SMEs (10+) that use Internet for transactions with PAs	***90%***
No of Public Services available electronically to SMEs	***>20***
New SMEs beneficiaries in High Tech Sector	***>70***

2. The empowering of the extraversion of the region
   - ✓ Improve of productivity
   - ✓ Project and promotee the region of Western Macedonia

Table 3.2 Expected outcomes in terms of empowering the extraversion of RWM

Indicators	
Description	*Target Value (expressed in % or in Nos)*
% of gross turnover that comes from e-business	***>2%***
% of SMEs that receive orders electronically	***>17%***
Technology Transfer from Academic Institutions to SMEs	***>4,6%***

3. Upgrade of quality of life
   - ✓ Usage of Electronic Services. Increase the effectiveness of those available.
   - ✓ New Technologies become part of the day-to-day life of the citizens
   - ✓ Control and protection of natural environment

Table 3.3 Expected outcomes in terms of upgrading quality profile

Indicators	
Description	*Target Value (expressed in % or in Nos)*
% of PAs with broadband access	***90%***
% of PAs (municipalities with population exceeding 20.000 people) that offer digital services to SMEs	***40%***
% of population that use Internet for educational purposes	***30%***
% of population (16+) that use internet fir health purposes	***20%***
% of population that order goods from Internet	***15%***
% of households with Internet access	***>41%***
% of population with broadband connection	***>95%***
% of population that use internet for direct or indirect transactions with PAs	***38%***
Number of public electronic services available to people	***>20***
% of PAs (municipalities with population exceeding 20.000	***>50%***

people) that offer digital services to citizens	
% of population that use internet for e-learning purposes	***16%***