

THE INFORMATIVE SOCIETY AS A DETERMINANT OF SOCIAL DEVELOPMENT

INFORMAČNÁ SPOLOČNOSŤ AKO DETERMINANT SOCIÁLNEHO ROZVOJA

LIPIANIN-ZONTEK Ewa

Abstract

In the article it was showed the role of informative society in building social progress. The main strength of the informative society development is Informative Technology and Telecommunication Sector, which condition makes up the essential parameter of the informative society analysis in international statistics. It was showed, that the level of the informative society development in Poland is insufficient, and the improvement of this situation is possible through investment in the infrastructure and the initiation of the utilization of Internet at public institutions.

Abstrakt

V príspevku poukazujeme na úlohu informačnej spoločnosti pri budovaní sociálneho pokroku. Hlavnou silnou stránkou informačného rozvoja spoločnosti sú informačné technológie a telekomunikačný sektor, ktoré tvoria základný parameter informačnej analýzy spoločnosti v medzinárodnom meradle. V príspevku konštatujeme, že úroveň informačného rozvoja spoločnosti v Poľsku je nedostatočná a zlepšenie tejto situácie je možné prostredníctvom investícií do infraštruktúry a iniciovania využívania internetu vo verejných inštitúciách.

INTRODUCTION

Objective of this paper is to provide a preliminary report on research into the Knowledge Transfer occurring in Social Enterprise Communities of Practice, in the UK and Poland. This study has been undertaken to increase understanding of people's motivations and methods to participate and acquire specific education and learning, in social enterprise situations. This paper outlines the processes undertaken and progress to date.

1 INFORMATION SOCIETY - BASIC TERMS AND FEATURES

The term "Information Society" (IS) appears rarely in OECD resources – the Organization of Economic Cooperation and Development, however the organization does researches which directly or indirectly refer to the problem. In solutions for economic politics of membership countries, the OECD states that future economy is going to be the "information economy", and societies will gradually adopt the features of the "Information Society". In OECD publications, one can state that the contribution of the "Information economy" to basic economic growth and economic effectiveness is connected with the amount of resources, which are devoted for a development of new information technologies (IT), or in consumption

categories – a demand for investments or innovative efforts¹ (OECD 2002: 10). Therefore, one can conclude that the growth of the Information Society may have an essential impact on companies which function in the era of crisis.

The term “Information Society” (IS) is used in scientific publications, strategic studies, as well as in everyday language. It has become the subject of theoretical and practical discussions, as well as practical programs of activities². The term is often defined inaccurately without a theoretical support. Institutions and organizations repeatedly offer their own understanding of the term. Nowadays, according to some authors, the term Information Society can be understood as a key word for the future. The IS may be expressed in many ways: in economy, technology, networks, experience and in action.

IS denotes a social-economic formation in which the productive usage of the resources: information and intensive production (from scientific point of view) are the main factors. Thus, the term information society refers to society in which individuals – as consumers or workers – take advantage of information. It was specified in 1996 by The National Council of Radio Broadcasting and Television, which submitted a report “Information Society in Poland”. The Information Society is defined in the report as follows: “A Society becomes the Information Society when it gains a level of development, scale and complication of social and economic processes, that demands the usage of new techniques of collecting, processing, transferring and making use of the huge amount of information generated by the processes. In such a society:

- information as well as, resulting from it, knowledge and technologies are the basic productive factor, but the usage of tele- information technology is the versatile factor of development,
- labour force (in majority) consists of information workers,
- the most of gross national income is established within a widely defined information sector”³.

In a Declaration of Principles, the declaration of Geneva which says about the creation of information society as a new challenge in the new millennium, it is emphasized that“ (...) pro-developmental Information Society, which sets a person in the centre of attention, is the one in which everybody has a possibility for a creation, access, usage and making information and science available, which enables individuals and societies to gain the full potential in reaching the balanced development and improving the quality of life, it is based on the aims and principles of the United Nations Card, and it is the one which absolutely respects the legal validity of the Declaration of Human Rights (...)”⁴.

The characteristic features of the Information Society are the connectors of the above definitions: the growing importance of information, knowledge and innovation in all aspects of human life, the common usage of tele-information technologies, as well as the growing role of information workers. The Sector of Telecommunication and Information Technology (TIT) is the main force of the IS development; it is defined as a “combination of processing industry and the factor of services in which data and information are gained, transferred and presented

¹ OECD (2002), Measuring the Information Economy, p. 10, <http://www.oecd.org/dataoecd/16/14/1835738.pdf> , Accessed 20.12.2011.

² Viherä M. L., Nurmela J., Communication capability as an intrinsic determinant for information age, “Futures” 2010, No. 33, p. 245-265.

³ Report „Społeczeństwo Informacyjne w Polsce”, KRRT, 1996, <http://kbn.icm.edu.pl/pub/info/dep/spo.html>, Accessed 01.11.2011.

⁴ World Summit on the Information Society , Declaration of Principles, Geneva 2003 - Tunis 2005, <http://www.insead.edu/v1/gittr/wef/main/fullreport/index.html>, Accessed 15.12.2011.

in the electronic form”⁵. The technologies are put into practice in different areas, for example in industry, education, administration, business, health and entertainment⁶.

It is justified and correct to identify the IS with the sector which is characterized by the features of telecommunication and information technologies (TIT), and to emphasize a significance of information accumulation and social consequences of using information technologies. However, as it is stressed by authors⁷, the Information Society is something more than a sign of technological development. It represents changing relations of power and the changes of culture and organization. For that reason one can point to the term IS as coincident with the term “network society”.

The term “Economy Based on Knowledge” appears in OECD together with IS and network. The term is defined as the economy” in which knowledge (codified and hidden) is acquired, transferred and used by companies, organizations, units and local societies more effectively in order to expand the level of social and economic development”. It requires:

- an organization of institutional economy and infrastructure that will provide stimulus for effective usage of existing knowledge in the process of building up new knowledge, elimination of obsolete activities and beginning new, more effective ones;
- educated and resourceful society that can form and take advantage of new knowledge;
- dynamic information infrastructure that is able to support effective communication, spreading and transferring information;
- effective innovative system that consists of companies, scientific and research centers, universities, teams of advisers, consultants and some other organizations which can interact and become part of the growing area of global knowledge⁸.

One can distinguish three dimensions within one uniform concept of IS: technological, economic and social. The technological dimension includes access and usage of TIT in companies and domestic markets. The economic dimension is connected with a development of vital sectors (of an industry connected with TIT, research and develop (R&D) or knowledge absorptive service), value added that was formed in the sectors and the level of intensity of conducted research and its products (e.g. patents). The social dimension describes a role of education and TIT in life of citizens and includes the elements such as an e-administration. The distinguishing of three IS dimensions allows for a detailed construction of the sectors which can be used in IS analysis.

The development and usage of TIT refers to many spheres of human life and has impact on companies, domestic markets, public administration or educational system which can finally lead to changes in social and economic regional structures. Thus, one can distinguish four main spheres of IS formation and development as well as basic activities that support its development (tab 1).

One can use many possible indicators for description of IS parameters and aspects. The study points to some of them, the most often described on the grounds of the availability of data, especially the ones compared on the area of our country or Europe. Here are some of them:

- The indicators of economic dimension: a share of expenses for R&D in regional GDP, a number of patents in a region, a share of added value for TIT sector in total added value,

⁵ OECD (2002) Measuring the Information Economy, op. cit., p.81.

⁶ Listwan T.: Kaczocha W., Współczesne przemiany społeczno-gospodarcze w Polsce i na świecie, PASSAT, Poznań 2007, p. 73.

⁷ Castells M.: The Rise of the Network Society, Blackwell, Oxford 2002, p. 507; Stehr N.: Deciphering information technologies: modern societies as networks, “European Journal of Social Theory” 2000, No. 3(1), p. 83-94.

⁸ OECD (2002) Measuring the Information Economy, op. cit., p.13-14.

employment in TIT sector, a share of employment in R&D in the whole regional work force, a percentage of population with high/ secondary education.

➤ The indicators of technological dimension: an access to Digital Subscriber Lines (DSL), a percentage of companies having their own web site, a percentage of companies that make use of internet, a percentage of domestic markets that make use of internet.

➤ The indicators of social dimension: regional participation in an e-administration, making use of internet by people for training or educational reasons, a participation of people in e-trade activities⁹.

Table 1. The activities which support the formation of IS in different spheres

SPHERES OF FORMATION AND DEVELOPMENT OF INFORMATION SOCIETY	PRIORITY ACTIVITIES ESSENTIAL FOR DEVELOPMENT OF IS
Domestic markets	A development of national tele-information infrastructure, especially assurance of common wide-band access to internet, electronic services and available content
Public administration	A development of commonly available electronic services in public administration, business and health care
Companies	A stimulation of development and formation of polish digital resources on Internet, especially the resources of significant value for polish competitive position of EU economy, a development of enterprise and an increase of social and economic unity
Educational system which is one of the most important areas of IS formation and development, as it forms models of behaviour and provides the youngest generations with skills and abilities.	A development of skills and abilities essential for an active and creative participation in IS services, especially adaptation of a new educational system for the needs of economy based on knowledge.

Source: Self-study on the basis of : Directional strategy of information development in Poland up to 2013 and a perspective forecast of IS transformation up to 2020, Ministry of Science and Information Technology, Warszawa 2005, p. 4-5.

The formation of IS requires complex activities on different areas, including the following pillars:

- rule of all stakeholders – who propagate knowledge about the role of telecommunication and information technology in a process of economic development,
- access to knowledge and information,
- ability to active participation in information society,
- safety and confidence in using ICT,
- a friendly institutional environment,
- ICT applications,
- diversity and cultural identity,
- free and independent media,
- ethical dimension of information society,

⁹ ESPON (2007) 1.2.3. Identyfikacja istotnych przestrzennie aspektów społeczeństwa informacyjnego. Raport końcowy, Uniwersytet Warszawski, Centrum Europejskich Studiów Regionalnych i Lokalnych (EUROREG), p.73.

- international and regional cooperation ¹⁰.

2 INFORMATION SOCIETY IN POLAND AND IN THE WORLD

The analysis of statistics, which refer to information society, is limited by a number of data generated in particular countries. The EPSON report shows a detailed analysis of index and available data.

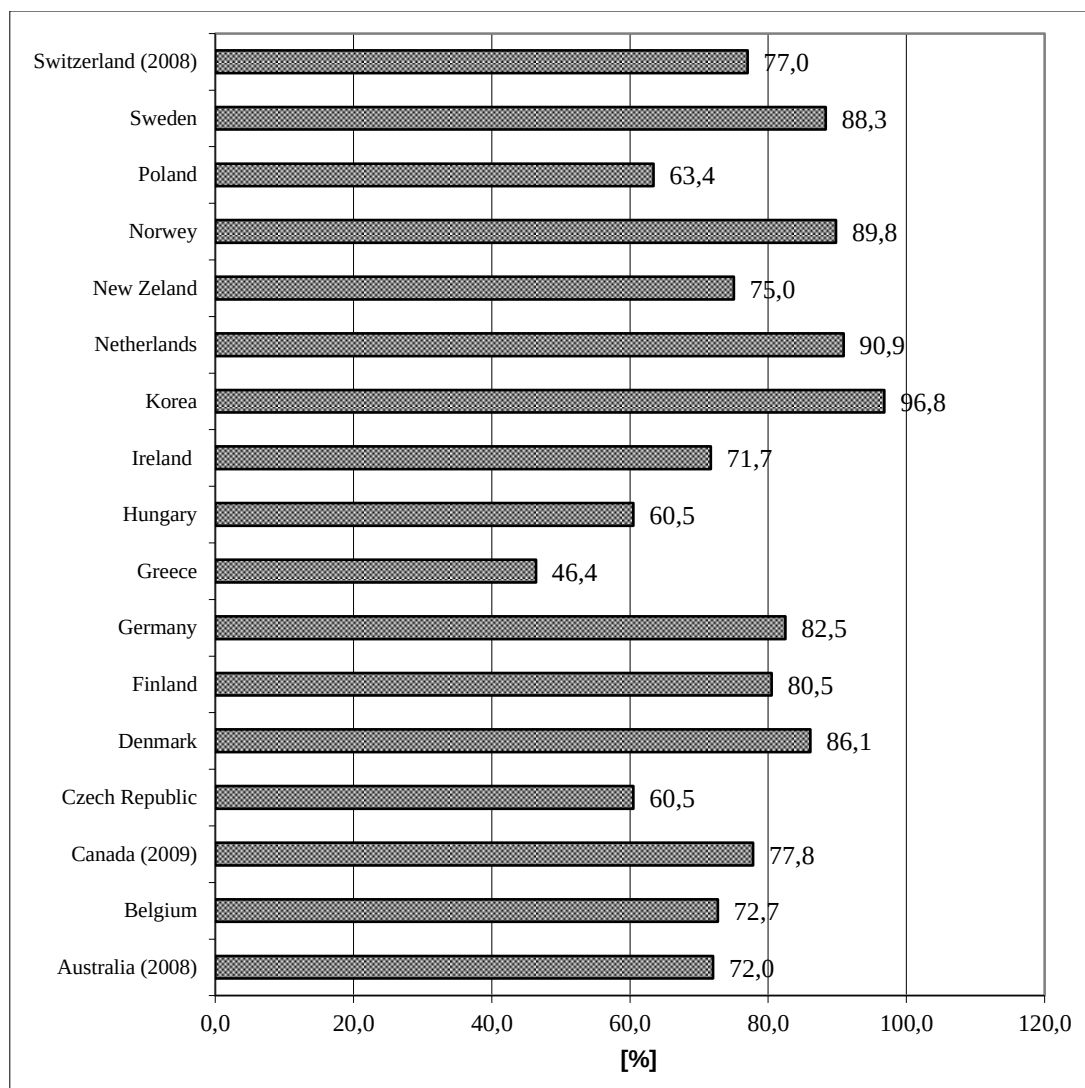


Chart 1. Households with access to the Internet, 2010

Source: OECD, ICT database and Eurostat, Community Survey on ICT usage in households and by individuals, November 2011, [http:// www.oecd.org/dataoecd/19/45/34083073.xls](http://www.oecd.org/dataoecd/19/45/34083073.xls) (2012-01-14).

There are some the most important conclusions in this report, that refer to Poland:

- a degree of access to computers in countries of lower GDP for one citizen (Greece, Czech Republic, Hungary, Poland) has been almost twice lower than in more developed countries (Germany, Finland, Italy);
- The analysis of IS level in economic area points to clear disproportion between more developed countries: Finland, Germany and Italy and the rest of EU countries. The analysis conducted by research teams shows the existence of many factors which increase the disproportion between the examined countries. In Poland, the special attention was focused

¹⁰ World Summit on the Information Society, Declaration of Principles, Geneva 2003 - Tunis 2005, op.cit.

on a factor that includes cultural differences and relating to them barriers in adaptive abilities which result in slower development of the new technologies in traditional rural areas¹¹;

➤ An increase of expenditures for TIT was observed in all the examined countries (apart from Poland), as a result of joining different forms of public and private expenditures. In Poland the expenditures for R&D and employment rate are decreasing (the expenditures expressed as a percentage of GDP are nearly four times lower than EU average¹²;

➤ Poland is ranked as one of the more traditional and less progressive countries, as far as the views of joining IS development with an urban and regional one are concerned. The issues are rather omitted in the documents of strategic development¹³.

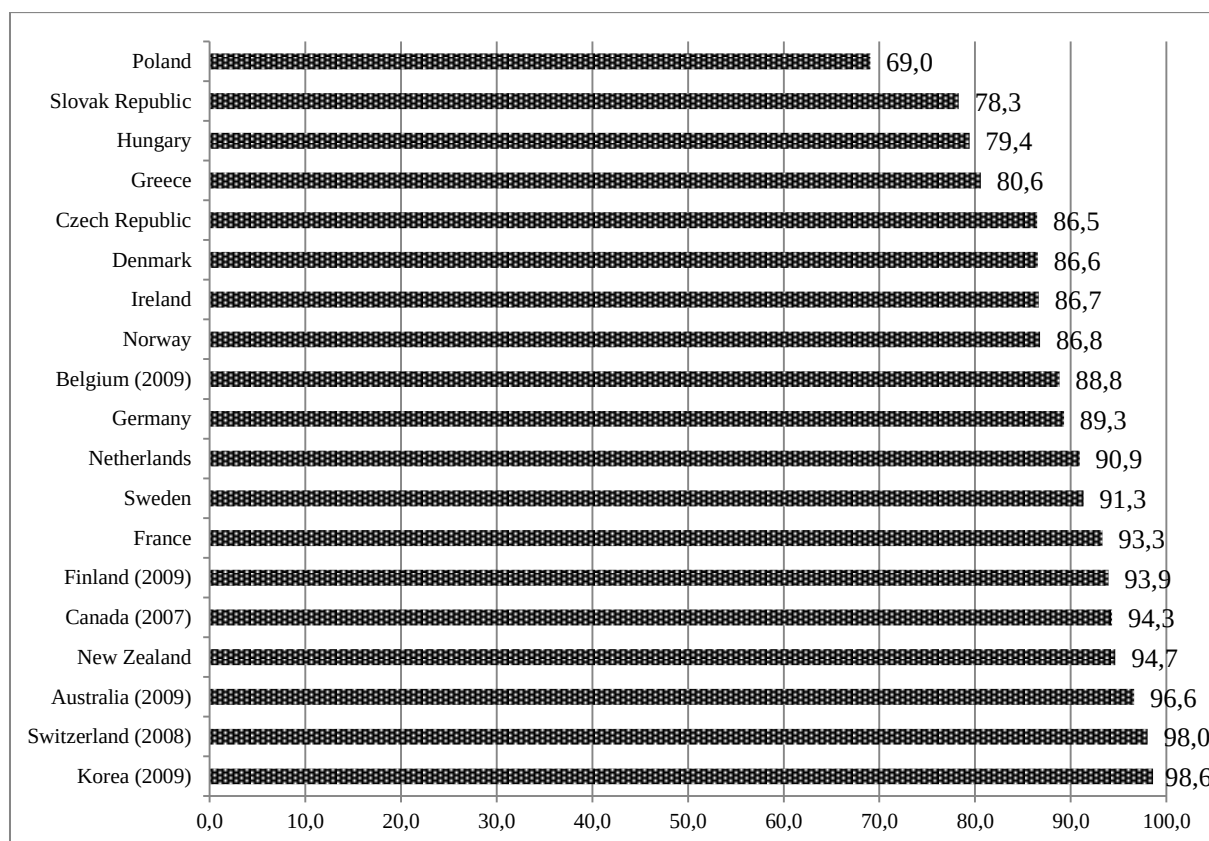


Chart 2. Business use of broadband, 2010 or latest available year

Source: OECD Broadband statistics, 2010, <http://oecd.org/dataoecd/8/48/45446706.xls>, Accessed 2012-02-03.

Important are the analysis of three important parameters, that was conducted for the sake of this research:

- an access to the internet for domestic markets,
- a level of using the internet by companies for operational activities
- universality of using the internet in public institutions.

The countries with the highest rate of domestic markets which have an access to the internet (chart 1 and chart 2) are: North Korea (96%), Holland (90%) and the Scandinavian countries (80-87%). On the contrary, the rate for domestic markets in Poland and some other countries of Wyszehracka Group is approx. 50-60%. One can conclude that the result is satisfactory,

¹¹ ESPON (2007) 1.2.3. Identyfikacja istotnych przestrzennie aspektów społeczeństwa informacyjnego. Raport końcowy, op. cit., p. 126.

¹² Ibidem, p. 127.

¹³ Ibidem, p. 131.

when considering the level of social-economic development. The countries acquire the features of Information Society.

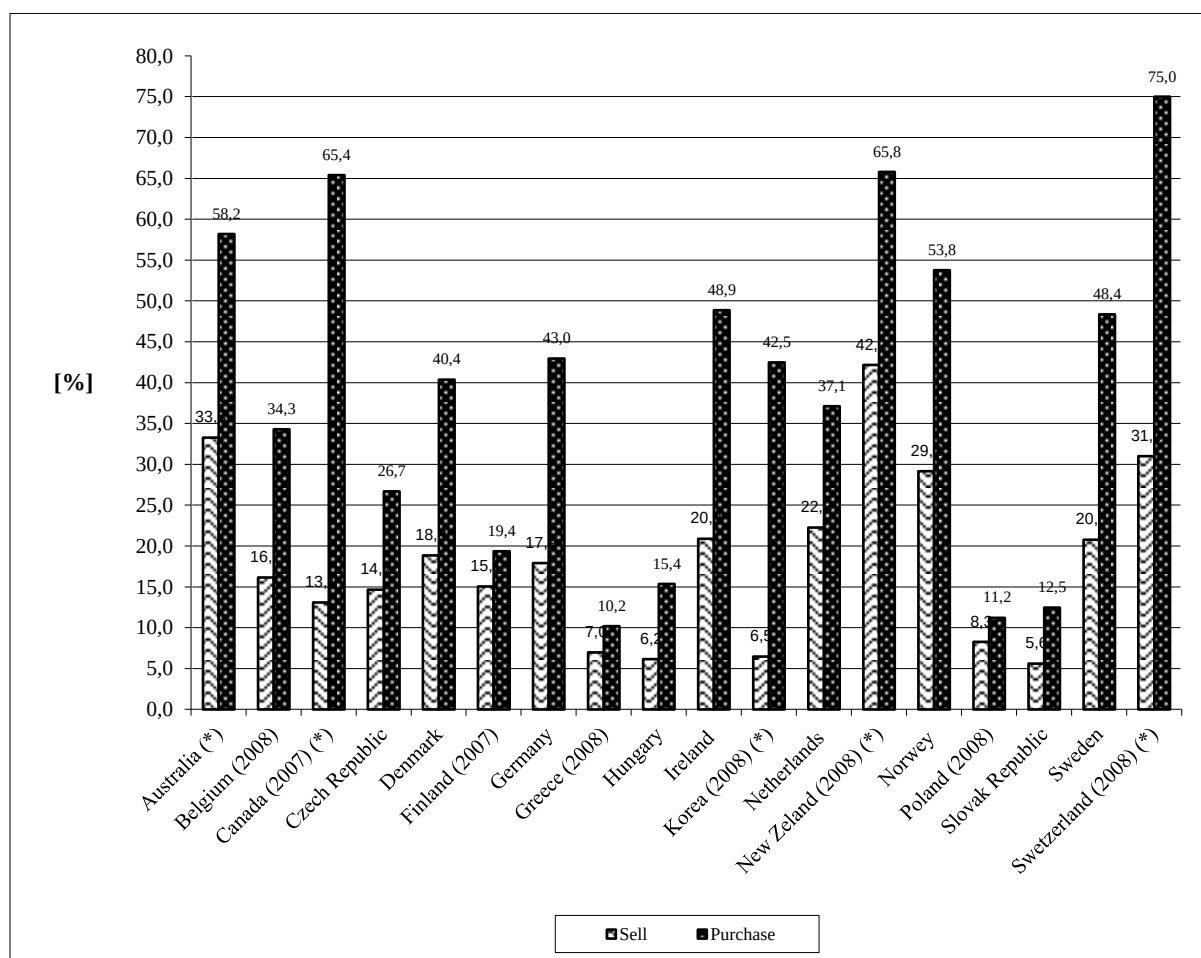


Chart 3. Internet selling and purchasing, 2009 or latest available year

Source: OECD Key ICT indicators, 2009, <http://oecd.org/dataoecd/20/22/34083121.xls>, accessed 2014-01-28.

On the other hand, some of the countries do not use the potential (chart 3). The chart presents the level of using the internet for the processes of sale and purchase by companies. In this case the highest rate of companies that use the internet refers to New Zealand, Australia, Canada, Switzerland, Norway, Sweden and the Republic of Ireland. Poland belongs to the group of countries that show a low rate, where companies don't use the internet for offering their products or for purchase on the internet. This fact shows that the companies do not take an active part in IS.

According to The Global Technology Report, which was conducted for the needs of the World Economic Forum (it refers to the particular parameters of IS), Poland takes:

- the 46 place in ranking, when one considers the usage of the internet in domestic markets
- the 69 place, in case of using the internet by companies for purchase, sale and cooperation between customers and suppliers;
- the remote 127 place (for 134 countries) – with reference to usage of the internet in public institutions¹⁴.

¹⁴ The Global Technology Report (2009), <http://www.insead.edu/v1/gitr/wef/main/fullreport/index.html>, accessed 2014-01-28.

CONCLUSION

Poland takes the remote place in the world and European rankings, as far as a development of Information Society is concerned. Whenever one can observe growing tendencies among the particular rates, they appear on too low level, therefore it is impossible to form any long-lasting competitive success in crisis.

A development of polish society and enterprises, and elimination of risks that arise due to the current world economic crisis, should be dependent on the innovative activities which are particularly geared towards TIT. The activities are promoted within the Innovative Economy Program - Grants For Innovations – 7. priority pivot – Information Society. The program works on the assumption that the position of polish economy on the international market, especially in EU, becomes more and more dependent on the rate of access to information, including public information and electronic services, performed by public administration for the sake of society and enterprise. It is essential to undertake the following actions that aim to gain a competitive advantage in the era of crisis, in order to ensure a development of IS:

- a provision of cheap and wide access to broadband net,
- a development of TIT infrastructure in weaker regions,
- an introduction of TIT technologies into the educational process (as part of everyday life),
- a promotion of e-management and e-administration in social life.

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Contact information

Ewa LIPIANIN-ZONTEK, Assistant Professor
Faculty of Management and Transport
University of Bielsko-Biala
Willowa 2
Bielsko-Biala

Poland

43-300

E-mail: ezontek.ath@gmail.com