

# The Strategy for the Development of the Information Society in Poland until 2013

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http://www.mswia.gov.pl/strategia/



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### Introduction

The Government of the Republic of Poland, having in mind the good of Poland and its inhabitants, is striving to ensure **rapid and sustainable economic growth and social development** that will **improve the living conditions of our citizens**.

One of the key stimulants of economic growth is citizens' ability to acquire, accumulate and use **information** as a result of the **dynamic development of Information and Communication Technologies (ICT)**. The importance of this factor for economic growth is confirmed by various research projects, which conclude that ICT account for approximately a quarter of the GDP growth and 40% of the productivity growth in the European Union.

The rapidly increasing significance of information and electronic services, and thus, of the application of ICT, in the economy, public administration (central and local government) and in the everyday life of citizens has triggered a new transformation trend – a transformation towards the "information society."

The term "information society", as adopted for the purposes of this paper, is defined as a society for which the processing of information with the use of ICT solutions creates significant economic, social and cultural value.

This Strategy is sectoral and, as such, defines the vision and mission for the **development of the information society in Poland until 2013**. Within each of its three areas – Human, Economy and State – it maps out strategic directions and determines the objectives that should be accomplished in order to achieve the desired development status for the information society in Poland in 2013.

The creation of the Strategy was preceded by a series of extensive consultations with experts who represented organisations and institutions that are most competent to express views on the issue of information society development. The outcomes of the consultations and the strategic development directions adopted by the Government were the basis for the formulation of the vision of the information society in Poland in 2013, and the core principles for its development.

Within the framework of the partial subject areas, the vision of the information society status in Poland in 2013 has been presented in detail. This paper presents the most vital activities initiated thus far and selected directions for further actions that are required to accomplish the adopted objectives.

For each objective, an indicator has been determined to measure its implementation progress. Such indices are presented against the respective averages for the three EU Member States that are leaders in the given category. The implementation progress of particular objectives will be measured as the gap between Poland and the three leaders in particular areas. For the objectives covered by the Strategy, the ability to measure the completion level of its objectives is one of its primary tasks. For the purposes of a comparison with other Member States, maximum utilisation was ensured of indicators from Eurostat databases and from reports accepted by the European Commission.

For the Strategy, formulated in accordance with the above, the basic implementation frameworks are presented in the scope of organisational, financial and measurement aspects.

The attachments are an integral part of this Strategy. They present a detailed analysis of the main issues relating to the development of the information society, a list and summary of comments and proposals provided during the consultations, and a presentation of the results of a survey carried out in co-operation with the largest Internet portals in Poland.

The Strategy for the Development of the Information Society in Poland until 2013, prepared by the Government of Poland, is consistent with the key documents that delineate the strategic development directions for Poland:

- National Development Strategy 2007-2015 (http://bip.mrr.gov.pl);
- National Strategic Reference Framework 2007-2013 (http://bip.mrr.gov.pl);
- Strategic Governance Plan (<u>http://www.premier.gov.pl</u>).

The Strategy takes into account the priorities of the European information society policy that result from the assumptions of the Lisbon Strategy and the initiatives: "eEurope – Information Society for all" and its continuation "i2010 – A European Information Society for growth and employment" (http://www.ukie.gov.pl).



# Summary of the analysis of the current development status of the information society in Poland

Poland's information society policy should respond to the specific needs of Polish society and be consistent with European policy, using its best experiences. The assessment of the status of information society development in Poland refers therefore, to, among other things, the fulfilment of the European policy priorities that are defined in the communication from the European Commission "i2010 – A European Information Society for growth and employment."

The European Commission has recommended the following three priorities in the information society policy:

- to create a single Information area in Europe that will support an open and competitive internal market in the scope of the information society and media;
- to accelerate innovation and investment in research in ICT in order to support growth and to create new and better jobs;
- to create an inclusive European information society that will support growth and the creation of new jobs in accordance with sustainable growth principles, while prioritising better quality of public services and life.

It should be noted that the so-called i2010 Initiative is a continuation of the information society activities that started in 2000 and that not all of its priorities are equally important at the current stage of information society development in Poland. It, nevertheless, outlines the path to European cohesion, which is one of the most important objectives adopted by Poland as an EU Member.

The current status of the information society in Poland has been assessed by analysing different aspects in six areas. The list of areas results from the i2010 Initiative and national priorities:

- ▶ A single information area in Europe;
- Innovation:
- Investment in research and development;
- An inclusive society:
- Public services;
- Quality of life.

#### Single information area in Europe

Under the EC's IDABC programme, started in 2004, work is continuing on the preparation of a set of standards and guidelines as the foundation for pan-European public administration services (e-Government) — European Interoperability Framework. The minimum requirements for electronic systems, public records & registers and electronic information exchange were formulated as part of the activities aimed at regulating interoperability in Poland. In the course of implementing such projects such as the Schengen Information System or Customs Unions, Poland has accumulated practical experience in the development of pan-European A2A e-Government services (Administration to Administration). Poland still has to develop and implement a National Interoperability Framework.

It should be emphasised that the EU Member States have been increasing their efforts to launch pan-European services in order to hasten the establishment and development of the single market.

To implement the Strategy, coordinated actions are required, as determined by documents prepared at central and local government levels.



#### Innovation

Innovation and development are priority topics on the EU's economic reform agenda. The innovation survey conducted by Eurostat in 2007 (Fourth Community Innovation Survey) shows that over 40% of EU enterprises implemented innovative solutions in 2002-2004, while this proportion for Poland was 25%. Their partners in projects that implement innovations were other enterprises (42%), suppliers (28%), customers (16%), research institutes (6%), and public administration and public research centres (9%). Other EU Member States have a similar structure, including innovation leaders. The development of the ICT sector, in particular, in the scope of services, is linked more with small and medium-sized enterprises; therefore, it is important to remove any barriers to external funding sources for their operations.

In terms of EU Member State ICT sector development, Poland is ranked 18<sup>th</sup>, on the basis of that sector's contribution to GDP. The share of the ICT sector in Poland as a source of value-added is 3% in 2004, i.e., below the level observed in other Members States from our region (in Slovenia, the sector accounted for 5% of the value added created by the enterprises sector; in the Czech Republic, Lithuania and Latvia – 9%, and in Slovakia as much as 10%).

#### **R&D** investments

Research & development (R&D) activities are one of the factors that stimulate enterprise innovation and thus, the productivity of the entire economy. Poland's R&D spending amounts to about 0.6% of its GDP, i.e., significantly below the EU average (approx. 1.9%), but at a level typical for those EU Member States that have comparable GDP per capita (e.g. Lithuania, Latvia, Greece and Slovakia).

In terms of the number of patents per 1,000 employees, Poland is one of the worst performers in the EU. The key problems relating to Polish research & development activities are a low involvement of the private sector in such initiatives and insufficient co-operation between private companies and public research centres. In Poland, the private sector covered only 33% of the total R&D expenditure in 2004, while in other countries it was over 70% (e.g. Sweden, Finland, Denmark, Belgium and Italy).

#### Inclusive society

ICT should be used, with consideration, as far as possible, for social integration and for the relating problems of social group mobilisation and digital exclusion. Social groups that require dedicated initiatives to prevent their digital exclusion include poorly-educated people, seniors and the unemployed.

Taking advantage of an increasing number of students in Poland, the educational effects should be maximised. At present, the Shanghai list includes only two universities from Poland (the Jagiellonian University and the University of Warsaw), and both are ranked in the last five hundred. The high-quality education offered by ICT departments and faculties that play a significant role in the development of the information society is a positive factor; however, the average level of IT skills in Poland is half the EU average. This figure is determined as the number of operations (from a determined set of activities) that a user is able to carry out unassisted. This figure is strongly correlated to age. There is a huge IT skill's gap between 16-24 year olds, and the over 65 year olds - in 2007, the share of top skilled persons in the younger group was over 11 times the proportion for seniors. In addition, the availability of broadband lines does not translate automatically into utilisation of their capacity. Respondents usually cite the high costs of equipment and services, and the lack of need, as the main reasons for not having broadband access. This means that ensuring access to ICT only is not sufficient. This limitation usually affects unemployed persons.

For the development of the information society, it is necessary to prepare development forecasts and scenarios that are based on reliable and regular research on broadly-defined social issues (e.g., Foresight "Poland 2020", Intellectual Capital Report, Social Diagnosis, and surveys conducted by the Central Statistics Office).

Increasing citizens' awareness and skill levels in the scope of ICT application is the overriding task for the educational system on the way to the information society in Poland.



#### **Public services**

In terms of implementing the 20° primary public administration services, which (in accordance with the European Commission's recommendation), should be available on-line, Poland's score is less than half of the EU average (in 2007, it was 25%, while the EU average was 59%). Only four services have achieved the transactional level that allows full interaction with administration units via electronic access channels

Polish entrepreneurs use e-services on a regular basis, even more than the EU average (56% of entrepreneurs send forms in electronic format). One of the important factors behind this trend is the fact that certain services can only be used via electronic channels (statistical data or social insurance).

#### Quality of life

Activities that improve quality of life allow for extensive use of ICT tools; in particular, they facilitate remote social contacts and access to e-services from any place in Poland via electronic channels. Data provided by cell phone operators shows that nearly all Polish residents are within their coverage. In terms of use of the Internet for communication purposes (VoIP and videoconferencing), Poland has reached the EU average level. In other areas (e-mail, information search, entertainment, web-based media and e-banking), Poland is still below the EU average. E-commerce in Poland clearly lags behind the EU average. Only 9% of enterprises receive orders on the Internet (EU average = 14%), while the level of companies that buy on the Internet has reached 22% (EU average = 39%). In both cases, Poland is ranked 15<sup>th</sup> in the EU. Various surveys confirm that the sense of security is not an obstacle in Poland to the use of the Internet for commercial purposes. The issue of the appropriate confidentiality and privacy level in web-based transactions is ranked just third in terms of the significance of barriers for electronic payment users.

ICT provides various opportunities for launching new healthcare and social welfare services. Nearly a half of the Internet users are interested in electronic healthcare services and the highest interest level is shown by Internet users who work or are of working age. At present, those IT systems used in the healthcare sector demonstrate low interoperability and serviceability vis-à-vis patients — mainly because they are mainly built to meet the needs of public sector organisational units.

It is necessary to reduce digital exclusion by identifying and removing existing educational, economic and geographical barriers.

Services for business include: Mandatory Social Insurance, Corporate Income Tax, VAT: returns and notifications, Registration of Business Activities, Statistical Data Submissions, Customs Declarations, Permits and Certificates (e.g. environmental), and Public Procurement.

Services for citizens include: Individual Income Tax, Employment Intermediation, Services provided by Labour Office, Welfare, ID Documents, Vehicle Registration, Building Permits, Police – reported incident processing, Public Libraries – catalogues and search, Certificates (birth, death or marriage), Registration of High School Applicants, Residence Evidence, Health-Related Services.



Summary of the analysis of the strengths & weaknesses and the opportunities & threats, which affect the development of the information society in Poland.

The pace of development of Poland's information society depends on various factors that result from current conditions and ongoing changes in Poland and in other EU Member States. These factors are discussed below, using the SWOT analysis structure (Strengths, Weaknesses, Opportunities and Threats).

#### I. Strengths

Poland's strengths that relate to the growth of the information society, primarily include the high quality of the education of ICT human resources at university level, which is confirmed by, *inter alia*, the excellent international achievements of Polish programmers. The total number of working-age educated people is increasing.

In addition, commercial web-based services, e-banking and mobile phone services are widely accessible and arouse large interest. More and more employees and companies are interested in various web-based work schemes. Small and medium-sized enterprises use more and more ICT solutions to improve their operating efficiency. Services in the IT and telecommunication sectors have been growing at an accelerated rate as they are well-prepared to process cashless and e-commerce transactions.

A National Strategic Reference Framework has been prepared, which covers objectives that support the development of the information society, and at regional level, innovation-support strategies and information society development plans.

#### II. Weaknesses

Weaknesses that may hamper the development of the information society in Poland include the low saturation of schools with ICT solutions, the insufficient links between the educational system and labour market needs, as well as the low rate of continuous adult education. Additionally, there is still a considerable group of persons who are either not interested in using ICT or just lack the necessary skills – not only among seniors, but in all age groups.

The structure of R&D expenditure impairs co-operation between science and business. This, in turn, leads to a low number of inventions – Poland has a relatively low yearly number of patents, compared with other EU Member States. Despite a growing interest, the absorption of ICT solutions by Polish companies is below the average level for other EU Member States and the ICT industry shows poor performance (measured by its low generation of value added in the business sector).

Other development needs that should be emphasised include the delayed implementation of the EU information society recommendations and the insufficient utilisation of those EU funds dedicated to this area (e.g., funding for EU R&D programmes – 7<sup>th</sup> Framework Programme). The lack of a consistent plan for developing the information society, which would cover all governmental departments and agencies, and the inadequate co-operation between them, are key reasons for the general slowdown in such activities and they hinder the search for the desired synergies. In addition, the inflexible Public Procurement Act slows down the implementation of ICT solutions in the public administration units. At present, the low interoperability level of solutions adopted by governmental departments is clearly visible. Another weakness is the public administration employees' fears connected with implementing ICT and the poor legislative support for the development of the information society in Poland.

#### III. Opportunities

For the purposes of this analysis, opportunities are defined as conditions and factors that forecast a positive impact on information society development in Poland. Poland should utilise the opportunity resulting from its attractiveness, compared with other European countries, for investors, to attract foreign capital and import advanced technologies and know-how. This inflow could intensify after Poland joins the Eurozone. It is vital to simplify the law and improve the regulatory environment of



enterprises. This would include adapting the law to align it with the development requirements of the information society and e-economy, and building a system of legislative and financial solutions that would support the transfer of technologies to small and medium-sized enterprises. This is also Poland's opportunity to ensure the consistent and effective use of funds offered by the European Union to its Member States for the implementation of goals relating to the development of the information society.

In the area of public administration, one of the opportunities is the development of interoperable ID management systems as master solutions for the development of pan-European e-services, the co-ordination of initiatives aimed at cost reductions and the consolidation of scientific and research teams on top priority multi-year and strategic research programmes.

Another opportunity for Poland is the allocation of considerable public funds for the development of the ICT structure related to the preparations for Euro 2012. In addition, Poland has a tremendous opportunity to use its presidency in 2011 to achieve objectives related to the development of the information society in the European Union.

#### IV. Threats

Threats mean any conditions or factors that have an adverse impact on the development of the information society in Poland. Such threats include the insufficient absorption of EU funds and the excessive bureaucracy, which hamper innovation. The development of the Information society may be slowed down in Poland by administrative obstacles and restrictive regulations in the scope of extending the ICT infrastructure, and the lack of adequate regulation in the area of intellectual property rights.

The outflow of educated and experienced human resources, both from the administration and science, to business, and from Poland to other countries, is also a serious threat. Another risk is connected with the declining interest of students who choose technical studies and sciences, the aging society, the reluctance and suspicion of older persons (60+ generation) to new technologies and the digital exclusion threat in certain geographical areas and social groups. The development of the information society can also be hindered by fears of privacy being compromised and by the costs necessary to ensure the security of information and e-services.

Too many changes in the direction of strategic efforts may adversely affect both the speed and cost of developing the information society.



# Vision and mission of the information society in Poland

A society where citizens and enterprises consciously use the potential of information as economic, social and cultural value, with effective support from a modern and friendly public administration.

#### Children

Children acquire the awareness of communication tools for fun, learning and for practical activities.

#### Youth

Young people have access to ICT education, and they are well-prepared for a professional career, thanks to an educational curriculum that is aligned with labour market requirements, is focused on practical skills, stimulates creativeness and talents, and uses advanced technologies in the educational process. Young people make good use of the easy access to the electronic and information resources of prestigious educational institutions and research & development centres in Europe. They also acquire experience and habits of critical, independent thinking and information selection. They use ICT tools to build social relationships, maintain remote contacts with their families and actively participate in interest groups.

#### **Adults**

Adults have the knowledge, skills and the awareness of the benefits offered by e-services and e-content. These increase their professional competences, mobility and flexibility. An attractive workplace, due to innovation that allows use of one's knowledge and continued life-long learning. Newly-available work methods (telework) ensure the life-career balance, and activate disabled persons, rural inhabitants and the carers of children or sick persons. Electronic tools enable them to actively participate in the social, cultural and political life.

#### **Senior Citizens**

ICT solutions allow senior citizens to maintain social, cultural and political activity. They have the possibility to easily maintain social and family contacts over a distance. They use available sources of knowledge, and they actively participate in efforts to create national intellectual capital, through the expanded possibilities of transferring knowledge, skills and life experience. They have easier contact with the public administration and healthcare institutions. They feel safe thanks to various ICT tools.

#### **VISION**

A PRO-ACTIVE SOCIETY THAT ACHIEVES A HIGH QUALITY OF LIFE AT PERSONAL AND SOCIAL LEVEL.

#### **MISSION**

TO ENSURE THE UNIVERSAL AND EFFECTIVE USE OF INFORMATION AND KNOWLEDGE FOR HARMONIOUS SOCIAL, ECONOMIC AND PERSONAL DEVELOPMENT.



# Primary principles and assumptions of information society development in Poland

The development of the information society in Poland should have the following permanent attributes:

- Availability, security and confidence access to reliable information or a secure service that is indispensable to citizen and businesses.
- 2. **Openness and diversity** no preferences in access to information; especially to public information.
- 3. **Universality and acceptability** efforts to ensure that participation in the information society is obvious and common to the maximum extent feasible, and that the information society products and services are as broad as possible.
- 4. **Communicativeness and interoperability** searching for and access to the desired information are secure, quick and simple.

The development of the information society in Poland requires co-ordinated efforts and the harmonious co-operation of the public and private sectors, the scientific and research centres, institutions and non-governmental organisations, and the activities to be carried out within the framework of implementing the Strategy should be co-ordinated as a comprehensive portfolio of initiatives and projects.

On the basis of the SWOT analysis prepared to assess the prospects of information society development in Poland, the following list of essential recommendations has been formulated. The ultimate success of the Strategy depends directly on their successful implementation.

#### Creating conditions for the efficient development and functioning of the information society

- Improving citizens' motivation, awareness and skill levels, and supporting the general and multi-dimensional education of society in the scope of ICT use. Fulfilling the needs of people and businesses, by facilitating access to ICTbased public services and by implementing comprehensive IT and educational projects.
- Providing extensive support to groups susceptible to digital exclusion, by indentifying and removing educational, organisational, economic and geographical barriers that deprive such groups of access to ICT solutions.
- Promoting international co-operation to study the achievements of other countries (in particular, other EU Member States) in developing the information society, providing cross-border electronic services and promoting Polish companies and institutions, and the new-technology solutions that they have developed.
- ▶ Implementing new tools and technologies to support the influence and joint decision-making capacity of citizens in matters of interest to them and, thus, to support regional development and promote local initiatives.
- Creating conditions that are favourable to support practices and initiatives that facilitate the development of society, and preparing research agenda and the regular monitoring of the social, economic and technological status of the development process and the outcomes of implemented projects.
- Carrying out activities to reinforce the feeling of security among citizens, which guarantee the full protection of their fundamental rights, personal data and identity, and eliminate digital threats.



#### II. Ensuring general access on information networks to services and content

- Providing free access to public services (in particular, healthcare) on the basis of ICT solutions.
- ▶ Ensuring general access to content free of charge to those in the public domain, and against a fee to compensate their authors as required by their value and demand, and taking into account the proper protection of intellectual property rights. Implementing adequate laws and regulations applicable to specific situations where public funds cover only part of the production of content and services.
- Promoting efforts to create and make available services that use information processing skills in all areas of the economy and social life.
- Ensuring the multi-channel distribution of public services, so that the progress of civilisation does not hamper their usability and they are easily accessible for all target recipients.

#### III. Ensuring the broader utilisation of new technologies to improve businessto-business co-operation, and the effectiveness, innovativeness and competitiveness of the economy

- ▶ Stimulating the scientific and research sector to generate innovative solutions for enterprises (especially small and medium-sized enterprises).
- ▶ Increasing the commitment of the public and private sector to research into and implementation of innovative ICT and environmental solutions.
- Maintaining the technological impartiality of the public sector by the equal treatment of various hardware and software platforms, and determining the interoperability frameworks for technologies used in implemented ICT systems, which should create favourable conditions for reinforcing competitiveness.
- ► Increasing competitiveness and innovation at Polish enterprises, by stimulating the use of new technologies; in particular, ICT solutions.

# IV. Creating legal, economic and organisational conditions as a launch pad for the development and widespread use of secure digital communication networks

- ► Removing technological, organisational and legal barriers in order to ensure the full utilisation of the potential offered by ICT solutions; in particular, implementing regulations that will support an open and competitive market.
- ► Ensuring general access to electronic communications through all equally important digital channels telephone, radio, television, cable wireless, stationary and mobile with the use of efficient next-generation high-capacity broadband networks.
- ▶ Ensuring the efficient protection of network users against e-crime.
- Providing support to citizens in crisis situations (energy delivery interruptions, natural disasters, riots or acts of terror or war) by using any ICT solutions that may be available in such circumstances.
- Promoting the well-balanced use of electronic devices in terms of health protection, environmental protection, electricity savings and recycling of electrical devices.



# Poland's strategic directions and objectives in the context of information society development until 2013

Area: HUMAN

#### Strategic direction:

Accelerate the growth of the intellectual and social capital of Polish citizens with the use of ICT solutions

Area: ECONOMY

#### Strategic direction:

Increase the productivity, innovation potential and competitiveness of Polish companies, and thus Poland, in the global market, and facilitate B2B communications and cooperation with the use of ICT solutions

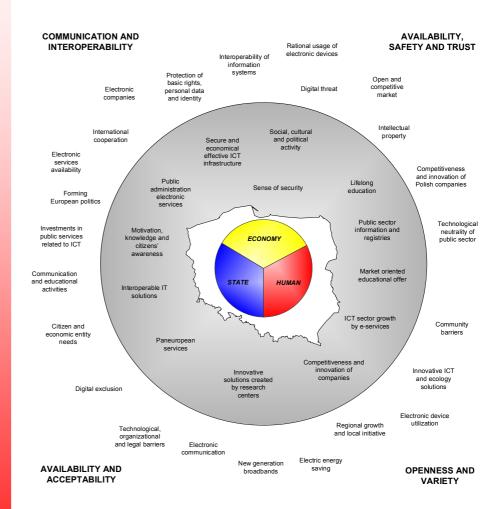
**Area: STATE** 

#### Strategic direction:

Increase the accessibility and effectiveness of public administration services with the use of ICT solutions to reconstruct internal processes in the administration and the delivery of services

The adopted vision and mission of the development of the information society in Poland involve strategic activities targeted at:

- people (area: HUMAN)
- business entities (area: ECONOMY)
- public administration (area: STATE)





Area: HUMAN

#### Strategic direction:

Accelerate the growth of the intellectual and social capital of Polish citizens with the use of ICT solutions

#### Mission:

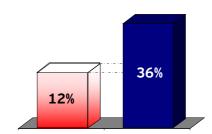
- An aware individual who can use technological progress to improve their quality of life.
- ► An individual who learns all their life long, continuously acquiring new knowledge and skills, supplementing their education to respond to changes in the global labour market.
- An individual who has access to ICT and who can use ICT proficiently and creatively, who can find an attractive job and, once employed, can use their skills and knowledge to work more efficiently and contribute to increasing the country's wealth.
- ▶ An innovative individual who can recommend initiatives that will make their local communities more efficient and use upcoming opportunities to succeed in their personal life and professional career.
- An active citizen who participates in the economic, social and cultural life of their country, region, city and local community.

#### Objectives in the area HUMAN

#### Measurement framework \*

**OBJECTIVE 1** 

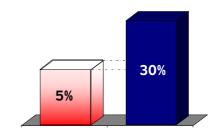
To improve the level of motivation, awareness, knowledge and skills in the use of ICT solutions.



Individuals' level of computer skills (percentage of individuals who have carried out 5 or 6 of the computer related activities) (2007 data).

**OBJECTIVE 2** 

To improve the level and accessibility of education (pre-school to university) and promote life-long learning by using ICT solutions.



Life-long learning – percentage of the adult population aged 25 to 64 participating in education and training (2007 data).

<sup>\*</sup> The target rates are set at the average level for the three EU leaders in a given category.

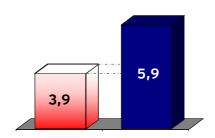


#### Objectives in the area HUMAN

#### Measurement framework \*\*

**OBJECTIVE 3** 

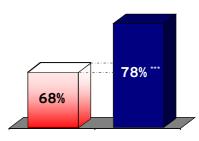
To adjust the educational offer to the requirements of the labour market, with ICT as one of its vital components.



Adapting the Polish educational system to the needs of a globally competitive economy (1 = no match, 7 = perfect match) (2007 data).



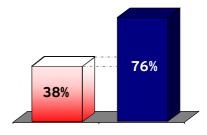
To increase the feeling of safety in the society by using ICT solutions.



The feeling of safety among Polish citizens. (responded 'yes' to the question: "Do you think Poland is a country where people can live safely?") (2008 data).



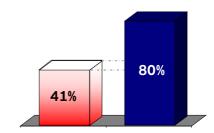
To increase Polish citizens' social, cultural and political activity by using ICT solutions.



Percentage of people who use the Internet for communication purposes (2007 data).



To ensure that the infrastructure for ICT is costeffective, secure and oriented to the future needs of the citizens, which is required to develop the Polish information society.



Percentage of households that have access to the Internet (2007 data).

<sup>\*\*</sup> The target rates are set at the average level for the three EU leaders in a given category.

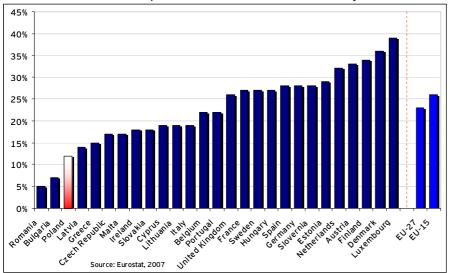
<sup>\*\*\*</sup> The target rates are set at the desired 2013 level.



Area: Human - Objective 1:

#### To improve the level of motivation, awareness, knowledge and skills in the use of ICT solutions

The awareness of electronically accessible information and e-services and the ability to use them are prerequisites for the development of the information society, and enable an individual to be a peer member of the information society.



Individuals' level of computer skills (percentage of individuals who have carried out 5 or 6 of the computer related activities) (2007 data).

#### Commenced activities (examples):

- ▶ Promotion of the ECDL in Poland (European Computer Driving Licence a European certificate that confirms computer literacy).
- n@utobus an educational training project that moulds technological awareness by developing practical skills for Internet users.
- ► "E-lementarz" (E-ABC) a TV program that promotes the idea of the information society, advanced technologies and ICT solutions, and their practical everyday use.
- A training programme for librarians in the scope of new IT and web-based technologies -BIBWEB (supplement to the IKONKA programme).
- ► The Interkl@sa programme that supports educational processes at schools, and is focused on areas of higher digital exclusion risk.

#### Key tasks and initiatives:

- Creating and implementing a training programme in the scope of computer and Internet use for persons at risk of digital exclusion and persons who have a computer at home, but are reluctant to use it.
- Presenting best practices and informing citizens and businesses about sources of electronic information and e-services that can facilitate professional work and business activities.
- Supporting and coordinating initiatives to promote and disseminate practical ICT knowledge and skills.
- ▶ Developing a programme of international and inter-regional co-operation (seminars, conferences, etc.) to ensure the exchange of good practices and experiences.
- ▶ Educating society on the safe use of information networks to protect personal identity.
- ▶ Promoting electronic devices that ensure reduced electricity bills, and raising awareness of their impact on the environment.

#### **VISION 2013**

Polish citizens **have knowledge** of the available scope of information and eservices that they can use from any place at any time and via various ICT channels, such as the Internet or mobile phones.

Citizens have the motivation and skills necessary to use ICT on their own in their everyday lives. Such motivation and skills enable them to use a broad e-services offer regardless of their place of residence, and they need less time to use these services.

Citizens acquire and share knowledge with each other using ICT solutions, e.g., knowledge forums, discussion groups or blogs.

Citizens create virtual societies, and strengthen contacts with their families and friends, thanks to ICT.

Citizens, with ICT knowledge and skills, find jobs that are best suited to their professional aspirations. Those who run their own firms can apply innovative solutions in their business; thus, improving their operations and competitiveness.



Area: Human - Objective 2:

To improve the level and accessibility of education (pre-school to university) and promote life-long learning by using ICT solutions.

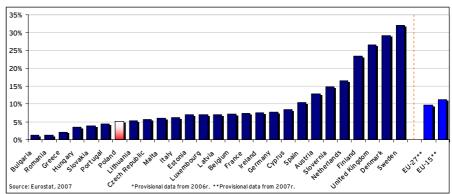
#### **VISION 2013**

Students perfect the skills necessary to use ICT, at **every stage of education**, regardless of the curriculum profile.

Pupils and students learn with the use of the appropriate **tools** (computers with Internet access – for students, multimedia educational software, profiled educational applications accessible on-line, dedicated laboratories for professional education, modern and attractive textbooks) and are supported by **teachers who have the skills necessary to use such tools**.

Persons of **post-educational age** and **senior citizens** can improve their skills with the use of an ICT-based educational offer dedicated to their needs, which allows them to improve existing skills or acquire new ones, as required in the labour market.

ICT are natural tools that make access to knowledge easier. Life-long learning is a foundation of the information society and a knowledge-based economy.



Life-long learning – percentage of the adult population aged 25 to 64 participating in education and training.

#### Commenced activities (examples):

- Polish Virtual University (PUW) offers courses and supplementary classes on the Internet. Its task is to support traditional training and lectures and to promote advanced educational methods.
- ► The project "Distance Learning Centres in rural areas" establishes centres that provide people in rural areas with access to continuous learning, with the application of advanced ICT solutions (under SOP HRD, Priority 2, Activity 2.1).
- Activities to improve the quality of education and to prepare human resources for the advanced economy under the Operational Programme Human Capital for 2007-2013 (OP HC, Activity 2.1, 3.3, 9.3, and 9.5).

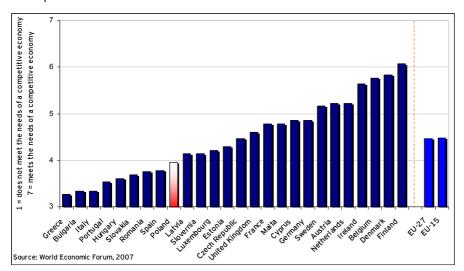
- Ensuring the effective utilisation of opportunities created by the Operational Programme Human Capital.
- Preparing a programme for the use of ICT systems as educational tools at all educational levels.
- Preparing mandatory training and exam programmes for teachers (including college and university lecturers) in the scope of using ICT techniques.
- Preparing and implementing continuous education programmes relating to the application of ICT solutions, via in-school and distance learning (eLearning).
- Building electronic educational platforms, preparing content (curricula, textbooks, dictionaries and encyclopaedias) for distance teaching (eLearning) and increasing the supply of educational content.
- Creating network resources (a repository) of curriculum contents for various recipients and teaching profiles.
- Introducing a general training programme for teachers (of all profiles) in the scope using IT tools.
- ▶ Increasing the supply of post-graduate studies and vocational courses to support retraining and re-skilling.
- Intensifying activities in the area of vocational training and continued vocational training, and removing legal barriers.
- ► Equipping schools with educational computers (gimbooks), while providing special support to students from lower-income families.
- Preparing the appropriate curricula and, thus, ensuring Internet access for all pupils (primary schools, and junior and senior secondary schools) as tools to support the learning process.



Area: Human - Objective 3:

## To adjust the educational offer to the requirements of the labour market, with ICT as one of its vital components

The identification of labour market needs on an ongoing basis and the flexible adjustment of the educational offer to the market, will provide graduates with competences that are valuable for employers and will support information society development in Poland.



Adapting the Polish educational system to the needs of a globally competitive economy (1 = no match, 7 = perfect match).

#### Commenced activities (examples):

- A plan for the reform of the Polish educational system, which assumes a reduction in the transfer of encyclopaedic knowledge to increase the learning of the most important skills needed in adult life and in the labour market and determines the minimum curricula for colleges and universities.
- A project involving the earlier acquisition of practical skills by secondary school students, which is implemented in co-operation with employers (traineeships and apprenticeships for students of general education).

#### Key tasks and initiatives:

- ▶ Implementing the curricular reform of the Polish educational system.
- Preparing the assumptions and implementing the programme of economic growth and educational development forecasts.
- ► Streamlining the structure of the educational systems to be in line with the needs of the information society and knowledge-based economy.
- ▶ Developing ICT subjects in higher education curricula, also for non-IT faculties, and creating interdisciplinary educational systems.
- ▶ Increasing the focus on creative and knowledge search skills in the educational process, which is necessary to enable students to adapt to the changing labour market.
- ▶ "New technologies in education" a plan of activities in the area of children and youth education, in the scope of the functioning in the information society.

#### **VISION 2013**

The objective of the educational offer alignment is to meet the requirements of a continuously changing labour market. To this end, **analyses and forecasts of the demand** for employees of various professions are prepared.

Citizens have access to information about expected changes and use this when choosing their field and level of study.

The State initiates and carries out activities to adapt the offer of

educational units to projected changes in the labour market, to improve the quality of education and to stimulate motivation to choose one of the desired faculties.

At all education levels, there is an extended offer of professional and technical education supported with ICT solutions. As a result, citizens acquire professional skills and practical knowledge that enable them to compete successfully in the open labour market, in accordance with the freedom of movement principle.



Area: Human - Objective 4:

#### To increase the feeling of safety in the society by using ICT solutions.

#### **VISION 2013**

Poland's society has the necessary knowledge of network and information security issues, is not afraid to use eservices and has confidence in provided information contents.

Poles feel better, due to the welldeveloped and effective infrastructure of **preventive equipment and systems**, as well as high crime detection rates.

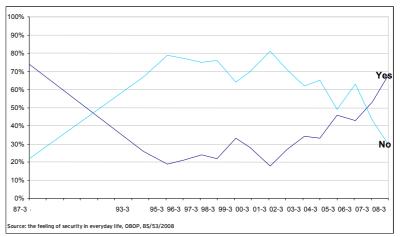
ICT also improves the healthcare system. Patients and doctors have access to the history of treatment and results of examinations, which facilitates diagnosis and increases the effectiveness of treatment. Citizens are regularly informed about necessary prophylactic examinations.

Available ICT solutions are secure in terms of personal data and transaction protection.

Traffic control systems improve road safety and improve traffic in metropolitan areas.

There are advanced and effective systems that support citizens in crisis situations.

Poland is well-prepared to fight cybercrime, and it effectively prevents human rights violations and the dissemination of obscene content on computer networks. The perception of a high level of safety and a friendly environment support the fast development of citizens and their proactive participation in the information society.



The feeling of safety among Polish citizens. Answers "difficult to say" were omitted.

#### Commenced activities (examples):

- Council Resolution (2007/C 68/01) dated March 22, 2007 concerning the strategy for a secure information society in Europe.
- A project to ensure health and to improve the effectiveness of the healthcare system (NSRF 2007-2013, Operational Programme Infrastructure and Environment.
- ► CERT Polska (Computer Emergency Response Team).
- ► Email addresses provided by the police to report incidents.
- ▶ Implementation of the 112 emergency number.
- ▶ Initiated implementation of the European 116 emergency number for children and parents.

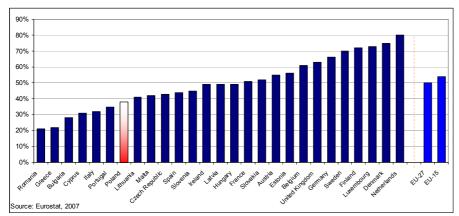
- Improving the functioning of the system that gives access to the numbers of emergency services that provide assistance and help, and subsequently extending the system to include situations that require higher security.
- ▶ Implementing the Healthcare Digitalisation Programme (PIOZ).
- Promoting interoperable solutions in the scope of ID management the government and public administration should be perceived as a best practice model, by promoting secure e-government services for all citizens.
- ▶ Starting initiatives to ensure top level security for users of ICT solutions.
- ► Ensuring the active participation of Poland in the European Commission's programme "Secure Internet" 2009-2013.
- ▶ Implementing ICT in the healthcare sector, by the development of tele-medical applications (e-health); including medical reporting, financial reporting, electronic healthcare records, e-prescription and information services, e.g. tele-consultations and registration on the Internet, etc.
- ▶ Initiating a national debate on the balance between privacy protection and national security.
- ▶ Increasing the effectiveness of prosecution authorities and special services in understanding and detecting e-crimes.
- ► Extending the network infrastructure by emergency resistant functions (including back-up functions initiated in the case of power supply interruptions).



Area: Human - Objective 5:

#### To increase Polish citizens' social, cultural and political activity by using ICT solutions.

Citizens who are aware that they have an actual impact on their country's situation and are free to communicate with local and global communities will be more eager to participate proactively in information society development efforts.



Percentage of people who use the Internet for communication purposes.

#### Commenced activities (examples):

- ▶ Development of Internet forums and community portals on the Internet.
- Network of regional portals that present news and information about the region and directories of local institutions.
- ► The Foundation for Aid to Physically Disabled Mathematicians and Computer Specialists, which helps persons with physical handicaps to start to work or integrate with society.
- ▶ Virtual museums that present their collections with the use of the latest ICT solutions.

#### Key tasks and initiatives:

- ► Facilitating participation in local and national elections with the use of ICT solutions (eVoting).
- ▶ Disseminating local political forms (civic initiatives and referenda) with the use of ICT
- Promoting discussion forums on municipal and county portals to stimulate social activity, which allows for the exchange of observations and the submission of recommendations by citizens.
- Supporting NGO initiatives in the scope of using ICT solutions.
- ▶ Implementing the digitisation of libraries, museums and archives in all the areas of culture, science and national heritage.
- ► Preparing digitised textbooks, lexicons, directories, encyclopaedias and other sources of knowledge that are essential for each Polish citizen.
- ► Adjusting all public on-line services to W3C requirements in the scope of the design and functionality of websites (under the eAccessibility programme).

#### **VISION 2013**

Citizens are aware of the significance of their participation in social, cultural and political life.

Information about current events, problems, issues to be resolved and key decisions, from their perspective, is presented in a clear and transparent way – simply and unambiguously.

By using ICT, the State provides **convenient tools** that allow citizens to participate in voting and in public discussions, to submit ideas and to participate in social consultations.

ICT systems enable non-governmental organisations to respond effectively to the social and cultural needs of citizens.

Citizens know-how ensures that their voices are heard in the social debate and trigger the desired effect.

ICT also ensure remote access to cultural achievements, by general digitisation of information resource, and creation of virtual museums, art galleries or libraries.



Area: Human - Objective 6:

To ensure that the infrastructure for ICT is cost-effective, secure and oriented to the future needs of the citizens, which is required to develop the Polish information society.

#### **VISION 2013**

The ICT infrastructure, which includes broadband networks, digital television and advanced telephone networks, etc., is **commonly accessible** in all regions in Poland.

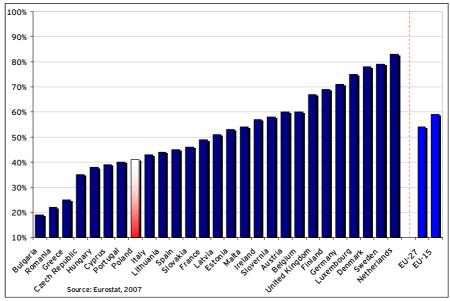
The capacity of the ICT infrastructure meets demand and allows fast access to the required information.

**The cost** of access to communications channels is not a barrier.

A citizen who has no computer may use one of the numerous **points of access** to digital services, which are located in public institutions. The number of digitally excluded citizens is, therefore, minimised.

Citizens know how to use e-services (public and private) **safely**.

The development of the information society requires general access to ICT architecture, which is the basic communication medium in the society.



Percentage of households that have access to the Internet.

#### Commenced activities (examples):

- ▶ Implementation of the nationwide optic-fibre academic network PIONIER, which has integrated 21 centres from the City Academic Networks.
- ▶ Polish research centres may connect to the multi-gigabit pan-European backbone network GÉANT, which is dedicated to scientific research and education, and to other pan-European science networks.
- Activities to prevent digital exclusion (elnclusion) under OP IE 2007-2013 (Activity 8.3 OP IE).
- Activities to ensure 'last-mile' access to the Internet under OP IE 2007-2013 (Activity 8.4 OP IE).
- Projects to enhance broadband access to the Internet in Poland, specified in NSRF 2007-2013, OP Development of Eastern Poland, and in Regional OPs.
- ► IKONKA programme that ensures generally accessible broadband Internet access points at public libraries.
- Action plan to develop the broadband access infrastructure that supports information society services in Poland in 2007-2013.
- ▶ Initiatives conceived by the CERT (Computer Emergency Response Team), which is established to respond to web security incidents.

- Ensuring the effective utilisation of EU funds to implement information society tasks in Poland.
- ► Continuing programmes that support development of broadband networks, digital television and next-generation networks, by the public administration and the European Union.
- ▶ Determining the legal and financial conditions for the development of next-generation networks in line with European directives and with the involvement of public funding and institutions this is a strategic task from the perspective of Poland's development.
- Commencing activities to ensure high security and resistance levels of key components of networks and IT infrastructure, and to ensure that the provision of services is not interrupted.
- Granting the public objective status to the telecom and ICT infrastructure and levelling their status in terms of local levies with the infrastructure of networks of a different type (power supply, water, gas or sewer).
- Carrying out informational campaigns to raise citizens' awareness of computer security and promote the ethical use of ICT.



Area: ECONOMY

#### Strategic direction:

Increase the productivity, innovation potential and competitiveness of Polish companies, and thus Poland, in the global market, and facilitate B2B communications and co-operation with the use of ICT solutions

#### Mission:

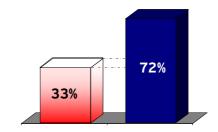
- ▶ An innovative economy that uses the latest scientific advancements and ICT.
- ► Enterprises compete in international markets by offering top-quality goods and services and are supported by thriving and proactive scientific & research centres, which provide new innovative solutions.
- ► Enterprises create **attractive employment opportunities** for citizens and stimulate the further development of the information society

#### Objectives in the area ECONOMY

#### Measurement framework\*

**OBJECTIVE 1** 

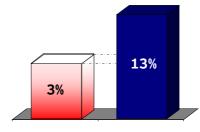
To improve the ability of R&D centres to create innovative solutions to be used by enterprises.



The share of private funds in R & D expenditures (2007 data).

BJECTIVE 2

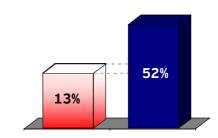
To create favourable conditions for the development of the ICT sector and e-services in Poland.



Value added in the ICT sector (as a percentage of total business sector value added) (2004 data).



To increase the competitiveness and innovation potential of Polish enterprises by creating conditions that will allow better use of ICT.



Percentage of enterprises that purchase on-line (2007 data).

<sup>\*</sup> The target rates are set at the level of the average for the three EU leaders in a given category.



Area: Economy - Objective 1:

#### To improve the ability of R&D centres to create innovative solutions to be used by enterprises.

#### **VISION 2013**

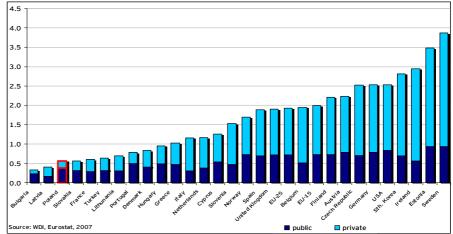
Scientific & research centres have large personnel resources and an integrated and well-developed ICT infrastructure that generate solutions for enterprises, while ensuring the effective utilisation of available funds. ICT research projects are financed by enterprises and public entities that perceive investing in ICT research & development as an important method for improving their innovativeness and, as a result, their competitiveness in the global market.

Scientific & research centres cooperate with each other (at national
and international level) and such cooperation enables them to implement
crucial ICT projects that are important
for the competitiveness of the
European Union economy. European
Union research & development funds
are utilised and the effects of scale, in
particular personnel, infrastructural and
financial synergies, also improve
overall efficiency. Inter-sector initiatives
are integrated under research
programmes.

Cooperation between scientific & research centres, public administration and enterprises, ensures the continuous **transfer of knowledge and technologies**, making the solutions deployed by enterprises even more innovative.

Entities that implement innovative solutions at enterprises, on the basis of the experience of other companies, best practices and the knowledge provided by scientific and research centres.

Development of new and absorption of existing innovative solutions by businesses increase their competitiveness in the domestic and international market. Improved flows of knowledge from research centres to implementing units that transfer innovative solutions to enterprises promote their live utilisation.



The share of public and private funds in R&D expenditures.

#### Commenced activities (examples):

- Activities to support the development of the shared research infrastructure for scientific institutions under OP IE 2007-2013 (Activity 2.2 OP IE).
- Development of regional advanced technology centres that are to create a system of instruments to support innovative ideas and their implementation in enterprises in the ICT area.
- National Programme Foresight Polska 2020 this is a scientific and technological project to channel research and technology resources to areas, which ensure the dynamic medium and long-term growth of the economy; especially, the second research field: "Information and Communication Technologies."
- ▶ Detailed programmes under the Community Framework Programmes in the scope of technology research, development and implementation.
- Development of 28 Polish Technology Platforms under the European Technology Platforms, which are a joint venture of the European Commission, industry, research centres, financial institutions, decision-making groups and society, to formulate development strategies for Europe's core sectors in the economy and future technologies.
- Regional Innovation Systems, which include a network of Incubators and Enterprise & Technology Parks that support enterprises at early stages of their existence.

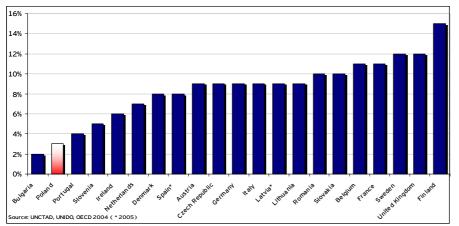
- ▶ Implementing open standards in science (open access).
- ► Changing the principles of financial support for research and science sector to promote joint research projects with enterprises.
- ▶ Promoting research into the security of new technologies and innovative solutions in the scope of utilising resource-saving technologies in the light of shrinking natural resources; especially, those used for energy production.
- ▶ Supporting the development of Regional Innovation Centres.
- ► Creating favourable growth conditions for entities that implement innovative solutions at enterprises (e.g. under OP IE).
- Reinforcing activities to achieve a higher utilisation rate for EU funding under Framework Programme 7 (FP7) and pursuing efforts to build a base of partners to apply jointly for grants.
- ▶ Promoting innovative solutions for SMEs.



Area: Economy - Objective 2:

#### To create favourable conditions for the development of the ICT sector and e-services in Poland.

The ICT sector provides the infrastructure that is necessary to accumulate, process and make available information in electronic format. It also offers tools needed to build and market, on the basis of such information, e-services that accelerate information society development and are required for its growth.



Value-added in the ICT sector (as a percentage of total business sector value-added).

#### Commenced activities (examples):

- ▶ Building the legal environment the Electronic Services Act and other regulations.
- ► Activities to support business activities in the e-business areas under the Operational Programme Innovative Economy for 2007-2013 (Activity 8.1 PE IE).
- ▶ Financial support for technology investments under the Technology Credit Fund.
- Developing Regional Innovation Strategies (RIS) to create a co-operation forum for organisations and institutions from a given region, which promote and support enterprise and innovation.

#### Key tasks and initiatives:

- Creating institutional frameworks for the ICT and e-services sector and removing legal barriers that slow-down the implementation of electronic solutions.
- Active participation of the state in relation-building projects targeted at financial institutions and ICT and e-services enterprises that search for external funding for their investment projects.
- ▶ Implementing the concept of the Single European Payment Area (SEPA) migration of EUR-denominated payments to SEPA standards, which also cover e-banking services.
- ► Crating a digital information exchange platform to support SME growth.
- ▶ Supporting SMEs with investment funds to enable them to provide online services with the use of advanced IC tools, e.g., e-commerce, e-learning, e-training and network building.
- ► Generating a demand for e-services by enabling integration with public administration systems for the purposes of developing comprehensive commercial services for individuals and companies.
- Providing pre-implementation support for the outcome of R&D projects; in particular, in the SME segment.
- ▶ Supporting research and innovation in the development of secure ICT solutions.
- Running pro-active campaigns to promote Poland in the world as a friendly place for ICT investors and e-services providers.
- ► Ensuring pro-active participation of the government and non-governmental organisations in the work of the European Commission and Parliament on directives relating to the information society and ICT applications.

#### **VISION 2013**

Poland is perceived as an ICT and eservices entrepreneur-friendly country. Enterprises readily invest in these sectors. New initiatives are developed in this sector and Poland receives foreign investments.

On the basis of growth in the advanced technology sector, as well as improved education, intellectual capital is built, which is required to promote Poland as an attractive market for investments that require highly-skilled personnel.

ICT create **new**, **attractive jobs** and new products and services, while existing manufacturing methods are constantly improving.

Knowledge and experience in the field of advanced technologies are transferred to other sectors of the economy, contributing to a general growth in efficiency and competitiveness in the global market.

Legal regulations are clear and support the growth of small and medium-sized enterprises that provide services through electronic channels.

Implementation of e-services at small and medium-sized enterprises **expands their target markets** and contributes to the development of a single market in the European Union, while absorbing minimum funding.

Entrepreneurs who start business in the ICT and e-services sector face no significant barriers when trying to access external financing sources.



Area: Economy - Objective 3:

### To increase the competitiveness and innovation potential of Polish enterprises by creating conditions that will allow better use of ICT.

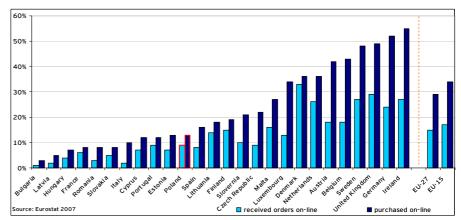
#### **VISION 2013**

Polish enterprises see the need for **improvement in business processes** with the use of ICT. Advanced technologies lead to the more effective utilisation of internal resources and processes in all areas of the operations of an enterprise. Consequently, Polish enterprises become more effective and more competitive in the global markets.

Effective communication with public administration entities, supported by ICT solutions, reduces the time and increases the effectiveness of the official and legal activities involved in the State-enterprise relationship.

ICT are used on the basis of **legal and** institutional frameworks that are stable, clear and explicit.

A more effective utilisation of ICT solutions increases the effectiveness of business processes within companies and improves labour productivity, thus increasing competitiveness.



Percentage of enterprises that sell or purchase goods electronically.

#### Commenced activities (examples):

- ► Activities to support B2B electronic solutions under the Operational Programme Innovative Economy 2007-2013 (Activity 8.2 OP IE).
- ▶ Informational activities through the network of National Contact Points (NCP) for the National Framework Programme for Competitiveness and Innovation (CIP), which is to promote the competitiveness of enterprises (in particular SMEs).
- Amendment to the Public Procurement Act to allow Internet auctions.
- Supporting micro, small and medium-sized enterprises under Regional Operational Programmes.

- Removing legal barriers that hamper utilisation of electronic communicating tools in B2B and B2A relationships.
- Minimizing the scope of direct contacts between entrepreneurs and authorities by using IT solutions and providing services and information that are essential to run e-business.
- ► Stimulating the utilisation of IT solutions in business to make it possible to send documents, including financial documents (e-invoices), between businesses and the administration.
- ▶ Introducing obligatory electronic settlements in business to administration relationships.
- ► Launching information campaigns to educate society on the legal framework of e-commerce and the principles and security concerning e-payments.
- Ensuring the pro-active participation of government branches and departments in campaigns to promote the participation of Polish ICT companies in the EU market and other countries.
- Promoting tele-work opportunities.



#### Area: STATE

#### Strategic direction:

Increase the accessibility and effectiveness of public administration services with the use of ICT solutions to reconstruct internal processes in the administration and the delivery of services.

#### Mission:

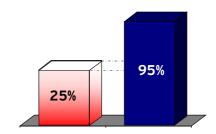
- ► A cost effective and process-oriented administration that cares about the needs of citizens and business and is not a barrier to the growth of competitiveness of Poland's economy in the global market.
- ▶ The administration functions on the basis of unambiguous and transparent regulations.
- ► The administration reduces the circulation of paper documents and uses only electronic information flows in its internal processes.
- ► A public administration that provides top-quality comprehensive electronic services to citizens and businesses.

#### Objectives in the area STATE

#### **Measurement framework**

**OBJECTIVE** 1

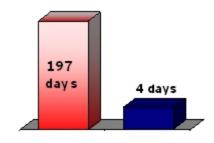
To provide a broad range of public administration services via electronic channels.



Percentage of the 20 basic public services available on-line (2007 data).

JECTIVE 2

To increase the effectiveness of the public administration by the extensive use of standardized and interoperable IT solutions.



Time needed to register a property (2008 data).

The target rates are set at the level of the average for the three EU leaders in a given category.



#### Objectives in the area STATE

Measurement framework \*\*

BJECTIVE

To provide access for citizens and enterprises to data from reference registers and other public information sources in order to ensure its further use for the enhancement of the contents and services of the administrations' offer.



Percentage of users of registers through electronic channels  $^{***}$ .

BJECTIVE

To support the creation of pan-European services and the mutual recognition of ICT solutions and tools.

The indicator will be determined under the regular information society survey, which is a part of the Public Statistics Research Program.

 $<sup>^{**}</sup>$  The target rates are set at the level of the average for the three EU leaders in a given category.

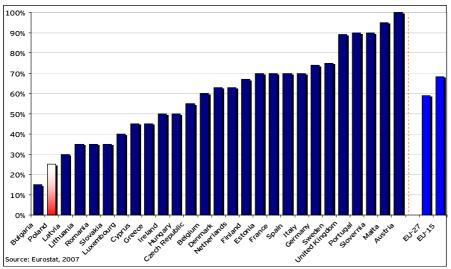
<sup>\*\*\*</sup> No statistical data available for the current value of the indicator.



Area: State - Objective 1:

#### To provide a broad range of public administration services via electronic channels.

Citizens and enterprises use public administration services via electronic channels and, therefore, reduce the time they need to spend on official administrative matters. Public administration services are available in a manner that allows for their continued integration to develop comprehensive bundles of services for citizens, entrepreneurs and the administration itself.



Percentage of the 20 basic public services available on-line.

#### Commenced activities (examples):

- Activities to increase accessibility to the information resources of the public administration and to digital public services under OP IE (Priority Axis 7. Information society – building egovernment, OP IE).
- The ePUAP portal allows for the provision of public services on the Internet.
- ► Promotion of the BIP (Public Information Bulletins) as information channels that support citizen-administration contacts.
- ► The e-Taxes project, which is a continuation of the e-Returns project.
- ▶ Digitisation of the Social Security Agency (ZUS) contributions may be made electronically.
- ► The City Gateways and Regional Gateway initiatives consist of portals for the provision of e-government services on the Internet

#### Key tasks and initiatives:

- ► Ensuring the full scope implementation of all 20 interactive public e-services, as specified by the European Union, offered by the administration to citizens and business.
- ▶ Introducing e-documents and e-services in the public administration in any matters that may be processed electronically.
- ▶ Developing tools and channels that allow for the provision of public services in electronic format with the use of electronic signatures.
- ► Preparing a joint interoperable dictionary of terms used for the purposes of digitisation, standardising methods of exchange of information and specimen electronic documents.
- ▶ Promoting an advanced electronic signature.
- Creating an administration portal for citizens and enterprises, which will allow for the personalisation of contents and services and process-oriented service.
- Implementing a single electronic administration service point relating to business activities (live implementation of the One Stop Office).
- Building e-services platforms dedicated to particular areas to meet the needs of entrepreneurs and citizens in key areas for business activities.
- ▶ Streamlining VAT payments on the basis of electronic invoices.

#### **VISION 2013**

The public administration has extensive, integrated and effective IT systems (e-Government), built in accordance with the technological neutrality principle.

The primary 20 interactive e-services are provided to citizens and enterprises through electronic channels at a level that ensures full interaction with public institutions.

The public administration (e-Government) is aligned to the citizen-user profile and ensures proactive and automated services. A personalised administration portal re-directs citizens to the relevant units.

Solutions that allow for the unambiguous identification of a citizen-user are in common use. Citizens may monitor the status of their official cases via interactive access channels.

Streamlined internal public administration processes are based on integrated, comprehensive and consistent data provided by IT systems.



Area: State - Objective 2:

To increase the effectiveness of the public administration by the extensive use of standardized and interoperable IT solutions.

#### **VISION 2013**

The utilisation of ICT ensures the accelerated completion of administrative procedures, which leads to reductions in the costs incurred to maintain the administration and the time allocated by entrepreneurs and citizens to official and legal matters. In addition, administration personnel have at their disposal user-friendly tools that significantly facilitate their work.

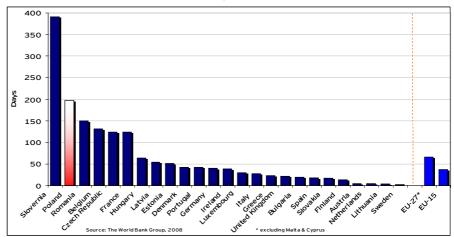
Easy access to data is ensured due to the implementation of a consistent architecture of solutions and appropriately secured IT technologies that integrate solutions used by particular authorities. Software implemented by administration units is suitable for secondary use due to the application of open standards and guaranteed access to application source code. Administration units promote and exchange best and proven solutions.

Systems deployed by the administration operate on the basis of a consistent IT architecture, they use a cohesive data model and they exchange data through standardised interfaces.

A consistent policy is in force in the area of **intellectual property management**, created with the use of public financing.

ICT used by the administration allows for the implementation of solutions that ensure the effective exchange of data between various authorities, a reduction in the number of institutions involved in providing a given service and, therefore, the creation of interactive and easily accessible services for citizens and enterprises.

ICT systems deployed by the public administration will enable it to restructure its internal processes and, hence, to improve its effectiveness ratio due to optimisation and automation of part of the operations that were processed by clerks. Data centres networks will ensure that data redundancy will be avoided.



Time needed to register a property.

#### Commenced activities (examples):

- ▶ The Act on the Computerisation of Activities of Entities that Carry Out Public Tasks.
- ▶ Projects under the Computerisation Plan for Poland 2007-2010.
- Activities under Regional Computerisation Strategies.
- Establishment of the Computerisation & Communication Committee of the Council of Ministers
- Appointment of the Computerisation Council it will support the Minister responsible for computerisation, with their analyses and advice.
- ▶ Project to develop and expand the public administration ICT network STAP.

- Reviewing and updating the State Computerisation Plan 2007-2010 and implementing a national-level structure for management of IT project portfolio – to ensure that particular projects are consistent with the Strategy.
- ▶ Preparing standards and clear rules to ensure the efficient circulation of electronic documents within the public administration.
- Preparing a consistent and standardised architecture of systems for public serviceoriented administration (SOA).
- ► Creating and implementing information systems at national, regional, supra-local and local level, within the scope of e-Government, which will increase the scope of and access to electronic services.
- ▶ Aligning the ICT infrastructure to enable data exchange between e-service platforms, electronic registers and administration units.
- ▶ Building or enlarging ICT systems used by the public administration to support management processes in the public sector.
- Introducing obligatory computer literacy requirements for administration personnel -(e.g. ECDL certificates).



Area: State - Objective 3:

To provide access for citizens and enterprises to data from reference registers and other public information sources in order to ensure its further use for the enhancement of the contents and services of the administrations' offer.

Maximum access to public reference data, e.g., spatial, statistical, economic, and quality interfaces allow for the development of comprehensive services for citizens and enterprises.

There is no statistical data for the adopted objective indicator which would allow comparison with the other EU Member States.

#### Commenced activities (examples):

- ▶ Building hubs for the national spatial data infrastructure GEOPORTAL.GOV.PL; in particular, infrastructural hubs for geodetic and cartographic information. The portal should co-operate with other European spatial information infrastructure hubs.
- ▶ Borrowers Register of the Credit Information Bureau.
- ▶ New Land and Mortgage Register electronic Land and Mortgage Registers.
- ► Central Database of Vehicles and Drivers (CEPiK).

#### Key tasks and initiatives:

- Implementing digitisation of state registers and ensuring mandatory access for citizens, businesses and local government to data from reference registers and other public sector information sources, to allow its secondary (also commercial) use (to extend content and services).
- ▶ Introducing the 'one place of storage' rule for personal data and the principle of active presentation of valid data of citizens by ICT systems.
- ▶ Creating spatial information systems at regional and local level.
- ▶ Developing a business model for the provision of public data to businesses.
- ▶ Creating an online medical services platform.
- ► Providing and promoting electronic communication standards in the B2B, A2B, A2C and A2A areas.

#### **VISION 2013**

Effective mechanisms are in operation to acquire, collect, aggregate, process and provide data from reference registers in the social, economic and cultural area.

Easy and low-cost access to data gathered by the state administration is ensured

The state administration uses a broad range of gathered data to improve the effectiveness of particular areas of State activity. First of all, information exchange is ensured to increase citizens' security and to facilitate business activities. Dedicated interfaces for the exchange of information in crisis situations are implemented, as well as systems that collect key information for crisismanagement purposes.

Stable legal and institutional frameworks are built, together with certain access mechanisms, which allow for the use of public sector data. Such mechanisms define precisely the scope of available data and the access charges.

Public administration has the appropriate interfaces in place that give access to reference registers. They are used by businesses to extend their own service proposals.



Area: State - Objective 4:

### To support the creation of pan-European services and the mutual recognition of ICT solutions and tools.

#### **VISION 2013**

Polish public administration systems are linked with IT solutions used by authorities in EU Member States, within the open standards framework. This allows for the simple and fast **exchange of data with Member States** as regulated by the respective international agreements.

Information flow improvements ensure a more effective operation of document exchange systems with agencies of the European Union and the Member States, and the increased scope of information available to law enforcement agencies and business activity data.

Pan-European services increase the effectiveness of international business operations and support the efforts to build a single market. This is possible due to the recognition of electronic signatures, the use of electronic invoices, electronic tax settlements, permits and certificates and the secure exchange of electronic documents.

Polish society's communication and mobility within the European Union and international co-operation require interoperable solutions and services that will integrate with solutions from the other Member States.

No objective indicator is available at present. The indicator will be determined under the regular information society survey, which is a part of the Public Statistics Research Program.

#### Commenced activities (examples):

- ► A project to build the EWD-P (European Document Exchange System Poland) system this initiative is aimed at the creation of a national document exchange system within the framework of Poland's membership of the European Union.
- ▶ IDABC (Interoperable Delivery of European eGovernment Services to public Administrations, Businesses and Citizens) an EU project to improve the effectiveness of European public administrations and their co-operation. It has replaced the IDA II programme, which has been enhanced by pan-European e-Government services for enterprises and citizens.
- ► The launch of the TESTA II network as the main co-operation platform for internal EU communication

- Extending the tele-information infrastructure for the judicial system and customs administration.
- Expanding the infrastructure and solutions used to counter cross-border crime, organised crime and illegal immigration, on the external borders of the European Union
- Removing barriers that hamper international business operations, while preserving economic and technical security. This is possible due to, inter alia, the recognition of electronic signatures, the use of electronic invoices, electronic tax settlements, permits and certificates and the secure exchange of electronic documents.



# Basic implementation framework for the Strategy

#### Organizational framework

The framework plan of actions to implement the Strategy for the Development of the Information Society in Poland until 2013, assumes the following:

- A single governmental centre will be created to manage, promote, develop and supervise activities of the central government administration relating to information society development.
- ► The Information Society Department of the Ministry of Interior and Administration will be responsible for co-ordination of and supervision over the implementation of the objectives set in the Strategy for the Development of the Information Society in Poland until 2013.
- ► The Information Society Department of the Ministry of Interior and Administration will ensure close co-operation with and act as organizational and resource back-up for the Computerisation & Communication Committee of the Council of Ministers and its working groups in its assigned subject area.
- ► The implementation plan for the Strategy will be formulated and will determine detailed tasks, the scope of responsibilities and progress measurement methods.
- As part of the Computerisation & Communication Committee of the Council of Ministers, a working group for the implementation of the Strategy for the Development of the Information Society will be established. It will consist of directors of departments who are responsible for particular issues relating to the implementation of the Strategy at key ministries, central government offices and regional offices.
- Permanent co-operation and experience sharing mechanisms will be created to cover issues relating to the Strategy for the Development of the Information Society. They will involve representatives of local government, organizations, think-tanks, professional associations and social organizations.
- ► The scope of activities and tasks of the **Computerisation Council** will be enhanced by issues relating to information society development. The Computerisation Council will be an advisory body on projects prepared by the Government, the Committee and Information Society Department of the Ministry of Interior and Administration.
- ▶ Units in charge of implementing particular components of the Strategy will be identified and the respective tasks will be assigned to them (down to department level at the relevant ministries and other public units).
- ▶ Mechanisms and a communication platform will be developed for units responsible for implementing components of the Strategy.
- Press releases concerning activities carried out under the Strategy will be published and the best solutions and co-operation will be promoted.
- A uniform and efficient implementation progress reporting system will be ensured.
- ▶ Programmes and projects will be implemented in accordance with the schedule.
- ► The implementation process and outcomes for particular components of the Strategy will be controlled in accordance with the adopted progress monitoring system.
- Annual progress reviews will be arranged to assess the implementation of the Strategy and search for measures to increase implementation effectiveness, to streamline expenditures and to align objectives to changing conditions.



#### Financial framework

In order to ensure the accomplishment of the objectives of the Strategy, the correct allocation of funds is required. The **Central Government's budget** is the main source of financing the development of the information society in Poland. In particular, tasks resulting from the Strategy, and falling within the framework of the digitisation and computerisation of public tasks, will be financed from the annual, multi-year, or targeted budgets of the relevant institutions. Their financial plans will be constructed so that they ensure the effective fulfilment of tasks imposed by the Strategy.

Many key tasks covered by the Strategy, which correspond to the general vision of the development of the information society. They will be funded by organizations or enterprises from outside the public finance sector that want to participate in their creation, e.g., telecommunications, banking, and entertainment, etc.

Development of the information society is one of the priority ideas supported by the European Union; therefore, co-financing from EU structural funds is already available - under the Operational Programmes to be implemented in Poland in 2007-2013.

Under the Operational Programmes that are being implemented in Poland, a total of over €4.3 billion has been allocated to support information society projects.

Projects aimed at preventing digital exclusion in Poland, with assured co-financing include:

- Priority 2 "Information Society Infrastructure" Operational Programme Eastern Poland Development;
- Priority 8 "Information Society Increasing Innovation in the Economy" Operational Programme Innovative Economy;
- ▶ Activity 2.2 "Support for creating a common research infrastructure for scientific units," Operational Programme Innovative Economy;
- ▶ 16 Regional Operational Programmes, which have ensured funds for the information society infrastructure under the respective priorities.

In addition to the above sources of funding, ICT projects can be co-funded under Priority 4 – "Investments in Innovative Ventures", Operational Programme Innovative Economy. The objectives of this priority allow IT companies to apply for co-funding to implement the outcomes of R&D projects and to purchase and implement innovative technology solutions. The budget under this priority totals €3.4 billion.

Training to improve the skills of citizens and administration personnel, including IT staff, may be co-financed under Priorities II, V, VII and IX of the Operational Programme Human Capital. The budgets for these priorities total over €4.6 billion.

Additional financial support to develop the information society in Poland may be obtained from various Community initiatives and programmes. Their utilisation will depend on the determination and will of interested Polish research institutions and businesses.

E-Government projects will be financed from funds that have already been allocated under Priority 7 – "Information Society – Building e-Government" of the Operational Programme Innovative Economy.

In addition, scientific research in Poland may be co-financed under the  $7^{th}$  Framework Programme, in the scope of research and technology development (7FP). The 7FP budget for Europe is nearly **€54 billion**, of which over **€9 billion** may be spent to support research and training activities that involve information technologies.



#### Measurement framework

An accurate diagnosis of the current status of the information society and implementation progress under the Strategy is a prerequisite for making further decisions concerning particular initiatives or adjustments to priority directions. To this end, an obligation should be imposed to collect and publish a broad set of statistics, describing the status and development pace of the information society, and the results of various sociological, economic and legal surveys and analyses relating to the information society should be subject to thorough examination.

In order to ensure the dynamic development of the information society in Poland and taking into account the changing international conditions, **regular comparisons** with countries that are leaders in the subject area are indispensable. A dynamic Measurement Framework has, therefore, been adopted under which the implementation progress of objectives adopted in the Strategy will be assessed against indicators selected for particular objectives and additional measures of progress adopted for strategic directions in particular areas. Indicators will be compared on a regular basis with the average for three countries that are leaders in a given area. Indicators may be replaced by other measures during the implementation of the Strategy, taking into account available indices and research that reflect the status of the information society.

In order to ensure that the data collection processes for particular indices, as well as processes used to calculate and present particular measures, are efficient, cooperation with the Central Statistics Office, Eurostat and other dedicated analytical centres will be necessary. It is possible that a special set of measures will have to be developed to monitor the implementation progress for the Strategy objectives. It may also transpire that such measures will have to be included in the regular survey of the information society carried out by the Central Statistics Office.

From among the indices included in the Strategy, those used by the European Commission to compare the information society development status in particular Member States are of utmost importance. These indices are presented in periodic reports and determine Poland's position in comparison with other Member States.

The adopted measurement model consists of three groups of indices:

- growth indices directly show progress in the implementation of a given objective for particular strategic directions in the area, and are specified next to each objective;
- additional indices that measure the implementation progress of the strategic direction in a given area – they are listed in Attachment 1 to this Strateov:
- ▶ monitoring indices listed in Attachment 1 to this Strategy; they are not related directly to the implementation of strategic directions or objectives in particular areas; however, by providing additional insight they may support a diagnosis of the information society development progress and the identification of problematic areas that need extra activities.



### Participants in consultations

The list of persons who took part in the group and thematic discussions about issues relating to information society development in Poland organised or coorganised by the Ministry of Interior and Administration from June to September 2008:

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