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COMPETITION AND DIGITAL DIVIDE
IN THE EUROPEAN INFORMATION SOCIETY

by

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ABSTRACT

The purpose of this master thesis is to show what is the impact of the competition and the need for competitiveness on the development of the European Information Society and how mentioned concepts influences the digital divide. Author argues that the competition is the driving force behind the development of the information society in the EU. For that content analysis is used to the EU policy documents to show what discourse is created by the EU officials in these documents. Literature interpretation is used to show the indirect impact of competition on digital divide. Interviews conducted with the officials in Brussels are used as the evidence while making conclusions. Such relevant concepts for the information society as competition, digital divide, Internet and decision making process are analyzed.

Keywords: Digital divide, information society, Information and Communication Technologies (ICTs), competition, EU.

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To my mother and father.

LIST OF ABBREVIATIONS

DAE - Digital Agenda for Europe

DG - Directorate-General

EC - European Commission

EP - European Parliament

EU - European Union

FP - Framework Programme

ICTs - Information and Communication Technologies

IS - Information Society

MEP - Member of the European Parliament

MS - Member States

R&D – Research and Development

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1. INTRODUCTION

The changes in social, cultural and economic life are conditioned by developments of the information and communications technologies (ICTs) and infrastructure. Printed media as a result of development of human knowledge is the technology that allowed us to shift from the oral culture to a culture, where knowledge and information could be kept on such medium as paper. It had crucial impact on how one dealt, used and received information. Later, the development of electronic media in the last century opened the way for the information age, which created, once again, opportunities unseen before. With such developments, from century to century, production, distribution and use of information played an important role in all aspects of human life. Innovation, technological development, new patterns of decision making and style of life characterize the development of the society in which information played the central role - the information society (IS). In such society the attention has shifted from the industrial production to the creation of information. Over the last two decades of the 20th century, ICTs and the availability of fast, reliable, and cheap means of information transfer, created a platform that led to a radical change in society (Stajano, 2009: 217). Consequences of this change are multidimensional in character, affecting economic, political and social life on local, national and international levels (Servaes, 2003: 5). The IS appeared to be the leading growth sector in advanced industrial economies with its three strands – computing, telecommunications and broadcasting, which have evolved historically as three separate sectors (Webster, 1995). By means of digitization these sectors are converging. The technical convergence of computing and telecommunications into ICTs has accelerated rapidly over the past two decades. (Servaes, 2002: 92). In the last decades the use of the IS concept has become widespread and started to be used not only by scholars in social sciences but also by individuals involved in policy making, politicians, entrepreneurs and businessmen.

If one look around, he will see that more and more people around us are using ICTs in their daily life for various purposes. It is evident that ICTs have penetrated all aspects of our lives, such as politics, economy, education, public health services. The shift from the industrial society where the production of goods and means for living was the main good to the information society where information becomes the main value is indisputable. New social sphere has been created with the dissemination of Internet – people go online and interact with

each other on distance. Spread of ICTs had an impact on the daily life of the majority of people and became the cornerstone of development, progress and innovation. I believe that IS is one of the main topics for discussion and concerns in the EU today.

Taking into account what has been said above I focus my research on this issue. The aim of this paper is to show what is the role of the competition in the development of the IS in the EU, and what impact it has on the digital divide. When referring to the information society in my research, I mean first of all development of information society as the spreading of ICTs and the use of the new tools offered by the new technologies, since the publication of the Bangemann Report (EC, 1994a). I use the concept of information society here as the supernarrative for development. ICTs concept itself is a broad one, so in my research I will mainly refer to the Internet. Another important concept in my research is digital divide. I will use the following definition when referring to this concept in my research: the gap between individuals, households, business and geographic areas at different socio-economic levels with regard both to their opportunities to access ICTs and to their use of the Internet for a wide variety of activities (Herman, 2009). Here as well, when referring to the opportunities to access information – access to the Internet will be the criterion.

Certainly, there is no direct link between competition and digital divide, since these processes are not interconnected, but my aim is to show the logic behind these processes. My research will have a pure conceptual origin, so it will not solve any particular life problems. It aims to bring understanding and knowledge to the reader. There are hundreds of books and articles been written on the theme of European Information Society. The novelty on my research, however, is that it will present things from the new angle, which is not clearly visible in the literature. Since the field of IS is very broad and encompasses many areas, I will narrow down my research – geographically - to the EU 27. Such limit is chosen by the origin of my study field, which is the European Studies – so that to cover the issues related to the EU. The reason not to cover all the Europe but focusing on the EU comes from the fact that EU 27 have common establishments and analyzed material covers particularly this area. As to the conceptual limits – I will focus my research on several particular points: competition in the IS, digital divide in the EU as related to the IS, role of Internet in the IS, decision making process as it relates to the IS in the EU.

From the first look it may seem unstructured, but the concepts mentioned above have a clear common logic. There is certain stage of IS development presented by the ICTs in the EU. It is spread all over the EU in all 27 MS, and the way the decision making process is being made towards the IS policies and priorities in the EU has a clear impact on its development and results. I will not take any things for granted, so the short analysis of decision making process will be presented to show the reader the logic behind this process. This will be linked to the concepts of competition and digital divide.

My hypothesis is that the competition is the main driving factor of the development of the IS in the EU. As to the latter one – it is interesting to see how EU officials create the competition discourse in the policy documents, stating its importance for the EU and development of the IS. So I will make a content analysis, counting the use of concept of competition and need for competitiveness in EU official documents as well as pointing to the discourse create by the EU.

The questions I wish to address in this paper are, thus, the following:

- *what is the role of the competition in the development of the IS in the EU?*
- *does the competition widen the digital divide gap in the EU or, on contrary, help to narrow it down?*

Decision making process here is an inevitable part that brings understanding to the overall picture. It is important to mention that when talking about competition in relation to the IS in the EU I mean primary the vision of the competition, as a process that stimulates growth and innovation and only then, the relevant policy of the EU. Both insights in the concept will be presented.

In order to receive respective information necessary for carrying out my research, I conducted 3 interviews with policy makers as well as with representatives from lobby groups (see Table 1 in Appendix I). Their responses will be presented in the analytical part of the study to support my argument. Furthermore, I studied the most important policy documents related to the IS and ICTs in the EU from the EP, the Council, and the Commission which are publicly available. The analyzed documents were Communications from the EC, Directives,

Regulations and speeches of the relevant authorities. As to the concept of competition – content analysis was used in order to capture the discourse created by the officials in Brussels.

At this point certain limitations of my analysis shall also be highlighted. Firstly, the reader should be aware of the limited number of interviews this thesis was supported by. Increasing the number of interviewees would have given the broader description and understanding of the issues analyzed that are not presented in other sources. Moreover, one should keep in mind that the responses of the interviewees are only the matter of opinion so it entails a subjective component. In terms of possible interpretations, this may be problematic since each interviewee relies on its own background while being interviewed. Finally, the purpose of the paper is to present the specific view which relies on opinions of several authorities and interpretation of official documents, so it does not necessary reflects the reality. Last but not least, the reality of such thing as information society and ICTs itself is very vivid and different interpretations are possible.

This paper proceeds as follows. The subsequent section presents the theoretical part where I introduce the main aspects of the IS in the EU - narrative that is used in the thesis, elaborate on concept of ICTs, decision making process and its importance to the overall discussion as well as the role of the Internet in the IS and its importance in the EU. This part aims to provide all the necessary background information that is needed for the following analysis. It follows with two chapters that will shed the light on two central aspects – competition in the EU and the digital divide. Chapter number 5 presents the methodological tools used for approaching the questions as presented above. After that, two chapters with the analysis, respectively, analysis I and II will be presented. The data from the EU policy documents and the results of the interviews, conducted with the officials in Brussels, will be presented to back up my assumption. The paper ends with a summary and my conclusion, highlighting the core findings and as well as proposed possible policy orientations to help EU overcome the digital gap.

2. BACKGROUND

In this chapter I will present main concepts that are important for the understanding of the topic, such as: IS – its theories, narratives and development of the concept; how this concept is used in the EU and its evolution; decision making process in the EU that is inevitable for understanding the development of IS.

2.1. Information Society as the Theoretical Concept

This sub - chapter I want to devote to explain the concept of the IS – its meaning, history, conceptual framework and context that is used in the current work. I will also elaborate on other main points, such as: ICTs and its main driver in the EU - the Internet. The concept of Internet is important in my discussion since I will use it as the reference point when talking about ICTs and digital divide. However one should note that the Internet is only one of significant features and techniques in the IS. Firstly, I will present different supranarratives that can be implied while dealing with the concept of IS. After that I will present historical background – the development of the concept of the IS from mid – 70s until nowadays and will focus on explaining the IS in the EU.

It is hard to give the concrete definition to the concept of IS, since it would require the definition of information to be presented and the definition of society. Also the concept itself was dissolved by the flow of time, and giving the definition to such concept would mean putting it into the particular framework. That is why I would rather point to the societal changes that took place with the appearance of the IS and present the theories of different scholars.

One thing I have to make clear here: information society is very wide concept that has many definitions and contexts as well as theories and narratives. I want to present the main supranarratives of the IS in order to get reader the understanding of what am I describing when referring to the IS. Such division very well presented in Pinter (2008). Firstly, there is a “Grand theory” – a conceptual understanding of IS presented by the scholars. Scholars that represent the Grand theory (Castells, Toffler, Bell and Webster) interpret an information society in the widest possible sense, as the totality of today’s (post) modern and post-industrial world emerging from the sixties or seventies of the 20th century onward, and focuses

primarily on social processes that may be initiated or enhanced by technological developments. From this perspective, everything that has happened in the world during the last three or four decades can be regarded as part of the emergence of an “information society”, since we have been using this particular term for as long as that. (Pinter, 2008: 216). There is, however, another supernarrative, that can be used when referring to IS. And since my study object is the EU and the IS in the EU and not the in whole world, I will use the concept of the IS as the supernarrative for development as it has been identified by its advocates with the spreading of ICT and the use of the new tools offered by the new technologies, in the context of the Union, since the publication of the Bangemann Report (Pinter, 2008: 228). Now let’s have a closer look at both supernarratives, so that I could explain my motivation in choosing one over another.

When talking about the IS in the grand theory (theories), the names of Manuell Castells (1997), Daniel Bell (1976, 1980), Alvin Toffler (1980) and Webster (1994) come to mind.

Daniel Bell (1976) states that the beginning of the information age brings the change into the logic of work: amount of people involved in the physical work decrease while the number of people dealing with intellectual work increase. Scientific innovations become the main driving forces in the economy. Sectors that deal with the production of goods and being substituted on the sectors that provides services. He describes three main components of the changes: in economic sphere there is a major shift in the direction of services; in technological sphere the scientific factor becomes the leading one and in sociological sphere new technological elites are formed. We can say that such postindustrial society means the appearance of new structures and principles: shift from the society that produces goods to the information society or the knowledge – based society. With some degree of simplification, it is possible to say that the economic sector in the industrial society is characterized by producing\manufacturing of goods while in the IS it is dominated by services sector. Main resource that has used to be the financial capital becomes knowledge and information.

Another scholar, the most acknowledged one in information society field, Manuel Castells, states that the information society is the new mode of human existence, in which the production, recording, processing, and retrieving of information in organized networks plays the central role (Castells, 1997).

Theory of Alvin Toffler (1980) divides the history of humanity into three stages that he calls the “waves”: first wave reflects the nature, second reflects the nature of things and the most important one is the third wave that reflects the nature of information.

Webster (1995: 6), for instance, identifies the following five types of definitions of the information society: technological, economic, occupational, spatial, and cultural. The most common definition of an IS is, probably, technological. It sees the information society as the leading growth sector in advanced industrial economies.

Summing up, the main characteristics of the information society according to the scholars of the grand theory are: increasing role of services in the economy; increasing role of scientific researches for the economy; increasing role of the information as the resource.

There is, however, a problem with grand theory approach, because it does not reflect the main subject of discussion in this paper: the information society as referred in everyday life by players in the political and economic arena as to the symbolic spread of information technology and the Internet. Theorists presented above do not discuss digital divide, broadband networks, they do not raise questions about those efforts that politicians and other key players in socio-economic life make in generating policy for developing the information society (Pinter, 2008.: 228). Therefore, their theories appear to be abstract and no reflecting the modern reality. It is visible that even after Castells main work, that came out in 1997, the ICTs made a huge step forward, bringing new opportunities to people. And the theories of 80 or 90th does not help to understand even the basic issue of IS that appear nowadays.

Now I would like to elaborate on the supranarrative for development that I will use in this work while referring to the concept of the IS. Such supranarrative reflects the diffusion and penetration of ICTs in our daily life as well as various political programmes for development. As for the timing, it would be relevant to refer to such definition from the mid,- 1990s till today. Main advocates of such definition are politicians, governments, businessmen and technocrats. The content of such definition can be narrowed down to the policy objectives, concrete programmes and aims. Concept of ICTs is one of the main one in such discourse, however, it does not represent the IS itself, but rather the part of it that can be used as the supranarrative for development.

Two different views on the IS has been presented above: the “grand theory” which is represented by the theorists and the IS as the supranarrative for development. There might be various discussions on whether it is legitimate to make such a division. Moreover, if one consider researching the IS in any of it interpretations, he will find much more available literature than presented in this study. There are numerous books and articles that describe the IS in one or another way. In my thesis, however, I decided to focus on such interpretation as supranarrative because in my view it reflects the modern reality in many aspects. Even though the “grand theory” may seem abstract and far from interpretation used in this work, it was necessary to present it in order to give the reader wider perspective then just the policy initiatives that will be presented in chapter 6, as well as to show how does society transforms with the inception of new technologies and principles.

2.2. European Information Society

Following the logic provided above, I would like to present the development of the IS in the EU. I will present the discourse that has been used in the EU for the past two decades when referring to the IS concept, highlight main historical periods, key policy documents that are central for the understating of such development. I will finish this sub - chapter explaining why Internet is the central element of the ICTs in Europe and its importance for the whole IS discourse.

One should bear in mind that in order to build IS, in our case in the EU, the information strategy is needed that would present the strategic policy initiatives for the EU. Such a strategy deals not only with the Internet and generally with the social usage of information tools, but with the whole of the information society, focusing on competitiveness and the quality of life because the country's future and welfare depends on its execution (Pinter, 2008: 132). Policy objectives are set at the supranational level, but they are implemented on a lower level in achieving national information strategies, which often deconstruct them into regional and local (regional or district level) development programmes (Pinter, 2008: 133). I will present in this chapter such policy initiatives and information strategy at the supranational level of the EU.

The European Information Society project was set in motion in the early 1990s. It was a move by the EU that was inspired by two factors: first, the US National Information Infrastructure Initiative (NIII), introduced in the early 1990s, that had a direct impact on many countries and the EU was no exception. Another factor was the assumed potential of new ICTs (Anttiroiko, 2001: 31). It appears to be quite natural if one thinks about the logic of progress and innovation – in the information society it arises naturally as the need to adapt to the changes. Servaes (2002: 3) claims: “In many ways the European plans to build an information society (IS) emerged as a reaction to Japanese and American initiatives. As in many previous technological projects, European policies on information and communication technologies (ICTs) lagged behind the policies of its main global competitors. That was the time when it became clear that ICTs would be one of the main factors for economic growth and EU start spending a growing amount of its R&D on ICTs”.

All these needs for research and innovation, catching up, international competitiveness were brought together and explicitly expressed in a number of important EU policy documents published in the 1993–94 period. First, there was the strategic white paper from the EC on Growth, Competitiveness and Employment - Challenges for entering in the 21st century, usually called “the Delors Report” (EC, 1993a). This document had purely economic objectives and was aimed at increasing EUs productivity and growth, proposing key areas that required attention and had to be re-evaluated.

However, the document that is here considered being the “first” in the set of policy agreements aimed at promoting the development of the IS, was proposed in 1994. In order for the EU to catch up with the programme launched in the US and to stay competitive in the international arena, the EC came up with the document, usually referred to as the Bangemann Report (EC, 1994a). Its original name was entitled “Europe and the Global Information Society – Recommendations to the European Council”. It was prepared under the direction of the previous Vice-President of the EC, Martin Bangemann and accepted by the European Council in 1994. The reports main objective was to improve the international competitiveness of European enterprises. Pinter (2008: 134) puts it like that: “the report concluded that the spirit of competitiveness was the most important factor complemented by a firm belief that only free but well-regulated competition based on equal opportunities would encourage the building of the information society in Europe”. Bangemann report reflected the interests of industrial leaders as key figures of European industries who had a significant role in determining its content. It proposed a list of 10 initiatives aimed at demonstrating the feasibility and usefulness of new telematics applications, including teleworking, distance learning, and electronic services for SMEs (Anttiroiko, 2001: 32). Next important document that came out right after Bangemann Report was “Europe’s Way to the Information Society – an Action Plan” which aimed at building framework to structure actions related to the development of IS on different levels. An updated and revised Action Plan was announced in 1996 in order to launch a second phase of the policy that presented four main policy lines: improving the business environment; enhancing Europe's knowledge base by investing in research, education, and learning; working for more integrated policy with a view to social and security issues; and meeting the global challenge by promoting the Information Society on a global scale (Anttiroiko, 2001: 33).

Since the 1990s was only the beginning of the spread of ICTs and the Internet has not yet penetrated the market, liberalization of media sector was the main priority for the development programmes in the EU. This idea was fundamental for the Green Paper entitled “Convergence of the Telecommunications, Media and Information Technology”. With this initiative on liberalization of the media sector Europe seemed to narrow the gap with its main competitor – the US. Because of this gap, Europe was supposed to be less competitive, the use of telecommunications being too expensive for users, notably the firms (Dang & Jolles, 2005: 5).

Next big step in building the IS in the EU was an introduction of the 1999 eEurope (1999-2005) programme, which raised objectives that went beyond the economic ones as it was in Bangemann Report. As it is presented in Pinter (2008: 136) - the difference of the eEurope programme from the previous initiatives was that more and more people started to get involved in the building of the IS and politicians started to take the principle of “information society for all” seriously. Thus, programme included in its focus social aspects that were missing in the previous programmes. The EC initiative “eEurope: An Information Society for All” was aimed to accelerate the European processes of transition to the information society and to make the results more accessible to every citizen of the EU (Pinter, 2008: 137). This programme is first one where the digital discourse appears for the first time, pointing to the objectives of the programme: connectivity of citizens with digital era and networks; formation of digitally educated Europe (EC, 2000b). With the beginning of the new millennium, while having advantage in mobile communications and digital television, the EU was lagging behind in Internet usage compared to the USA and Japan, and in order to stay competitive, the actions had to be taken (see Appendix I for the interview with Fred – Arne Odegaard).

Such actions for improvement can be found in the next influential document: eEurope Action Plan that can be regarded as a development programme the aim of which was to improve access to the Internet throughout Europe. The objectives of the programme were presented in the Lisbon European Council in 2000 and usually referred to as the “Lisbon objectives”: building of the infrastructural support that ensures access to the Internet everywhere cheap, quickly and safe Internet-usage; coaching people to prepare them for the challenges of the information society; development of the Internet-usage areas (EC, 2000a). The overall aim of the Lisbon objectives was to make Europe “the most competitive knowledge-based society”.

E-inclusion was considered a priority, since more than ever, unequal adoption of and access opportunities to ICTs exclude many people from benefiting from the advantages related to opportunities brought by such technologies. In that respect, “Lisbon goals” focused, among other, on building an inclusive society and set the pace for the balanced and sustainable development of e-inclusion actions such as National Action Plans (NAP) against poverty and social exclusion that was presented by MS in July 2003. An important thing is that within the framework of the Lisbon strategy, the competition policy was chosen as a key element of stimulating the competitiveness increase in European industrial sector in order to achieve the set objectives. As stated in the document (EC, 2004: 3): “Strong competition, encouraged and protected by EU competition policy, is rightly regarded as instrumental for achieving the competitiveness objective of the EU and the Lisbon Strategy”.

The success of the eEurope Plan depended on the MS and cooperation between them, as well as on the performance of the EU institutions. However, the Action Plan only spelled out responsibilities and the EU did not give any financial support to the MS for their implementation, so achievement mainly depended on national policy (Pinter, 2008: 138).

Shortly after that, in 2001 the EU was about to enlarge through the accession of new MS and in such conditions it was important to renew and update the information strategy in order to broaden the IS policies to the new MS. Not only was it necessary to catch up, but also to have a European policy taking into account national specificities, and at the same time bringing the MS together to the same development trajectory (Nguyen & Jollès, 2005). To do this, the new policy document of the EU called eEurope+ (“eEurope+ 2003: A co-operative effort to implement the Information Society in Europe – Action Plan”) was presented in June 2001. Since the EU expanded, the comprehensive policy was necessary to bring ICTs to people. One main task was to construct the framework for a unified regulatory structure to assist the transition to a new type of economy (Pinter, 2008: 139). Being a common, hybrid programme, the eEurope+ aimed at harmonizing already existing IS strategies in the MS so that it would be possible to minimize the digital gap within the EU.

Next programme - eEurope2005, which covered the period after the eEurope and the eEurope+ programmes were closed, were entitled the “information society for all”. It shifted discourse from the building of the infrastructure and the networks, to the Internet content and

new services, such as eGovernment or eCommerce (Pinter, 2008: 140). Whereas the previous eEurope objectives were concentrated on connectivity, eEurope 2005 was designed to enhance “Uses and Services of ICT” (Nguyen & Jollès, 2005: 9). The main message to the MS addressed by the new programme was to support broadband Internet. The programme was submitted to the European Council in June 2002. Being a successor of the previous eEurope programmes, the eEurope 2005 as well shared the objective to enhance competitiveness and to form the basis for the knowledge-based society. In order to achieve the set targets in the eEurope 2005, it was essential to co-ordinate the information policies of the MS with the benchmarking approach, helping to supervise this process. “Benchmarking can be termed as “soft regulation”, referring to a form of “non-binding regulation”. This mode of EU governance includes mainly: the definition of objectives, the spread of use of best practices, and the review of the results achieved by single countries after a given period of time” (Nguyen & Jollès, 2005: 8).

At this point it is important to note that for a bit more than 10 years of various programmes devoted for the development of IS in the EU, such reality as digital divide occurred. Many factors can be named to explain the reason: state of industrial development of different MS, origin of the initiatives, financial means that were not enough or uneven implementation of ICTs. Moreover, new challenges appeared that put additional pressure of the EU: international competitors were progressing, several countries was about to join the EU and new technological opportunities were invented. Instead of focusing solely on MS, EU had to consider these factors. Speculation on true reasons for digital divide are numerous, however, the fact is that in the middle of 2000s, digital divide was a reality and the necessary steps must have been taken to solve the problem.

The time of change came on 2004 when Manuel Barroso became the president of the EC and made Viviane Reding the Commissioner for Information Society. In June 2005 she announced a new policy document - “i2010: European Information Society for Growth and Employment”. New orientation was preserving some of the main objectives of eEurope and as well as with the Lisbon objectives, the goal remained to establishing the world’s most competitive knowledge-based society and economy. Main priorities were defined as: building a single European information space; investment in research on information and communication

technologies and to encourage innovation; establishing an “inclusive” European information society (EC, 2005).

Reaching these objectives would offer a rich and colorful content, and digital services. These priorities were to be achieved through technological development, the mass application of ICT and digital convergence (Pinter, 2008: 142). Inclusive part of the priorities was aimed at bridging the digital divide.

In 2009 Neelie Kroes changed Viviane Reding on the post of the Commissioner for the IS and changed the name of the portfolio to “Digital Agenda for Europe” (DAE). It is interesting to see how the digitization and promotion of Internet became the main priorities. It can be seen even in the name of the DG of EC responsible for IS. From the 1st July 2012 it was renamed from DG INFSO to DG CONNECT. The overall aim of the DAE is to deliver sustainable economic and social benefits from a digital single market based on fast and ultra-fast internet and interoperable applications (EC, 2010: 3). Europe's primary goal to get back on track from the years of economic crisis and DAE is seen as one of the main tools to achieve this. The CONNECT nature of the new portfolio is seen as the main objectives of the Agenda, which is to set course to maximize the social and economic potential of ICT, most notably the Internet, a vital medium of economic and societal activity: for doing business, working, playing, communicating and expressing ourselves freely (EC, 2010: 4). Fragmented digital markets is recognized as one of the main barriers for the EU growth and competitiveness. Europe was and still remains a patchwork of national online markets, and Europeans are prevented by solvable problems from enjoying the benefits of a digital single market. Commercial and cultural content and services need to flow across borders (EC, 2010: 6). On the Digital Agenda Assembly that was held in July 2012, Neelie Kroes highlighted some achievements of the DAE and presented her vision for the future development. She mentioned programme on radio spectrum that was successfully implemented, to bring down the barriers to mobile internet. Five priority areas mentioned were: the Cloud, broadband, security, innovation, and public services. She highlighted the importance of ICT sector, presenting such data: five of the top ten companies in the world by market capitalisation are in ICT; more than 176 million Europeans can access mobile internet wherever they go, in some cases now aided by new 4G networks. She expressed her believe in ICT to maintain EU competitiveness in a changing

world, to find jobs for the young, to spend taxpayers' money more efficiently, to manage energy resources better and boost productivity, efficiency and effectiveness (Neelie Kroes, 2012d).

Representative of the DG CONNECT, who I was interviewing for my research, gave me good response concerning some aspects of the current information society in the EU and DAE in particular. He gives an interesting perspective, saying that if analyzing the productivity in the ICTs sector in the US it is visible that it was much higher than in the EU, which can be explained in the way how the US uses these technologies. Europe could not spread the use of ICT and the fragmented digital market was and still remains the main reason for that. There are many barriers created by such aspects as the copyright law and collecting societies. That is why the main challenge for Digital Agenda in comparison to the eEurope is to bring down the barriers (See Appendix I).

I mentioned several interrelated concepts for the IS in this sub – chapter, such as digital divide, knowledge - based society, etc. But it is important to note the connection between the IS and the innovation. Most of the aspects on innovation in the IS will be presented in the chapter on digital divide and competition, however, some basic things have to be pointed now. Innovation is an inevitable process if one thinks about the IS. Such processes as growth and competitiveness cannot have place if innovation is not taking place. One of the important prerequisites for innovation is accessibility to sufficient funds. Such funding does exist in the EU, specially created to sustain and develop certain areas of life. They are generally known as the “framework programmes” (FP) - funding of multi-annual research and development (R&D) initiatives. Such R&D initiatives are undertaken under the control and with the financial support of the EU. These include a series of strategic R&D actions that comprise only a minor part of the overall R&D undertakings in the EU countries. EU research has the objective of achieving industrial competitiveness and contributing to number of EU policies, such as policies in field of IS, for instance (Stajano, 2009: 159). Currently, 7th FP is in action, which amounts for € 50.5 billion of funding for the period between 2007–2013 years which aims to strengthen European innovation and research in ICTs. Stajano points out (2009: 166) that such FP initiatives “are not a plan for the redistribution of financial resources, but rather

an instrument to promote the research actions required to increase the competitiveness of European products and services”.

Special role in explaining the development of the information society in the EU and the spread of ICTs has to be devoted to the Internet. The Internet is recognized by the EU officials as the main driving factor behind future economy, promoting growth and contributing to the development of the IS in the EU. Importance and role of the Internet is not only visible in the policy documents, but is frequently stated by the EU officials such as Neelie Kroes, Commission for the Digital Agenda. According to her, the Internet is a key to sustainable future and the authorities must remove obstacles to its huge potential. She firmly believes that it can boost EU’s competitiveness and productivity, by offering new services, such as Cloud Computing that could radically reshape current models for ICT services. Transforming not just the digital economy – but every other sector that uses it, from small businesses that get flexible and cheap back - office services, to other sectors such as healthcare and culture. She said that such services, as eHealth and eGovernment can help people stay active and independent longer as they age, more effectively for less cost and can deliver better services more efficiently (Neelie Kroes, 2012d). In May 2011 she presented her vision for the “Internet essentials” that she called “COMPACT”. Ideas that led into the guiding principles of the Internet policies are: Internet of Civic responsibility, One Internet that is Multi-stakeholder, Pro-democracy, Architecturally sound, inspiring Confidence and Transparently governed (Neelie Kroes, 2011b). It is visible how over the last decade the Internet has transformed society and become a pillar of the economy. The EU officials recognize it as essential for vision of smart, green and inclusive growth in the years and decades to come (Neelie Kroes, 2011a). And so it is also essential to make it safe, open and accessible to all citizens. Internet is a strategic domain for the European Union. EU policy on the Internet should be informed by the same EU values, priorities and interests which govern action in other areas (Neelie Kroes, 2011a). With a truly open and universal platform, authorities can deliver choice and competition, innovation and opportunity, freedom and democratic accountability. She named areas where value can be achieved. For example, opening up public sectors and putting their data online would benefit consumers, inform voters, help policy-makers, stimulate web innovators, and boost the economy (Neelie Kroes, 2012a).

The introduction of Internet access is particularly important since it opens up new possibilities, both for people, government and businesses. Moreover, Internet is an important driver for the delivery of such services as e-commerce, e-government, e-learning and many others. Another benefit of the Internet is that it results directly in new jobs and revenue. The social impact of ICT has become significant – for example, the fact that there are more than 250 million daily internet users in Europe (EC, 2010: 5). According to official numbers, at a global level, the EU27 is the second largest region behind Asia by number of internet users (more than 380 million). Relative to its population, the number of internet users is similar to that of the US (78%) and well ahead of other regions (EC, 2012b). It is visible in most of the policy documents, that most of the actions are aimed at bringing cheap, fast and secure Internet to people, businesses and households. Moreover, the EC always recognizes the democracy and freedom issues when touching upon the Internet: “the Internet is changing the world. It is not just a trillion-dollar marketplace. It is a forum where people connect, a platform for astounding innovation, and a powerful vehicle for human rights and fundamental freedoms” (Neelie Kroes, 2011d).

Concluding, one may see that the development of European Information Society took place in mid 1990s with the adoption of such initiatives as Bangemann Report and Delors Report and keep progressing with its last policy initiative – DAE. The EU recognizes the IS as one of the main driving factors of the economy, that can bring growth and innovation as well as allow the EU to remain competitive on the global arena. ICTs in general and the Internet in particular as its main part, are seen as the tool that can help Europe to get out of the economic crisis by creating new jobs, bringing services such as eCommerce that contributes to growth, as well as it cuts the red tape by introducing eGovernment. Shortly, it is seen as the key factor of the future economy and such vision is backed by numerous policy initiatives that try to get every European citizen online.

2.3. DECISION MAKING PROCESS IN THE EU

Following the context of the IS that is provided above, one may see that the IS in general and the ICTs in particular is the project of the EU that is planned, negotiated and implemented through the supranational institutions located in Brussels. So in order to understand the development of IS in the EU and the digital divide, the logic behind the decision making process in the EU should be presented. To do this, the institutional set up firstly must be described. Saying this, the subsequent chapter will provide a short overview of the main EU institutions, namely the EC, the Council, and the EP. After that, the co-decision – EU's main decision making process will be explained and the pre-legislative work that has crucial impact on the development on IS in the EU. Overall, such logic is well known and available to the interested parties, but the aim of this chapter is to provide the reader with the background knowledge in context of the IS policies in the EU.

First of all, when talking about the IS in the EU and concrete policies that are developed by the EU institutions, there are 3 main bodies that stand behind the decision making process at the supranational level in the EU, namely the European Parliament (EP), European Commission (EC) and the Council of the European Union (Council). There are also several stages of decision making: pre-legislative work, legislative process and post-legislative implementation.

The **EC** is designed to be a politically independent institution that represents and uphold the interests of the EU as a whole and it is the EU's main executive body (consilium.europa.eu). It is divided into different Directorates-General (DGs), each representing particular policy areas. These DGs have, among others, the responsibility of preparing legislative proposals which are then debated and passed by other institutions, e.g. jointly by the Council and the EP in the co-decision procedure (Müngersdorff, 2009). Important to note the role of the EC in pre-legislative work - before drafting the proposal, the EC consult different organizations, such as NGOs or industry lobby groups. Basically, it collects all the necessary information, sometimes for several years, before presenting the proposal to the EP and the Council. Because of that, EC's workers are well informed regarding the proposal, impact and other potential topics that may correlate.

The **EP** consists of the 736 members which are directly elected by the European citizens. The practical policy work of the EP is largely accomplished in about 20 policy-specialized Committees, which are composed of Members of the European Parliament (MEPs) from different parties who prepare the EP's standpoints on legislative procedures (Müngersdorff, 2009).

The **Council** is the EU's main decision-making body. It represents the Member States, and therefore, is composed of one representative of each EU national government. Each Minister is empowered to commit their Government during meetings and is politically accountable to their own national Parliament and to the citizens that Parliament represents (consilium.europa.eu). After receiving the proposal from the EC, Council can start negotiations, which are less available to the public, then for example meeting of EP. It is discussed internally where the national interests are put forward. That is why Müngersdorff (2009), states in his case study that thus, though it formally serves the EU's interest as one of its institutions, national concerns still play a major role in the internal negotiations. The Council is headed by the Presidency, a post which rotates every six months among the member states. That is why every Presidency trying to push the process at the specific direction, that is more comfortable for the respected MS.

In the **legislative process**, the Commission sends its proposal to the Parliament and the Council. These two institutions consider it, and discuss it on two successive occasions. The EP debates and votes on an issue both in the relevant committee and as a full parliament and this process sometimes take many months. The relevant government department also discusses the issue in the Council of Ministers, though not necessarily at the same time as the Parliament. If they agree on the proposal – it is adopted. If they do not agree - the proposal is brought before a Conciliation Committee made up of an equal number of representatives of the Council and Parliament. When the Committee has reached agreement, the text agreed upon is sent to Parliament and the Council for a third reading, so that they can finally adopt it as a legislative text. The final agreement of the two institutions is essential if the text is to be adopted as a law (europa.eu). After that, post-legislative implementation comes in. The EC is responsible for monitoring the implementation of the law in MS which sometimes can take up to several years.

However the pre-legislative process is the most important in our case. On the pre-legislative work, the direction and scope of the new piece of legislation can be influenced. It is done so by the consultations that EC establish with the various stakeholders, representatives of NGOs and different national authorities. Competition and digital divide already can be seen here, at the very first stage. There are several aspects that must be explained here. Firstly, in its Communication on the Digital Agenda for Europe, the EC presents a clear Digital Agenda Governance Circle (See EC, 2010a). The first phase of the overall process comes from the internally established coordination mechanism called The Digital Agenda Scoreboard. It is done so to ensure effective policy coordination. This Commissions Scoreboard work closely with the representatives of the EP and High Level Groups that represent the MS. This is the primary stage, where the process is shaped by international competition and need to innovation. On this stage all the main priorities are established that after goes to the MS and the Parliament for future negotiations and considerations. Then at the summer Digital Agenda Assembly takes place grouping together representative of the EP and High Level Groups as well as all the main stakeholders. On the basis of the Assembly, the Communication from the Commission is released and goes to the Council and the above described co-legislative process begins.

Competition on the pre-legislative stage can be explained in two ways: first of all, the international competition between the strongest economies in the world (US, EU and Japan) that basically motivates EU to innovate and progress (the link between the competition and productivity and innovation is shown later in the chapter dealing with competition). Such competition defines many development priorities and objectives that are needed to be achieved. On the other hand, there is an internal competition between MS in the Council, where every representative is trying to put national interests in front. Here the digital divide is happening (or one may say widening) since MS have different standards and priorities towards the ICT and the common solution is not always the case. In order to understand the background of European Information Society, one should bear in mind that most of the EU policy documents touching upon the information society in the 1990s were written by industrial leaders, as it is visible in Bangemann Report, Delors White Paper and Green Paper on Convergence of Telecom sector. That explains primary the economic objective of these documents and the logic behind such processes as growth, innovation and competitiveness.

Only in the beginning of 21st century, in documents of the eEurope Group, the social aspect is added and later become increasingly emphasized.

The impact of the interviewees is very valuable for understanding some aspects of the decision making. All 3 respondents provided different answers relating to the decision making process, which can be explained by the different background and working field. Representative from the lobby, Vincent Sneed, said that the proposal for a regulatory instrument from the EC is the result of a very long reflection process which is backed with the impact assessment, a consultation of as many stakeholders as possible. Defining the possible hierarchy and impact made by various interested sides, he stated that the direction is usually given by: the European Council (which represents the heads of States and of governments); the programme presented by the Commission and by each Commissioner at the beginning of its mandate; the Presidency (See Appendix I).

Interviewees from the EC DG CONNECT, on the other hand, presented another view, focusing on internal process inside the EC. Rosa Barcelo pointed that there are different aspects of decision making within the EC. First is the Commissioner, who can imply political aspects in decision making, and sometimes such political issues matter. Other side – experts, functioners of the EC, those who work on the file daily and independently from the political issues. Fred - Arne Odegaard, another interviewee from the DG CONNECT, said, referring to the Digital Agenda for Europe, there are hundreds of actions, but only 50% is the responsibility of the DG CONNECT. Since other DGs are also involved in the decision making - half of the impact is made by them and the external bodies (See Appendix I).

To conclude, it is worth saying that the decision making process in the EU is quite complicated one and requires a lot of work. Understanding of this logic behind the decision making process is important to see the logic behind the development of the information society in the EU, and the above chapter was aimed to shed some light on such process. The pre legislative phase of such decision making process is the most important for my case, since it is the stage where the future direction is defined, thus impacting such issues as digital divide.

3. DIGITAL DIVIDE IN THE EU

In the following chapter I would like to highlight the main issues that touch upon the existence and development of digital divide in Europe, present data from the official EU documents and views of different scholars, elaborate on possible reasons for digital divide.

Digital divide is not something new. It has been present in the EU for decades now and variety of research argue about the origins of the divide and its causes. The phenomenon of the digital divide is of interest to multiple disciplines and is being observed from various perspectives by the variety of scholars. It is important to highlight the role of ICTs for the digital divide and efforts that has been taken for its elimination. In light of progress and technological development, the ICTs became a vital engine of economic performance and growth. Together with such development and progress, the need to measure and analyze the digital divide emerged.

Another issue that emerges from this discussion is the role of education in bridging the divide and the issue of social exclusion. It is obvious that ICTs diffusion and usage presents an opportunity for developing countries and their respected citizens who can fully grasp the opportunities of such diffusion, but on the other hand it makes socially excluded those who cannot afford the use if ICT or simply don't have necessary access. Basic ICTs skills are among necessary requirements for a growing number of jobs. It is also highlighted by Fred - Arne Odegaard in an interview, when he said that recently, there has been high number of jobs created in the EU for application development, which means that there is a demand for this kind of jobs in Europe. There is big amount of jobs are available for computer engineers, however there are 10 times less people who have the relevant degree and who can do this kind of work (See Appendix I).

Radu Herman claims that: "in knowledge society individuals must update and complement their knowledge, competencies and skills throughout life to maximize their personal development and to maintain and improve their position in the labour market (Herman, 2009: 508). Applied in the case under discussion, there is a growing need for ICT literacy in public and private life, since such technologies become a part of our daily life.

As it was mentioned earlier, when referring to the digital divide, I will use this explanation: the gap between individuals, households, business and geographic areas at different socio-economic levels with regard both to their opportunities to access information and communication technologies (ICTs) and to their use of the Internet for a wide variety of activities (Herman, 2009: 506). This description is good, since it includes both people in the EU and geographical areas, so it is possible to present data for both the social groups with certain criteria (age, income, gender, etc.) and particular MS. It also comprises the use of ICTs in general and Internet in particular, which is in center of attention when it comes to the ICTs. Important to note that I will not analyze or present the data for comparison of inequalities in information access within one MS, but focus rather on such inequalities between MS and what causes the divide between the different social groups within the MS. Since the divide I will analyze here mainly focused on MS and appears as the result of unequal policy implementation and decision making process, such socio - demographic factors as gender, age, education and income will not be the priority, however I will mention them for overall understanding. One should bear in mind that digital divide in broader view can be understood as existence of general socio-economic inequalities as the reason of insufficient infrastructure, high cost of access, divergent policy visions and other factors that are present at national level. Neelie Kroes, presented such numbers in her speech during the Assembly in July 2012: in Europe, one in three European households have no internet connection; one in four adults have never gone online; In Japan, there are already over 18 million fibre broadband subscriptions; China is installing 35 million fibre connections this year alone. To put that in context: the largest EU Member States have just a few hundred thousand fibre subscriptions, if that (Neelie Kroes, 2012d). Logic of presenting these numbers in chapter that deals with the digital divide reflects the need to stay competitive in the global arena, which is recognized by the EU officials. If one compares the numbers following the logic of the digital divide, it can be said that the divide is wider in the EU, than in Japan, for instance.

Cuervo & Lopez Menendez (2004), point out that the reason for international digital divide is largely the consequence of social and economic imbalances that exist between developing and industrial countries. Countries with lower income and lower educational attainment tend to show lower rates of ICTs access and use when compared with higher income and higher education countries (Cuervo & Menendez, 2004: 3).

The issue of the digital divide has emerged as the diffusion of ICTs has taken place. From previous chapter one may recall that the framework for ICT diffusion in the EU has been the eEurope Action Plan in its two versions: eEurope 2002 and eEurope 2005. Cuervo & Lopez Menendez (2004) argue in their article that the issue of the digital divide was traditionally understood in terms of the gap between ICTs “haves” and “have-nots”, but as the number of Internet users has grown, it has become quite relevant to look at differences on those who are online. They use multinarrative approach in their work which implies that making a deep analysis requires a broader spectrum of indicators than just Internet penetration rate. The results that they got shows that there are four groups of countries with similar levels of ICT development. The well-known North-South divide is presented, with such countries as Germany, Austria, Denmark, Sweden and the Netherlands with the highest ICTs penetration rates across the EU and Portugal with Greece with the lowest penetration (Cuervo & Lopez Menendez, 2004: 13).

Concetta et al. (2006: 6) make an argument, that originally coined to describe inequalities in the distribution of information and communication infrastructure, the notion of digital divide has evolved rapidly to encompass ‘physical, digital, human and social resources and relationships. Authors explore key documents of the US and EU by making a content analysis of policy documents to identify the similarities and differences in the way that the digital divide is defined in both contexts. They come to the conclusion that, on the one hand, the US documents define the issue as access to equipment and infrastructure, consistently referring to the beneficiaries of policies in terms that discriminate users into distinctive demographic segments. On the other hand, the group of texts comprised by the eEurope documents defines the digital divide as access to information and services and consistently refers to the subject of policy initiatives in more homogenizing terms, through words such as ‘society’, ‘citizens’ or ‘public’(Concetta et al., 2009: 15).

One should also bear in mind that during the evolution of EU policies in the IS field there were new MS joining the EU, and with every enlargement the gap only widened, caused by lack of technological infrastructure in the region as well as cultural and physical factors. Referring to the World Summit on Information Society, Sjaak Hubregtse (2005) defines the role of infrastructure as central in achieving the goal of digital inclusion and realization on IS.

Moreover, he points to the private sector that must be engaged in building such society by developing needed infrastructure.

Radu Herman presents an interesting observation in the article “Digital divide in the EU” (2009), where it is shown how education and infrastructure play a critical role in shaping the divide. These two factors are also frequently mentioned by the authorities in Brussels as the ways to bridge the divide (EC: 2010a). She argues that the access to the information technologies, whether because of the high cost of such technologies or differences in technological standards, represent the main problem in majority of countries. To overcome such problem, governments and private sector must be willing to invest in information infrastructures, since this is the main barrier for communication and information access. Moreover, attention should be also focused on the social, cultural and educational factors that continue to exclude people from participating in the benefits brought by ICTs. Further she points out that in terms of regional dimension, it is possible to observe that the degree of urbanization is an important factor of accessing the ICTs. Internet penetration has a low degree of penetration in the rural areas of the EU. The availability of broadband technology in remote areas thus plays a role in this discrepancy (Herman, 2009: 509). She continues, stating that macro-economic research, as well as firm - level data, confirms that ICT investment and higher infrastructure and usage levels alone are not sufficient to produce tangible benefits and has to be backed up with factors including a new set of ICT skills/training, structural changes within business models and the economy, and institutional and regulatory adjustments (Herman, 2009: 510).

Attempts to bridge the divide can be seen in i2010 Programme launched by Viviane Reding, the main objective of which was to establish Single European Information Space which would solve the problem of the digital convergence (EC, 2005). Main challenges for such establishment are the lack of infrastructure and single set of rules for copyright and collecting societies.

Nguyen & Jollès (2008) present an interesting analysis where they show how Europe’s heterogeneity is deeply rooted in different paths of growth that MS adopted towards the “knowledge based society”. These different paths of growth mean that the diffusion of ICTs can progress in peculiar contexts. Each represents a combination of national institutional,

organizational and cultural features. This different path of growth is highlighted in two models that were labeled, respectively, North/ South, which represent the major gap within the EU. Such geographical divide can also be found in analysis of Henten & Kristensen (2000) in their paper, where the information society vision of the five Nordic countries is presented. They state that these societies are among the most developed in terms of usage and economic importance of ICTs and can be seen as societies that are closest to having approached the notion of information societies (Henten & Kristensen, 2000: 78). Authors use expression of “National Systems of Innovation” (NSI), or to put in in European terms - European System of Innovation, as equal to national variations upon the theme of the knowledge based society. In his article about innovation and competition in IS, Marton Holczer describe the NSI, stating that it “is the network of institutions in the state and private sectors the activities and interactions of which initiate, import, modify and disseminate new technologies”. (Holczer in Pinter, 2008: 108). The most important aspect in understanding the NSI is that growth and development in a knowledge based society is systemic by nature, that is encompassing cooperation and competition, public / private sector interactions, policies for education and technology promotion. In what Nguyen & Jolles (2008) present, national variations in adopting the ICTs rely on NSI. Their assumption is that the institutional features that shape access to the ICTs are: a large effort to promote R&D; a good rate of innovation; a good access to education; an easy access to capital markets; freedom to trade; social cohesion and a good access to ICT. In order to characterize the peculiarities of countries relating to knowledge based society, eleven variables were selected and linked with institutional prerequisites. Results of the analysis show the structural differences among European countries, with the Scandinavian countries showing a high level of wealth, are on the way to building up a knowledge based society. At the opposite, the variables that correlate with a low degree of development and represent countries which are in transition: Slovakia, Poland, Czech Republic and countries of Southern Europe, such as Portugal, Greece, Spain, Italy and Ireland. Such countries show poor records in patents per inhabitants, in number of researchers per inhabitants, in the digital access index.

Mancinelli states that: “fact there is not just one digital divide but multiple divides which relate to a variety of factors such as: gender; age; “ethnic clustering”; uncertainty of living/financial conditions; work insecurity, and social insecurity (Mancinelli in Pinter, 2008:

174). Exclusion or inclusion here can be seen in the more broad perspective than just an access to the technical opportunities. It goes beyond this and influences the identity creation, impact of social relations, emergence of new methods of working and learning. She is using the Molnar's analytical model to demonstrate that ICT diffusion patterns are shaped by a combination of three variables: the degree of penetration of the technological innovation(s); the rate of growth, and the actual properties of the technologies themselves (Mancinelli in Pinter, 2008: 175). These are the factors that shape the process of different types of the digital divide in terms of adoption of ICTs. Overall, she defines 3 types of such divide: access divide or early digital divide: it considers the gap between those with and those without access; usage divide or "primary digital divide": it concentrates on those who have access but are non-users and finally the "quality of use" divide or secondary digital divide: it focuses on differentials in participation rates of those people who have access and are users (Mancinelli in Pinter, 2008: 176).

One may observe that bridging the digital divide and reaching the E-inclusion is considered as a key factor for Europe's future for a number of reasons. First of all, in economic terms, it is "a must" step in order to stay competitive in the international arena. For that, the further market penetration of ICTs is needed as well as promotion of e-skills and e-learning. All this would bring new jobs and overall growth. In social terms, promotion of various factors, such as e-learning or e-governance require these special skills, so the process is in circle – one has to get the necessary skills in order to grasp the benefits that new technologies bring. Since an estimated 60% of existing and 90% of new jobs require ICT skills, people who are ICT-literate in principle stand a better chance in the job market (Mancinelli in Pinter, 2008: 179).

Pachal Preston argues in his article that on the basis of the Information and Communication Technology Adoption Scale (ICTAS), which can be used as an integrated indicator of the use of modern information and communication related technologies (clustered around the television and the computer), the gap between northern and southern Europe is quite striking and quantifiable: the medium user countries form a central block of continental Europe (plus Ireland), the heavy users are found in Northern Europe, the light users are at the periphery of Southern Europe (Greece and Portugal) (Preston, P. in Pinter, 2008: 27). Author states that the notion of perceived need is central factor that keep people from using these technologies.

Over half of the Europeans who are not interested in on-line services say they don't need them in their private life. Moreover, it is stated that younger, wealthier and better educated Europeans are less likely to find on-line technologies too complicated. Income and level of education thus are more technology friendly factors. This assumption appears to be true if one consider the results of the recently presented Digital Agenda Scoreboard report on digital competencies (EC, 2012c).

Nico Carpentier writes in his article about access and participation in the discourse of the digital divide (Carpentier in Pinter, 2008). He refers in his work to one of the EU documents from 2003 that defines the digital divide and states that: "the potential benefits of the Information Society for citizens and companies are undoubted. At the same time, there is a possible threat of a widening gap between info-rich and info-poor, a concept known as the digital divide. This divide reflects and exacerbates existing inequalities, not only between countries but also within each country" (Carpentier in Pinter, 2008: 103). One may remember from the previous chapter, that the eEurope 2002 was aimed to ensure truly inclusive IS. Author discussed three lines of critique towards the digital divide discourse as expressed in EU documents on the World Summit of the Information Society (WSIS). A first line of critique is based on the argument of the multi-dimensional character of Internet access. He argues that when discussing Internet access, such elements have been disarticulated from the digital divide discourse: the possession of skills; user practice; relevant content and feedback. Emphasis on developing human capacities is an attempt to broaden the digital divide discourse found in the EU documents. Second line of critic concerns the very origin of the digital divide – the legitimacy of the concept itself. He questions the concept of gap, saying that this term suggests that the identified differences have a static character while there are enough empirical clues that this is not the case. For example, certain groups such as women and elderly do not belong to the vanguard, but are rapidly catching up (Carpentier in Pinter, 2008: 107). A third line of critique attempts to decentralize, de-westernize the digital divide discourse, showing that same specific articulations that characterize that Western digital divide discourse can be found in many other reorientations of this discourse.

Variety of data that evidences the digital divide in many of its forms is available on the EC website. In order to give the reader some numbers to actually see what are the statistic

provided by the EC, I will present some founding from the latest scoreboard reports that focuses of internet usage and ICT skills. One of such reports (EC, 2012b) analyses the latest developments in the use of the internet in the EU. Data in the report shows that around 120 million European citizens have never used the internet. Romania, Bulgaria, Greece, Cyprus and Portugal have the highest rates of non-users but together these five countries have just 25 million people (EC, 2012b). Conversely, the proportion of the population that has never used the internet is almost marginal in the most advanced countries, such as Iceland, Sweden, Norway and Netherlands, where the number of non-users is below 10% of the population (Same). Figure shows that in 2011, 76% of the EU population had used the internet at least once, an increase of just 2 percentage points from 2010. Moreover, 73% of EU 27 households had access to the internet in 2011. A lack of skills is the second most important reason for not having access to the internet (after lack of interest). From a cross-country perspective, more than 1 out of 2 households without internet access in Cyprus, Estonia, Latvia, Portugal, Slovenia, and Slovakia reported a lack of skills as a reason for not having internet access at home. In terms of different levels of digital skills, on average 14% of Europeans have low level computer skills, 25% have medium level skills and 27% have high level skills. These figures have not changed significantly over the past 2 years, increasing by only 2 percentage points. Countries with a higher rate of regular and frequent computer or internet users tend to have a higher rate of medium and high-skilled people. Only 1 out of 3 students in Europe are taught by teachers for whom participation in ICT training is compulsory. Only 53% of the labour force said is confident that their level of computer and/or internet skills are sufficient if they were to look for a job or change job within a year. The Nordic countries, the Netherlands and the UK have levels of confidence in skills at or above 70% (EC, 2012c).

Concluding, it is possible to see that there is no single road to the Information Society in the EU. National political objectives arising as binding factors from applying single standards and such barriers must be eliminated. Different national authorities in Europe simply react differently to the plans of Brussels (and this mainly due to national specificities), thus the divide and different standards take place.

4. COMPETITION

In this chapter I want to discuss the concept of competition and competitiveness. I will present all the information that is needed in order to understand the role of the competition in the EU and later present the collected data. When i talk about competition and competitiveness, what do i really mean? While referring to the concept of competition I mean first of all the concept itself, in its natural terms – as the condition between market players, and only in second place – as the relevant policy of the EU. Both perspectives will be described – the first one in respect to international competitiveness of the EU, and second as the internal tool aimed at growth and innovation. There are also different dimensions of competitiveness – it can be competitiveness between businesses or between countries. In this chapter I will mostly focus on competitiveness as related to countries and economic systems, in our case – the EU. This background information is necessary for the attention of the reader in order to understand the analysis that will be presented in chapters 6 and 7.

Attilio Stajano states in his book, that the EU's prosperity is dependent on its capacity to compete in the global market. Competitiveness creates the necessary conditions for sustainable development, for the creation of new production activities and new jobs, and for a better quality of life (Stajano, 2009: 35). It is not surprisingly therefore, that the EC recognizes the competition policy as a key element of a coherent and integrated policy to foster the competitiveness of Europe's industries. In its policy documents - Communication from the Commission entitled "A pro-active Competition Policy for a Competitive Europe" (EC, 2004), EC states that: "competition enables a competitive and open internal market that provides the best guarantee for European companies to increase their efficiency and innovative potential. Vigorous competition is thus seen as a key driver for competitiveness and economic growth, which is characterized by: improvement of the regulatory framework for competition which facilitates vibrant business activity, wide dissemination of knowledge and efficient economic restructuring throughout the internal market; enforcement practice which actively removes barriers to entry and impediments to effective competition that most seriously harm competition in the internal market and imperil the competitiveness of European enterprises" (EC, 2004: 3). Importantly, evidence linking competition and productivity is also presented in the document. Such evidence, linking competition and productive efficiency comes from the

comparison of the economic performance of countries with efficient and restricted competitive market systems. For instance, measures of competition intensity at the economy-wide level are positively associated with economic development. Furthermore, market competition has been found to significantly raise productivity growth rates. There is also ample evidence that vigorous domestic competition promotes success in international markets (EC, 2004: 5). Bearing this in mind, one should not forget for whom such policies are created. While in my thesis I refer to competition and competitiveness in the EU as a whole, there are, however, agents that directly compete and for whom the relevant policies exist – namely, the enterprises. According to Stajano (2009: 203), enterprises play a central role in the EU's economic growth. In order to build a strong economy, the Union must encourage the entrepreneurial spirit and provide an appropriate legal and normative context, as well as suitable infrastructures in order to promote new business practices, favor the creation of new companies, and support their development. The EU's enterprise policy aims at creating a dynamic business environment by ensuring to these enterprises and to their products and services real access to markets both within and outside Europe (Same: 203). According to Pauwels, however, EU competition policies are meant to reconcile two conflicting objectives (Pauwels: 1). On the one hand, sizeable corporations are essential for accomplishing internal market objectives and strengthening European competitiveness. Improving technical efficiency, referring to the production and introduction of a given set of (new) services at the lowest possible cost and the overcoming of fragmentation are important criteria in the industrial economic analysis of alliances. On the other hand these holdings should be deterred from taking advantage of their increased market power to undermine competition.

There are different tools and varieties of ICTs that directly or indirectly impact the competition and competitiveness. For example, Jean-Paul Smets-Solanes (2001, 17) in his article describes the way how patents stimulate innovation and competition in the IS. He argues that the purpose of a patent is to stimulate innovation, promote the sharing of technical knowledge, and create an economic framework that will encourage companies and competition. Acknowledging this position, I, however, will not touch upon the issue of patents or copyrights in my discussion on competition. More relevant factors for my case that contributes to the growth in competitiveness are presented by Stajano (2009: 97). According to him, the EU's future prosperity and the competitiveness of its economy depend on factors

such as: research intensity and quality; development of human resources; ICT investments; business reorganization, and access to financing. Bearing in mind these factors, one may see that they are not just theoretical assumptions, but as was mentioned above – needs that is recognized by the EU officials in such ways as: R&D spending, notably the FP 7.

Marton Holczer in his article (Holczer in Pinter, 2008) discusses the relationship between innovation and the economic competitiveness of companies, countries and regions in the information society. He comes from the assumption that the acquiring and producing new information in the IS is of big importance for the life of the community or organization. Concept of innovation is very important in his system, since it enables competition and economic growth. He argues in his article that the need for renewal is a fundamental one in the information society, since in the era of globally accessible information, real-time communication and money circulation the competitive arena has expanded. In the information society thus, research and development, which for a long time has been regarded as the key to innovation and economic competitiveness, has an indirect impact on the competitiveness of given regions and countries (Holczer in Pinter, 2008: 111). He faces some difficulties in his research. One of them is the actors that are hard to define: competition takes place globally as well as at the level of greater regions and countries while we can also talk about specific profit-oriented and non-profit organizations as well as regional and national innovation systems. In such a situation, every organization or a community that is not determined by innovation opportunities can be competitive. The leading areas of science that experience groundbreaking progress in a given period clearly induce the intense competition of technological development. The most innovative industrial and service sectors have the closest links with those areas of science in which the use of ICT generated a sudden leap in development: out of the 500 biggest companies of the world it is the companies active in the area of services based on pharmaceuticals, biotechnology, IT hardware, software and computer services that are forced to invest the most in R&D in order to maintain and improve their market position (Holczer in Pinter, 2008: 100). Another aspect that can be pointed from the article of Holczer is the economic essence of the competition which resembles the EC objectives. One may recall that the economic factors where the primary one in driving the integration of the EU. Financial advantage for the owner of the company or organization becomes the key outcome factor of the successful innovation. There are many factors, such as

manufacturing of the products, that can be made cheaper, or good marketing programme, however, such objectives pursued by a lot of other players, that makes these factors competitive. Sometimes the result of the breakthrough can be something that is not directly linked to the research. Such events that fall outside the scope of science can be, for example, a market liberalization process, i.e. the legislative activity of a state aimed at doing away with and preventing market monopolies that make smaller actors interested in pursuing innovation activities and will thus facilitate the market success of new, innovative products and services (Pinter, 2008: 99). This is very similar to the media liberalization in the EU in 1990s, that can be regarded as the perfect example of the innovation without conscious science effect on it.

Good analysis of the EU competition policy can be found in Luis Martos (2008) article. Even though the policy aspect is not the primary issue in this research, main points still must be presented in order to understand the logic behind the competition rules in Europe, since this rules applied in same way for the IS sector. Overall, there are 5 five areas of action of the competition policy in the EU: suppression of the restrictive agreements of the competition and abuse of dominant position; the control of the aid granted by the states; the liberalization of the economic sectors under monopoly; merger control between companies and international cooperation (Martos, 2008: 4). Common market is an importance issue, if one wants to follow the logic of Martos. In this sense the EU is a unique structure, since it established the common market which is not available in any other union of the world. In relation to the common internal market, the EC itself points out that the best guarantee for the increased efficiency and the innovative potential of European companies is that the domestic market is open and competitive. Therefore, says the Commission, vigorous competition is a key factor for competitiveness and economic growth (EC, 2004: 2). As stated by the EC (2004: 3), the system of economic governance of the EU itself is based on the “principle of an open and free competition market economy “. Acknowledging this, Martos makes several arguments that can be essential to understand the competition policy: firstly, he says, a dynamic internal market improves the competitiveness of European companies and favors its success in the global economy. This is done so, for an open and competitive market force companies to carry out innovative strategies to improve the quality and downward pressure on prices (Martos, 2009: 3). Another point is that European competition policy contributes to both consumers and business interests in the processes of mergers. These processes are justified by the need to

strengthen cooperation and to adjust the size of the companies to the global scale in which they operate. The concentration limits competition while it can offer benefits through improvements in efficiency (Martos, 2009: 3). The challenges that author recognizes in respect to European competition policy, mostly touch upon the scale on the Union, namely the issue on the national and international level. Cases that the EC can deal with become more complicated on the regional level since there are different national legislation and different institutional frameworks that configure competition authorities in each region. Moreover, challenge that exist on the national level only increases with the new enlargements, since there are some countries that carry the process of transition from planned economies to market economies, which determines that these countries have a poor culture of competition (Martos, 2009: 14). Effective mechanism of coordination would therefore be required.

Broadband penetration differences are well examined in the Bouckaert et al (2010) article, where it is shown to what extent different forms of regulated competition results in penetration gap. Among 3 regulatory policies: (1)inter-platform competition; (2)facilities-based intra-platform competition; and(3)service-based intra-platform competition it is shown that the inter-platform competition has been a main driver for broadband penetration (Bouckaert et al, 2010). Inter-platform competition is not dependent on access regulation, but instead results from rivalry between multiple infrastructures in a country, for examples, platform such as cable or wireless. Differences in regulatory policies seem to have played a crucial role for the broadband penetration divide. Countries that promoted competition between different platforms have done significantly better. In contrast, countries that mainly promoted service-based intra platform competition on the incumbent's network have on an average done worse (Bouckaert et al, 2010: 671). Such factor as population density appears to have a positive effect on penetration and population dispersion has a negative effect. This is consistent with expectations, since investment costs tend to be lower in countries with a high population density and low population dispersion (Bouckaert et al, 2010: 668).

Need for staying competitive in the global world is stated clearly by the Commissioner for the Digital Agenda, Neelie Kroes in her speech (Neelie Kroes, 2012d) on the Digital Agenda Assembly that was held in July 2012. Commissioner said that the European digital technology must be kept competitive. She said that she believes that Europe have what it takes to remain a

competitive on global scale and that the "ICT Competitiveness week" will take place in September to look at how the authorities and the ICT community can find the best competitiveness and innovation strategy for ICT sub-sectors.

5. METHODOLOGY

This master thesis is based on two approaches: interpretations of publicly available EU policy documents and interviews conducted with representative from the EU authorities. My research has a two - folded structure: firstly I do the content analysis of the concept of competition in official EU documents simply by counting the number of references to concept of competition and competitiveness and making a conclusion on the appeared data\numbers as to importance of it for the development of European Information Society. Such interpretation includes oral statements of the EC representatives, Directives, Communications from the EC and various outcome documents. The material used in the theoretical part of this thesis also includes official documents of the EU in various areas with regards to its information society policies. These are the primary sources. I will do the conclusion of importance of the concept of competition for the IS in the EU based on data collected from the primary text sources and interviews. Secondary sources are academic materials written about the EU's information society policies, competition, digital divide, as well as articles published in scientific journals dedicated to IS. I use secondary sources to link the concept of competition and information society to show the impact of one on another. Second method that I use to answer my research questions is interviews. Alternative channel of information, in my case – the interviews, is a good way to confirm or falsify the assumption about the role of competition and its impact of digital divide. Moreover, the good reason to involve interview as the method of the research is to help avoiding being fully dependent on the official EU documents and thus having another source of reference. In June 2012 I conducted a few interviews with the representatives of the DG INFSO of the European Commission as well as with the representatives of some stakeholders. These interviews were very valuable for my research since I was able to get an opinion of people directly working in the field of the IS development in the EU. It is important to note that the information gathered in the interviews is based on the subjective experience and not necessary represent the reality. While highlighting some unknown points it also puts some limits since different interviewees engaged with different tasks and represent different sides of interest. Importance of interviews, despite their low number, can be explained in the way, that the interviewees are the people who directly involved in policy making in the EU at the supranational level in Brussels. This people know the problem from the “inside” and can shed light on points that are not presented in the primary sources.

Several aspects are important to bear in mind, when it comes to evaluating the interviews. First of all, the structure of the interview and the construction of the question have to be considered when planning the interview. Ideally, the structure of the interview should not create any constraints for the respondents or affect their answers. However, since I have a concrete assumption about the role of the competition on the European Information Society, my questions directed on highlighting this point. Even though my question were designed in order to inquire particular information, they did not implied concrete answer and the interviews were held in the open way that allowed broad answers and descriptions. An audio recorder was used during the interview that allowed coming back to the material after the interview was finished and to double check the statements.

6. ANALYSIS I

In previous chapter I provided the background for the reader to understand the concept of competition and how the relevant policy is used in the EU. Coming to the analytical part of my work, it is needed to say that I will structure it as follows: firstly I will analyze the concept of competition how it is presented in the official EU documents. I will start from the Bangemann report that was issued by the EC in 1994 and will finish with the Digital Agenda for Europe, therefore analyzing all the main “pillar” documents that were aimed on building the information society in the EU. In addition, the data from the various position papers and background analysis will be presented. I will make a content analysis and compare the finding for other relevant words, which would allow me to make a conclusion of the discourse created by the EC as to the importance of the competition for driving the progress of the IS in the EU. Moreover I will present the results of the interview to back up my assumption. In second part of the analysis, which will be presented in the following chapter, I will try to show how does the competition impact the digital divide and see if it is the factor that creates the divide, or on contrary, help to narrow it.

The first document to be analyzed is the Recommendations to the European Council better known as the Bangemann Report, presented in 1994 (EC, 1994a). Concept of competition mentioned 20 times through the document. It is recognized as the key element in for the emergence of new markets (EC, 1994a: 12). Competition policy seen a key element in EU strategy that is especially important for consolidating the single market and for attracting the private capital necessary for the growth of the trans-European information infrastructure (EC, 1994a: 20). In comparison, in the White Paper on growth, competitiveness, employment: the challenges and ways forward into the 21st century, better known as “Delors White Paper” which was aimed at media and telecom sector liberalization, competition concept appears 73 times (EC, 1993). However, it is mostly aimed at internal EU policy as an instrument to unleash the market, and for that reason the Bangemann report can be considered the first document that recognizes the role of international competition.

Next big document is the “Europe’s way to the information society: An action plan” (EC, 1994b). Concept of competition appears only 9 times in the text, however the EC states that “The competition rules support a positive contribution to the achievement of the information

society, and the Commission will apply these rules taking into account the reality of the newly emerging global markets and the rapid speed of change” (EC, 1994b: 8). This statement shows that the EC acknowledges the impact competition has for the development of the information society in the EU as well as global challenges.

In the Communication entitled “The Implications of the Information Society for European Union Policies - Preparing the next steps” competition appears 16 times (EC, 1996). This is not the primary, “pillar document”, however it is important since it implies the “next steps” part which is already visible in the title of the document. Already, back in 1996, it recognizes the information society aspect as the one that has moved to the top of the EU political agenda. Two issues can be highlighted from this document: firstly, increased competitiveness is seen as the chance to improve the employment situation. Secondly, and more importantly in our case, ICTs are seen as the crucial factor to the future competitiveness of all industries, commerce and services (e.g. in the design and manufacture of products, in the products themselves and in the business processes) (EC, 1996: 5). Another document, that was not primary for the development of the information society in the EU is the Green Paper entitled Convergence of the telecommunications, media and information technology sectors (EC, 1997). One may consider it as being not primary since it mostly focuses on the issue of the liberalization of the media sector in the EU. With this Green Paper EU wanted to standardize regulations in telecommunications and media sectors and narrow down the gap with US. This document, together with Bangemann report and Delors White Paper, being issued in the 1990s, had mostly the economic objectives. That explains why the competition and competitiveness issues arise 98 times – the highest number found in the analyzed documents. Overall, mentioned 3 documents have the biggest number of competition concept appearance, which can be explained by the merely economic nature of these documents. The shift to more social aspects will start to be visible in the following policy documents. Some of these documents got a portion of criticism from the theorists because of their economic origin. For example, Laszlo Karvalics argues in his article (Karvalics in Pinter, 2008: 32) that the EU’s political practice interpreted and used the concept of information society in a way that was completely alien to its meaning almost declaring that the liberalization of telecommunications was equal to information society itself.

Next document is the one that set so called “Lisbon objectives” to make Europe “the most competitive knowledge-based society”, was entitled “eEurope, An Information Society for All” that was presented for the Special European Council of Lisbon in 2000. Competition context arises 8 times. Spread of the Internet through the infrastructure establishment and cheap access is recognized as one of the main priorities in the document and the EUs competitiveness is directly linked to it: “industry-wide cooperation is required to accelerate the establishment of a competitive “trust” infrastructure for the Internet” (EC, 2000: 11).

Just 3 months after the European Council in Lisbon, Feira European Council took place, where EC and introduced the eEurope 2002: An Information Society for All Action Plan. Competition concept arises 20 times in the 30 pages document. Cheaper and faster Internet recognized as the main objective of the Action Plan. Significant reductions in Internet access tariffs towards the lowest levels in the world must be facilitated by reinforcing competition and clear benchmarking at European and national level (EC, 200: 8). Overall, cheap, fast and secure Internet must be provided as the result of application of variety of competition rules.

Communication from the Commission to the Council and the European Parliament: eEurope 2002 Impact and Priorities was released next year to show the impact of eEurope on EU society. Even though the competition term is visible only 5 times, EC recognize the need to face global competition in the area of ICT at the all levels of EU - community, national, regional and local (EC, 2001a: 10).

In June 2001, a co-operative effort to implement the Information Society in Europe was presented, entitled eEurope 2003+ Action Plan. Competition concept appears 13 times. Like eEurope, the eEurope+ Action Plan aimed to accelerate reform and modernisation of the economies in the candidate countries, encourage capacity, institution building and to improve overall competitiveness (EU, 2001b: 2). Part of title “+” refers to the candidate countries in 2001 which were going to become the Member States, and overall actions of the new Action Plan was aimed at bringing IS to these countries and make sure that the whole of Europe becomes “the most competitive and dynamic knowledge-based economy in the world”, and not only a part of it.

Next big document was presented in June 2002 in the view of the Sevilla European Council. It was eEurope 2005: An information society for all An Action. Competition and competitiveness together mentioned 16 times. It states in the document that the policy measures must be taken to review and adapt legislation at national and European level, to strengthen competition and interoperability, to create awareness, and to demonstrate political leadership (EC, 2002: 9). Dynamic e-business environment is also recognized as an important element in increasing the competitiveness of European enterprises and raising productivity and growth (EC, 2002: 14). Most importantly, in broadband sector, competition is expected to drive investment, generate innovation and lower prices. Therefore, public policy should focus on issues where competition is not effective or where political objectives, e.g. territorial coverage with a view to cohesion, need to be ensured (EC, 2002: 17).

In June 2005, Viviane Reding became the Commissioner for information society and announced a new policy document "i2010: European Information Society for Growth and Employment". This small 12 pages document rises the concept of competition 12 times – approximately once at every page. At this stage, the differences in economic performances between industrialised countries are largely explained by the level of ICT investment, research, and use, and by the competitiveness of information society. Document promotes an open and competitive digital economy and emphasises ICT as a driver of inclusion and quality of life. (EC, 2005: 3). For the first time, the building up of the Single European Information Space is stated. It recognizes the importance of investment in ICT research in order to assure Europe's international competitiveness (EC, 2005: 7). Several important documents have been lunched as the part of i2010 objectives to strengthen Europe's position in ICT, such as: the Seventh Research Framework Programme (FP7) and the Competitiveness and Innovation Programme (CIP).

In 2009 Neelie Kroes changed Viviane Reding on the post of the Commissioner for the information society and proposed the new policy document: A Digital Agenda for Europe (DAE). DAE is a new type of policy document, if one compares it with eEurope or i2010 programme. New Commissioner means a new vision. Moreover, DAE is being implemented right now, so we can ourselves judge on its priorities and targets. Distinctively, the concept of competition and competitiveness together mentioned 40 times in the document, which is the

highest number during the last decade. The overall aim of the Digital Agenda is to deliver sustainable economic and social benefits from a digital single market based on fast and ultra-fast internet and interoperable applications (EC, 2010: 3). One of the main problems seen for the EU is the fragmented single market that is stifling Europe's competitiveness in the digital economy (EC, 2010: 8). Commission recognizes the future economy as a network-based knowledge economy with the internet at its center. Therefore, there is a need in widely available and competitively-priced fast and ultra-fast internet access (EC, 2010: 20).

From the above presented information, one may see that the competition and competitiveness is highlighted as distinctively important factor for the development of information society in the EU and overall growth and innovation. Two concepts mentioned above represent the internal and external key factors for European prosperity. Firstly, competition as the regulation tool is seen as a key for the internal European single market. In most of the documents it is regarded as the tool to unleash the market, make companies innovate and be competitive in the international arena. Competitiveness, on the other hand, is what drives the European progress and growth. The need to be competitive in the international scale is what initiates the move towards the information society in the EU – the society of the future that is being built now. Good overview of the most frequently mentioned concepts in the EU policy documents is presented in the Concetta, M.S. et al. (2006). Authors compare 3 documents of the eEurope group: eEurope Initiative 2000, eEurope Action Plan 2002 and eEurope Action Plan 2005. Most frequently mentioned words appear to be: European, eEurope, services, Internet, public, information, Commission. First two concepts do not need an explanation, together with the “Commission”. And for those who “services” and “Internet” may seem challenging, from my point of view I would put it in different basket, when considering “competition”. This opinion comes from the different logics that are beyond these aspects: services and Internet are interconnected concepts, because the later enable the former, however this issues is seen as the outcomes and the final result. Competition, on the other hand, is the need and logic behind the process, which leads to the development of ICTs, namely the Internet, which provide different types of services.

The role of the competition as the one of the key factors behind the IS progress in the EU is also recognized by the two interviewees – representative of the lobby, namely Vincent Sneed

and the representative of the DG CONNECT, Fred - Arne Odegaard (see Appendix I). Mr. Sneed gave an example of the telecom sector, saying that: “Since the end of the eighties, the EU has developed a systematical fight against monopolies on fixed and mobile telephony, internet and any other means of communication imaginable. This has enabled EU citizens with cheap, reliable, fast and easy access to mobile networks”(see Appendix I). Example of such initiative is the above mentioned Green Paper on Convergence of the telecommunications, media and information technology sectors.

Interviewee from the DG CONNECT also agreed on the key role of the competition. He also mentioned that competition, however, not always works (meaning the policy regulations), because sometimes the demand is not big enough (reasons for that may be the different aspects, but it can also be a result of the digital divide). For this kind of situations, structural funds, programmes (such as Connecting Europe Facility, for example) and governmental initiatives are created to help in the regions where the demand for the IS is lower. The list of such initiatives can be found in Stajano (2009: 36), which includes: education, lifelong learning, research and technological development, standardization, innovation, technology transfer, facilitating the access to financing, taxation, public spending, infrastructures, and the regulatory framework.

7. ANALYSIS II

This chapter presents my secondary analysis, which is aimed to show how the competition factor in the European Information Society and the need for competitiveness influences the digital divide. There are some limitations that have to be highlighted at this point: the linking on these two concepts, such as competition and digital divide may cause some problems for the researcher because these processes do not have direct influence on each other. They are a part of one logic, which is in my case – the European Information Society, and both play a certain role in its development, or in case of divide – become the outcome of the process. But being the part of one system, they however, do not linked and direct impact of one concept on another is not presented on the surface. I believe that the indirect impact of competition on digital divide can be seen and analyzed. The methods of such analysis therefore will be the interpretation of the literature on competition and digital divide provided above, as well as the results of the interview.

Firstly, I would prefer to start from the negative consequences of the competition and need for competitiveness on digital divide as seen by the author. Since the indirect impact is in focus, let's first of all take into account the nature of the decision making process in the EU. I believe that it is reasonable step to link such concepts as competition and decision making process since both are mutually reinforcing and sustaining each other. Competition between market players that creates growth and innovation and need for competitiveness is what motivates and creates such logic of decision making process that exist in the EU – namely the co-decision process, presented in chapter 4. I argue that the nature of such process results to some extend on digital divide. My position is backed with the thoughts of such authors as: Müngersdorff (2009) and Nihoul (2002). The most important thing that the reader should bear in mind while following such logic is that the need for the IS in the EU, the competitive strategies and the objective to stay competitive is formed on the supranational level of the EU, by such institutions as the EC, EP and the Council. However the implementation of the strategies, the innovation process is left to the MS, which in practice has much more trouble to implement Directives and Regulations from the EC then it is seen in theory. The logic of the decision making processes on both levels has been mentioned above, but some key aspects has to be reminded. Even though the co-decision making process in the result of long evolution and

represent the democratic approach, national interests still prevail, and this is seen in the work of the Council, as shown by the Müngersdorff (2009). Thus, the common decision that I made on the supranational level has different impact and needs for implementation in different MS, since they are by the nature begin the negotiations at the different level of the development of such crucial for the creation of IS aspects as infrastructure, spread of ICTs and skillful users.

Secondly, the indirect negative impact of competition on digital divide can be seen in the logic of competition itself. While competing, whether during the Olympic games or in the ICTs industry, there is always a winner and a loser. And there is always an outcomes, be so the medal, or the innovation and growth in our case. More industrialized and modern in respect to spread of ICTs Northern European countries are more competitive in the global market than their Southern colleges. The reasons for such divide have been mentioned above, referring to Dang & Jolles (2005) and Henten & Kristensen (2000). The main factors are: available infrastructure, relevant skills and willingness to use the ICTs, different trajectories in applying the IS strategies and what is most importantly – the level of the welfare in the MS. Stajano (2009: 241) states in his book that “the transformation of companies does not simply imply providing each desk with an interconnected personal computer. In order to get the most from the use of ICTs, it is necessary to reorganize the whole company according to a new strategy that will transform the production cycle and the relationships both within the enterprise and with its customers and that will increase the quality of products and services. Otherwise, the company will face failure and bankruptcy”. Applying such logic to the wider perspective within the EU, the losers of the competition, namely the MS that cannot apply the set standards designed in the Regulations and Directives of the EC, facing problems for themselves in grasping the opportunities that such technologies brings, and one the other hand – to the EU in its competitiveness position in the global market.

The positive impacts of competition on digital divide can be understood when analyzing the results of the interview with the representative from the EC - Fred-Arne Odegaard. It was hard for him to answer the question on the impact of the competition on the digital divide, however indirectly his response can have a value as explaining this logic. He said that the competition enables competitiveness, growth and progress in the information society. This results in such programmes as DAE, which take actions in order to prevent the digital divide between MS and

between people in Europe. Such actions include initiative on long life learning, spreading awareness about the opportunities that ICTs brings, making people ICT skillful. Therefore competition as the key driver behind the IS can be seen as the one that contributes to solving the digital divide problems.

8. CONCLUSION

Now it is the time to show all the main finding and make conclusions. What has been described above – is the development of the European Information Society and its elements. Reader can see how the concept was used by the famous theorists in social science and how it is used in daily practice by policymakers in Brussels. Content analysis of the EU policy documents in information society field together with the results of the interviews show the importance of the competition for the development of the Information Society in the EU. In all documents, starting from the 1994 Benngemman report and up till nowadays programme DAE, the competition concept together with the need for competitiveness, not only present in all documents, but appears to be one of the key factor that enables growth and innovation in Europe. Discourse created by the authorities allows me therefore to make a conclusion that such concept can be regarded as the key factor that stimulates the development of the European Information Society. My secondary research was aimed at showing the influence of the competition in the information society on digital divide. Since it is not directly connected concepts, it is hard to establish the influence of one at another. However the negative indirect impact can be seen in two ways: firstly, by the nature of the decision making process, which calls for the competitiveness on the supranational level but lefts the implementation to the MS. And since different MS simply have different trajectories towards the information society – their position appears to be unequal, therefore causing the divide. Secondary, the nature of the competition itself already imply the winners and the losers. In such situation, MS with the lover income, less developed infrastructure and skillful users appear to be in the downside of the digital gap. On the other hand, competition can be regarded as the factor that helps to bridge the divide, since fallowing the logic of competitiveness and competition, EC comes to such policy documents as DAE which take actions in order to prevent the digital divide between MS and between people in Europe. Moreover, DAE in general recognized by the officials as the crucial component of a growth strategy which sets out concrete steps whereby ICTs can enhance productivity and innovation capacity, as well as generate new business opportunities and jobs. The contribution of ICT is significant as recently ICTs have contributed around half of the growth in EU productivity and will remain a critical factor in future growth (EC, 2011).

Another important element that has to be highlighted in the conclusion is the challenges that the EU is facing and possible ways to overcome them. Main barriers for the development of the European Information society are mentioned before digital divide and fragmented digital market. Fragmentation is recognized as a crucial factor that slows down the competitiveness and possibilities for growth by the representative of the EC, Fred – Arne Odegaard in the conducted interview, as well as in the number of policy documents analyzed in the main part of this thesis. There are two main factors that must be considered while dealing with the digital divide: infrastructure and digital skills. In order for the EU to maintain its share in the global market, it must invest in education, training, lifelong learning, diffusion of ICTs and improvement of ICT infrastructure. Standardization on the other is needed in order to have one set of rules for enterprises, who appears to be the main actors involved in competition. It would create one single information space that would enhance productivity and growth.

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APPENDIX I

Table 1: List of interviewees

Interviewee	Organization	Place and Date	Length (Approx.)
Fred-Arne Odegaard	European Commission (DG INFSO)	Brussels, June 23, 2012	45 min.
Rosa Barcelo	European Commission (DG INFSO)	Brussels, June 24, 2012	20 min.
Vincent Sneed	AER – Association of European Radios	Brussels, June 24, 2012	20 min.

Questions that were asked during the interviews:

- 1) Opening question about conceptual shift. When Viviane Reding was the Commissioner responsible for Information Society and Media, her eEurope 2005 programme was called "An Information Society for all". When Neelie Kroes replaced Mme Reding, she presented her programme: the "Digital Agenda for Europe". Moreover, from the 1st of July 2012 the INFSO DG of the European Commission will be renamed DG CONNECT. Is such a shift just a matter of naming things, or is it a conceptual change? Does it change the priorities of the development of the information society in the EU? Why do you think such shift tacking place?
- 2) The decision making process in the EU is a well-known process (proposal from the European Commission transmitted to the European Parliament and the Council of the EU for Adoption). However the actions taking place before the European Commission proposal are less identifiable. Could you describe the decision making process as applied to the Information Society policy priorities (programme, for example the Digital Agenda) in the EU before the European Commission proposal? Where is the demand for such priorities/goals coming from? Where does the need for come from? Who are the main actors involved?

3) What is the role of competition in the development of the information society (ICT (Information and communications technology) policies, information society programmes (since 1994 and the Bangemann report) in the EU?

4) Would you agree that competition is the leading factor that defines the information society policy priorities (defines the development of Information and communications technologies) in the EU. Why? Why not?

5) Competition and digital divide. Would you agree that competition as related to the progress of information and communications technologies in the EU is one of the main factors that creates the digital divide in the EU? Or does it, on the contrary, help to develop information society bringing growth and innovation to the people in the EU? Maybe it has an impact on both processes?

Interviewee # 1: **Vincent Sneed (Association of European Radios)**

Question #1:

I think that there are some points to be considered: firstly, regarding the Digital Agenda for Europe name of the Commissioner's portfolio - this might be related:

to the current world economy crisis: Ms. Kroes has received a very important and horizontal portfolio. To put it simply, if she succeeds with the targets she has set for the Digital Agenda for Europe, it should be a central point to enable the EU to overcome the crisis. Or, at least, this is what she wants to show.

to previous difficulties that Ms. Reding (former Commissioner for Information Society and Media) with some files that she would have liked to put forward regarding the development of content online (such as Europeana where she had problems due to the copyright aspect of this file). So with a more "horizontal" approach, Ms. Kroes might be able to overcome some of the difficulties that Ms. Reding had encountered

Second, regarding DG CONNECT: the explanations given for the shift in the name of the portfolio might also partly explain the shift in the name of the DG. Moreover, the focus on

media and promotion of content seems to be fading. It could mean that the development of the infrastructure (broadband) per se is more important than the development of the content supported by this infrastructure which actually spurs people's interest for the infrastructure. But this is of course only my personal impression.

Question #2:

As a lobbyist, what I have observed is the following:

- a proposal for a regulatory instrument from the European Commission is the result of a very long reflection process
- of course, pressure can be exerted by lobbies for or against specific proposals, but there is always an impact assessment, a consultation of as many stakeholders as possible

Pressure coming from the European Parliament seems to have great impact - depending on the field.

However, the high level direction is usually given by (and I would say in this order):

- the European Council (that is heads of States and of governments)
- the programme presented by the Commission and by each Commissioner at the beginning of its mandate
- the Presidency

Currently, the main goal is to get out of the world / European economic / financial crisis. One of the main solutions is more austerity and more growth.

Question #3:

I am not too sure of how to reply to this question, but I can give you one obvious example: the telecom sector. Since the end of the eighties, the EU has developed a systematical fight against monopolies on fixed and mobile telephony, internet and any other means of communication imaginable. This has enabled EU citizens with cheap, reliable, fast and easy access to mobile networks (and less so to the internet - it depends on the country).

Question #5:

As mentioned before (question 3), I firmly believe that competition has enabled EU citizens to access the tools to develop the information society. However, there are various reasons why the information society (internet) is not "everywhere, for all": I think that in some cases it remains too expensive; besides, one cannot expect that everyone understands how these tools work, or, more importantly, is interested in it.

Interviewee # 2: **Fred - Arne Odegaard (EC, DG INFSO)**

The interview took a form of monolog where interviewee, knowing the questions, decided to shed the light in the aspects that he considered the most important. These aspects, however, were mostly relevant to the question.

“For eEurope 2002 main objective was to speed up the use and spread of the Internet. The focus was on how to get access to the Internet. After US lunched the “Super information highway” programme, EU issued the Bangemann report in 1994. Competition was an important factor to unleash the market. eEurope 2005 had an economic objectives, and aimed at increase the services on Internet, simply that people could purchase goods online”.

“i2010 was aimed at building the broader scope of services at the Internet, such as eGovernment, eSignature, etc. However when the i2010 finished the question came up what to do next. The Digital Europe strategy was needed”.

“If one analyses the productivity in US, it is visible that it was much higher than in the Europe. The explanation can be seen in how the US used the ICT. Europe could not spread the use of ICT and the fragmented digital market was the reason for that. Fragmented digital market means the lack of arrangement in charge of digital content across the EU and touches upon such issues as copyrights, TV, research, etc”.

“Creating true digital single market was a goal for many years now. And that what is needed. There are many barriers created by such aspects as the copyright law and collecting societies.

That is why the main challenge for Digital Agenda in comparison to the eEurope is to bring down the barriers”.

Question #1:

Yes, there is certain logic. It can be explained by the fact that the Internet certainly is the driving force behind the information society in the EU. There is also an organizational change: DG INFSO have 10 Directorates and 45 Units. Now there is a separate unit been created just for the broadband.

The use of ICT and broadband internet is very important for the job opportunities in Europe.

Question #4:

Yes, competition is the main driver. The demand for information society comes from the need to stay competitive in the international arena. On the other hand – competition does not always work. Sometimes the demand in MS is not big enough for the information society, so the competition does not help. In such situation when competition does not work, structural funds come in hand. Other programmes such as CEF (Connecting Europe Facility) also helpful: such instruments usually help in areas where competition does not work. Competition does not solve all the problems. You have to have other government initiatives in order to narrow the gap. There is also a competition on different levels. One is the international one, to be competitive and to catch up with other countries. Another is internal competition in the EU.

There are almost the same amounts of startups and entrepreneurships in the EU as in the US, but the small startups does not grow as well as in US. So the companies that want to grow – go to the US. And the reason for that is because Europe is still not a single market. Therefore, developing digital single market in Europe is important. Global competition need to be faced.

Question #5:

Actions have to be taken in order to prevent the digital divide between MS and between people in Europe. For that, Digital Agenda for Europe have an objective to teach people and to make them IT skillful. Therefore broadbands and skills are important.

Recently, there has been a high number of jobs created in the US for app development. So there is a demand for this kind of jobs in Europe. There are big amount of jobs are available for computer engineers, but there are 10 times less people who have the relevant degree and who can do this kind of jobs.

Question #2:

In Digital Agenda for Europe, there are hundreds of actions, but only 50% is the responsibility of the DG INFSO. Other DGs are also involved in the decision making, and half of the impact is made by them and external bodies. Also, many actions in Digital Agenda are the responsibility of the Member States.

Interviewee # 3: **Rosa Barcelo (EC, DG INFSO)**

Question #1:

Yes, there is a certain change. The units, for example my own, has been put together from now on with unit on Policy and Research. So now unites will cooperate closer with each other (with the unit on Research and Information Policy) which would allow broader monitoring field.

Question #2:

There are different aspects of decision making. If one considers the DG INFSO – the assistants of the heads of units are the masterminds. They are the one who is working with the small issues on the daily basis, and those who always aware of all changes in the field since they report to the heads of the units. Moreover, within the Unit, those people who closely follow particular file, for example on copyrights, or privacy issues, can be put in charge to develop the file. If they convince the policy officers and head of unit in the importance of the file, the process can go further. It is also important to consider that within the DG – there are two directions. One – is the Commissioner, who can imply political aspects in decision making, and sometimes such political issues matter. Other side – experts, functions on the EC, those who work on the file daily and independently from the political issues.