

Pojęcie społeczeństwa informacyjnego pojawiło się w Europie w roku 1978, w raporcie zaprezentowanym francuskiemu prezydentowi przez Norę i Minca. Piętnaście lat później na zlecenie Rady Europejskiej grupa ekspertów pod kierunkiem Martina Bangemanna przygotowała pierwszy systematyczny dokument dotyczący “Europy i społeczeństwa globalnej informacji”. Od tego czasu Unia Europejska ogłosiła wiele programów i inicjatyw dotyczących społeczeństwa informacyjnego. “eEuropa - Społeczeństwo informacyjne dla wszystkich” jest chyba najważniejszy i najbardziej aktualny. Traktuje się w nim społeczeństwo informacyjne nie tylko w aspekcie technologicznym, ale także jako klucz do szybkiego rozwoju gospodarczego. Celem artykułu jest zaprezentowanie swego rodzaju wspólnej polityki społeczeństwa informacyjnego i jej wpływu na rozwój regionów i państw. Porównane zostaną także działania Unii i państw kandydujących.

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## **Information Society in the European Union – History of Common (?) Policy**

Technology and communication appeared in humans' lives ages ago. Nowadays probably very few can remember how it is to look at the white sheet of paper; we rather stare at flashing cursor when we do not know how to start an article. The history of information technology goes back to the 30's of the last century. NT was developed during IIWW to accelerate ballistic calculations. The US Department of Defense supported creation of the Internet (web) as a mean of communication able to survive nuclear attack in 50's<sup>1</sup> (Saco 2002; Slevin 2002).

The notion of information society was used, for the first time, in Japan. In 1963 Tado Umehama described *joho shakai* in the context of social changes caused by "information industry". In Europe phenomenon of information society was described by Simon Nora and Alain Minc in their expertise for French government in 1978 (Goban-Klas 1999).

From the very beginning it was clear that information society meant something more than popularisation of personal computers and networks. In the future *joho shakai* was to transform into communication-based society with knowledge-based economy (Ibidem.).

The European Communities engagement into information society creation can be traced back to mid 80's. Nowadays it seems to be one of the most crucial policies of the EU. I would like to present the evolution of the process and the existing activities of the organisation. I will try to assess if we can pronounce Common Information Society Policy.

The very first step towards introducing of information and communication technologies (ICT) was taken in Europe in 1984 with the Community programme ESPIRIT (support for information technology). Two years later it was followed by special applications programmes on transport, health and distant training together with programme RACE (advanced telecommunication technologies). In 1987, thanks to a Green Paper on telecommunication liberalisation, the telecommunication policy was initiated. It established three major objectives for Europe:

1. "to liberalise the market segments under monopoly,
2. to harmonise the European telecommunications sector through common rules and standards,
3. to apply competition rules to liberalised markets segments to prevent collusive agreement, abuse of dominants

positions and the creation of dominant positions” (Information Society, 2004a)

Next step undertaken by the EEC was launching GSM technology as a European standard. In Council Directive (87/372/EEC) and Recommendation (87/371/EEC) 905-914 and 950-959 MHz frequency bands were reserved exclusively for a public pan-European cellular digital mobile communications service. Frequencies: 890-915 and 935-960 MHz were to be made available as soon as possible. In 1990 European Council adopted final resolution. It said that there is need of:

- “the mutual recognition of approval of GSM terminals;
- the mutual recognition of licenses for the operation of GSM terminals;
- the extension of technological potential and development of the use of the system in higher frequency bands for new personal communications network systems;
- the development of the GSM system in countries of Central and Eastern Europe;
- appropriate tariff and accounting arrangements between the operators;
- data protection measures.” (Official Journal C 329, 31.12.1990)

Now GSM is a standard in 130 countries all over the world. In period 1990 - 2001 the average growth of subscribers equals 80 points in the EU 25 (tab. 1).

At the beginning of 90’s Europe realized that its economic potential shrank. With the very little rate of growth, huge unemployment, relatively low investment ratio and export the EU lagged far behind

the USA and Japan. In December 1993 Commission adopted its White Paper “Growth, Competitiveness and Employment”. With that document it became clear that the information society and new technologies (knowledge-based economy) were treated as a one of the possible ways of the economic development. A year later a High-level Group on the Information Society published report entitled “Europe and the Global Information Society”. It was called Bangemann’s Report after name of the head of the group Martin Bangemann, vice-president of the European Commission.

Group suggested breaking down old economy schemata and letting market mechanisms “carry us into the Information Age”. Diagnosis explicitly showed how far behind the United States the EU was. In the USA more than 60% of households were tapped by cable TV systems which could carry text and data services, in Europe it was 25% (e.g. 92% in Belgium and 2% in Greece). European had also three times less PCs (per hundred) than Americans (see table 1). To shorten that distance the EU had to “foster an entrepreneurial mentality to enable the emergence of new dynamic sectors of the economy and develop a common regulatory approach to bring forth a competitive, Europe-wide, market for information services”. In group’s opinion those activities did not have to mean extra public money spending, financial assistance, subsidies, dirigisme, or protectionism. A proposed Action Plan was built on assumption that public and private sector must be engaged in the process, of course “the prime task of government is to safeguard competitive

forces". Ten areas of activities (applications) were defined:

1. teleworking,
2. distance learning,
3. a network for universities and research centers
4. telematic services for SME's,
5. road traffic management,
6. air traffic control,
7. healthcare networks,
8. electronic tendering,
9. trans-European public administration network,
10. city information highways.

**Tab. 1 Progress in technology diffusion**

Country	Telephone mainlines (per 1000 people)		Cellular subscribers (per 1000 people)		Internet users (per 1000 people)	
	1990	2001	1990	2001	1990	2001
Austria	418	468	10	817	1,3	387,0
Belgium	393	498	4	747	(.)	310,4
Denmark	567	722	29	740	1,0	429,5
Finland	534	548	52	804	4,0	430,3
France	495	573	5	605	0,5	263,8
Germany	441	634	4	682	1,4	373,6
Greece	389	529	0	751	0,5 *	132,1
Ireland	281	485	7	774	0,6 *	233,1
Italy	388	471	5	883	0,2	268,9
Luxembourg	481	780	2	920	1,5 **	359,8
Netherlands	464	621	5	767	3,3	490,5
Portugal	243	425	1	774	1,0 *	281,5
Spain	316	434	1	734	0,1	182,7
Sweden	681	739	54	790	5,8	516,3
UK	441	587	19	770	0,9	329,6
Cyprus	419	631	5	456	0,6 **	217,5
Czech Republic	158	378	0	679	..	146,7
Estonia	204	354	0	455	0,6 **	300,5
Hungary	96	375	(.)	498	(.)*	148,4
Latvia	234	307	0	279	..	72,3
Lithuania	212	313	0	277	..	67,9
Malta	360	530	0	611	..	252,6
Poland	86	295	0	259	0,1*	98,4
Slovakia	135,3	289	0	399	..	125,3
Slovenia	211	402	0	737	..	300,8
Japan	441	586	7	588	0,2	384,2
USA	547	667	21	451	8,0	501,5
EU 25 (average)	345,9	495,5	8,1	648,3	0,7	268,8

\* – 1991, \*\* – 1992, (.) – less than half the unit shown, .. – data not available

Source: adapted from Human Development Report 2003, UNDP

Group paid special attention to the ending of monopoly of the telecommunication operators and, what was equally important, technical standardizations of services (as it was with GSM) (Recommendations to the European ..., 1994).

The Bangemann's Report was the basis for first Information Society Action Plan "Europe's Way to Information Society". Revised version of Plan was adopted in 1996. In this document the Commission recognized its response in four areas:

1. the regulatory and legal framework,
2. networks, basic services, applications, and content,
3. social, societal and cultural aspects,
4. promotion of the information society (Europe's Way to the Information Society... 1994).

The very concrete result of mid 90's animations was liberalization of telecommunications services and infrastructures, reorientation of ICT research programs and incorporation of the information society goals into other Community policies. In next years the project called Information Society became true. European economy has been turning out into knowledge-based economy.

In December 1999 new initiative "eEurope – An information Society for All" was launched. In consequence Commission adopted Action Plan "eEurope 2002". That political initiative was to ensure coordination of Member States policies. But first of all it was to enable Europe "to become the most competitive and dynamic knowledge-based economy in the world by 2010" – as Lisbon strategy assumed<sup>2</sup>.

Commission wanted to:

1. bring every citizen, home and school, every business and administration, into the digital age and online,
2. create a digitally literate Europe, supported by an entrepreneurial culture ready to finance and develop new ideas,
3. ensure the whole process is socially inclusive, builds consumer trust and strengthens social cohesion.

The operational objectives were as followed:

1. A cheaper, faster, secure Internet; cheaper and faster Internet access, faster Internet for researchers and students (e-Research), Secure networks and smart cards (e-Security),
2. Investing in people and skills; European youth into the digital age (e-Education), working in the knowledge-based economy (e-Working), Participation for all in the knowledge-based economy (e-Accessibility),
3. Stimulate the use of the Internet; accelerating e-Commerce, government on-line: electronic access to public services (e-Government), health online (e-Health), European digital content for global networks (e-Content), intelligent transport systems (e-Transport) (Europe's Way to the Information Society - An Action Plan, 1994).

In parallel to eEurope 2002 the initiative eEurope 2003+ was developed by Candidate Countries. It was result of longer co-operation and work of a Joint High Level Committee (JHLC), comprised of the EU and the CEEC government representatives. The need for such enterprise was obvious. There was no chance for

Candidates, now new Members to make up the distance between them and the UE without special support. Development of information society was one of the most crucial areas of interests (Information Technology 2004).

The eEurope initiative was evaluated during Seville European Council in June 2002. The European Commission presented New Action plan eEurope 2005. It says:

*eEurope 2002, with the joint effort of all stakeholders, has already delivered major changes and has increased the number of citizens and businesses connected to the Internet. It has reshaped the regulatory environment for communications networks and services and for e-commerce and opened the door to new generations of mobile and multimedia services. It is providing opportunities for people to participate in society and helping the workforce to acquire the skills needed in a knowledge-driven economy. It is bringing computers and the Internet into schools across the Union, bringing governments on-line and focusing attention on the need to ensure a safer on-line world.*

In eEurope 2005 Commission suggested on two basic spheres. "On the one hand, it aims to stimulate services, applications and content, covering both online public services and e-business; on the other hand it addresses the underlying broadband infrastructure<sup>3</sup> and security matters" (eEurope 2005).

The objectives of eEurope 2005 are:

1. to provide a favorable environment for

private investment and for the creation of new jobs,

2. to boost productivity,
3. to modernize public services and,
4. to give everyone the opportunity to participate in the global information society.

By 2005, Europe should have modern online public services (e-government, e-learning services, e-health services), a dynamic e-business environment and, as an enabler for these, widespread availability of broadband access at competitive prices, a secure information infrastructure (eEurope 2005: An Information Society for all - An Action Plan, 2004 ).

Together with, or as an element of Action Plan the whole range of programs are realize (tab. 2). It must be also stressed that information technology and knowledge-based economy become a part of other Common Policies. One of the most spectacular is regional policy. Here we can find two points: innovative actions and Trans-European Networks (TENs).

The innovative actions<sup>4</sup> were designed to encourage less developed regions to invest in new technology and innovation. In 2000-2006 one of three themes is e-EuropeRegio. It covers the following areas:

- establishing innovative strategies and experimenting with advanced digital technology for the benefit of specific areas such as rural, remote and otherwise isolated areas,
- improving digital and mobile services for young people, the elderly and the disabled (e.g. public Internet access points),

**Tab. 2. Programs supporting eEurope 2005**

<b>Program</b>	<b>Objectives</b>
eContent	support the production, use and distribution of European digital content and to promotion of linguistic and cultural diversity on the global networks
IDA	improvement of interoperability of networks and developing trans-European telematics services in priority areas
The Safer Internet Programme	setting up a European network of hotlines for reporting illegal content, encouraging self-regulation, developing content rating and filtering, benchmarking filtering software and services, raising awareness of safer use of the Internet
Information Society Technologies (IST) Research	one of the priorities of The Sixth Framework Programme (FP6)
eTEN	help the deployment of telecommunication networks based services (e-services) with a trans-European dimension, focus on public services, aim to accelerate the take up of services to sustain the European social model of an inclusive, cohesive society
GoDigital	encourage companies to use the Internet in their business
eSafety	a joint initiative of the European Commission (DG Enterprise and DG Information Society), industry and other stakeholders, aim to accelerate the development, deployment and use of Intelligent Integrated Safety Systems, that use information and communication technologies in intelligent solutions, in order to increase road safety and reduce the number of accidents on Europe's roads

Source: adopted from Information Society 2004 b.

- encouraging SMEs to include electronic commerce in their development strategies and to find suitable ways of training their employees,
- creating and developing specific areas for experimenting with innovation.

TENs with the very strong legal basis (ToUE Title XV) is to support transport, energy and telecommunication. It started

with market liberalization in 1998. Now under this initiative broad-band networks are introduced.

Certain initiatives were also undertaken in co-operation with Candidate Countries, now new Members. One can mention here the Northern eDimension. The aim of the plan was “to develop and strengthen the Baltic Sea Region’s already leading posi-

tion in the IT sector in general, and at the same time asking the European Commission to include relevant IT proposals in its draft working plan on the Northern Dimension.” (The Northern eDimension Action Plan Version 1.0, 2001). The Northern eDimension Action Plan is divided into 7 Action Lines: high speed research networks and advanced broadband applications, eSecurity, eSkills, eCommerce, eGovernment, indicators, eEnvironment.

It needs to be stressed that the role of the Union is not only limited to encourage public and private sectors to co-ordinate their efforts in IT and NT development. The very crucial mission of the EU is to build coherent legal basis for that activities. As it was mentioned above, the most spectacular decision concerned GSM standard. We can also refer to other regulations such as:

1. Framework for electronic communications services,
2. Common regulatory framework for electronic communications networks and services (authorizations and licenses, provision of universal service, access and interconnection, protection of information and personal data,
3. Competition in the markets for electronic communications networks and services
4. Electronic communications: the road to the knowledge economy. ( Information Society 2004a)

The European Union’s information society policy itself rests on the following main policy components and legal basis:

- the telecommunications policy, whose legal basis is to be found in Article 95

(Internal Market harmonization), articles 81 and 82 (competition) as well as articles 47 and 55 (right of establishment and services) of the TEC (treaty of European Communities),

- the support to technological development in information and communication technologies (ICT), which is based on articles 163 through 172 (research and development) of the TEC,
- the contribution to creating the necessary conditions for the competitiveness of the Community’s industry, in line with article 157 of the TEC,
- the promotion of trans-European networks in the transport, energy and telecommunications sectors, as stipulated in Articles 154, 155 and 156 of the TEC.

Information Society Policy emerged as a European response to changing world economy. It was to be the way to catch up distance between Old Continent and America. After almost twenty years of experience one can say that it became European ‘Common Policy’. Standardizations, market regulations (liberalisation), infrastructure investments (e.g. TENs) are undoubtedly great achievements. New member countries, although in much worse situation, made visible progress. Knowledge-base economy is the only model of economy which can be developed in post-industrial era. The EU is not aware of that but also deeply engaged in building such economy. It means that newer and newer challenges have to be faced. As statistical data shows there is still much to do.



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***(Footnotes)***

- <sup>1</sup> Advanced Research Projects Agency (ARPA) – established to promote science and technology development, also co-operation between various research centers. ARPANET was to facilitate exchange of information and secure access to secret computer bases.
- <sup>2</sup> At Lisbon in March 2000, EU leaders stressed that: • ‘businesses and citizens must have access to an inexpensive, world-class communications, infrastructure and a wide range of services’; • ‘every citizen must be equipped with the skills needed to live and work in this new information society’; and • ‘a higher priority must be given to lifelong learning as a basic component of the European social model.’ • liberalizing Europe’s energy and telecoms markets; • creating a single market in financial services; • further liberalizing postal and transport services; • introducing an EU patent, • launching the Galileo satellite navigation system; • creating a single market for air transport — known as the ‘single European sky’. EU leaders have also agreed to increase spending on research, so that, by 2010, as much as 3 % of their GDP will be invested in research (Towards a knowledge-based Europe. The European Union and the information society 2002).
- <sup>2</sup> Broadband means faster connect to the Internet and it is absolutely necessary to develop services such as e-earning, e-health, etc.
- <sup>3</sup> Funds are available from European Regional Development Fund.