

Conceptualization of Emerging Legal Framework of E-Regulation in the European Union

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Abstract The article is focusing on emerging legal e-environment that comprises of legal acts regulating a field that can be administered by electronic means (eTechnology). The reasons behind various and sometimes overlapping and complex EU initiatives and agendas are analysed with the attempt to have an academic insight into the e-regulation and to establish a firm and more systematic approach for future studies in the field. The author maps the current situation, refers to the challenges related to e-regulation and discusses the need for characterising the e-legislation as a set of new type of rules. The stakeholders and e-identity, e-citizenship e.g. digital citizenship are discussed from the angle of e-regulation as a new qualitative level of EU law. It seems that today, some of the areas of e-regulation are well developed, and some of the areas still remain wishful thinking or are developing slowly in terms to be regulated electronically. The digitalization and e-regulation in terms of harmonization depend on the capacity of EU Member States in terms of electronic divide. Another challenge is the distinguishable nature of e-regulation normative status that should be taken in account when designing the new constitutional law and future for EU. As a conclusion and taking account of the interoperable nature of e-regulation, the author presents a list of policy stages that should be used when drafting and assessing EU level e-regulation.

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1 Preface: Competences of European Union in the Main Areas Related to eEurope

Digital Single Market: Articles 4(2)(a), 26, 27, 114 and 115 of the Treaty on the Functioning of the European Union (TFEU).

Digital agenda: Although Article 173 of the TFEU provides a legal basis for an EU industrial policy, the treaties do not contain any special provisions for ICT. However, the EU may undertake certain actions within the framework of sectoral and horizontal policies, such as competition policy (Articles 101–109 TFEU); trade policy (Articles 206–207 TFEU); trans-European networks (TENs) (Articles 170–172 TFEU); research and technological development, and space (Articles 179–190 TFEU); and the approximation of laws (Article 114 TFEU). Articles 28, 30, 34–35 (free movement of goods, including audio–visual products); Articles 45–66 (free movement of people, services and capital); Articles 65–166 (education, vocational training, youth and sport) and 167 (culture) TFEU are also key for a digital Europe.

Development and dissemination of ICT: The EU intends to promote the development and dissemination of new information and communication technologies (ICT), in accordance with Articles 179 to 180 of the TFEU.

Possible e-voting of European Parliament: TFEU art 223 (1)

2 “Wall of Text” Behind the E-Regulation: Initiatives and Agendas

The idea of building a digital knowledge-based information society was drafted into the eEurope action plan back in 1999, the main purpose of which was to make information technologies widespread across the EU, while promoting a socially cohesive, not divisive and integrated, not fragmented Union, or simply put—to bring Europe online.¹ The distinct features of the advantages of information society noticeable in all eEurope action plans as well as in the Digital Agenda stressed as endeavours for the EU can be seen as key features of why we can benefit from e-regulation² and digital market.³

¹ COM(1999) 687: Communication of 8 December 1999 on a Commission initiative for the special European Council of Lisbon, 23 and 24 March 2000—eEurope—An information society for all.

² E-regulation, in terms of this article means the legal act regulating a field that can be administered by electronic means.

³ Digital market is subdivided to many sub-areas. Beside e-invoicing, quite a recent initiative is e-procurement (strategy was elaborated only in 2012) which “refers to the use of electronic means by public sector organisations when buying supplies and services or when tendering public works”.

The first eEurope initiative introduced in 2000 sought to promote information society and encouraged to start taking advantage of what it had to offer in many aspects for the advancement of higher employment, growth and productivity.⁴ Europe was seen as having the potential, but it was not moving fast enough towards the digital age. The ten key objectives of the first action plan trying to improve the situation included among other things cheaper internet access, acceleration of e-commerce, e-participation for the disabled, healthcare online and government online. Given initiative, the first of this kind to promote the benefits of information society, aspired to carry “every citizen, home and school, every business and administration into the digital age and online,” or to the “new economy”, as the initiative referred to, while enhancing the digital literacy and promoting social inclusions as well as social cohesion.⁵

The eEurope action plan recognized that the uptake of internet usage in the United States at the time had led to direct creation of millions of new jobs and the endorsement of digital technologies to productivity growth and reduction in regulatory barriers. Even though the action plan saw Europe as a leading example in the mobile communications and digital TV, the uptake of the internet was relatively slow, and the public sector was not seen as enabling the development of online services at a pace it was expected. Therefore, first eEurope initiative sought to bring everyone online and to make the internet usage as commonplace as possible.

The importance of digital advantages was more emphasized in the succeeding initiative eEurope 2002,⁶ which, along with the upcoming eEurope initiatives, formed an integral part of the Lisbon strategy’s very ambitious plan “to become the most competitive and dynamic knowledge-based economy in the world capable of sustainable economic growth with more and better jobs and greater social cohesion.”⁷ In order to put the aforementioned ambition into practice, a comprehensive eEurope action plan was needed, which would combine the eEurope initiative, the communication *strategies for jobs in the information society* with coordination based on benchmarking the national initiatives. More concisely put, the eEurope 2002 focused on creation of a knowledge economy, an information society for all, so as to increase EU’s competitiveness, while as in the first initiative, the improvement of the employment situation and greater social cohesion were mentioned as crucial to the success of the knowledge-driven economy. eEurope 2002 further emphasized that the initiatives’ goals would go beyond Europe’s borders and contribute to the growth of a strong and proactive global policy in the information society.

⁴ To become familiar with the history of European Commission actions since 1980s in promoting a stimulation of the public sector to make its information available for re-use, see: Janssen and Dumortier (2003).

⁵ See COM (1999) 687: eEurope.

⁶ COM (2001) 140: Commission Communication of 13 March 2001 on eEurope 2002: Impact and Priorities A communication to the Spring European Council in Stockholm, 23–24 March 2001.

⁷ Lisbon European Council 23 and 24 March 2000. Presidency Conclusions. Accessible: http://www.europarl.europa.eu/summits/lis1_en.htm.

The *eEurope* 2002 aimed at developing internet connectivity throughout Europe and set three key objectives to be achieved by the end of the year 2002: firstly, to promote cheaper, faster and secure internet; secondly, to invest in people and skills; and third, to stimulate the use of internet. Since “closing the digital divide”⁸ between the Member States in terms of their digital development level was seen as one of the objectives, the initiative sought to develop a more equitable information society, providing similar development possibilities to all Member States. One obstacle that had emerged on the implementation of the goals introduced with *eEurope* was the fact that mere fragment of the actual potential of digital technologies was used even after the adoption of the first *eEurope* initiative.⁹ It was seen that the much needed lead of public sector and politicians in providing guidance in the field was deficient. Therefore, the new initiative also emphasized the importance of the public sector to set an example in the required adoption of new technologies, which had been mentioned as one of the causes of adoption in the previous action plan. Even though the *eEurope* 2002 Impact and Priorities Communication mentioned notable progresses in number of internet users and increase in the adaption of digital technologies, the efficiency gains of adapting to technology were seen as minimal, since the potential exploited was trivial, as in 2000, only 25 % of internet users had *accessed* government websites, 10 % had submitted any forms via public websites and 5 % did online shopping on a regular basis; thus the need to build up consumer confidence was seen.¹⁰

Accordingly, even though only half of workers were using computers in their workplace and less than 30 % of EU households were connected to the internet in 2000,¹¹ these numbers were on the rise and the focus shifted to the integration of internet to citizens’ everyday lives in order to increase the computer literacy in general. The *eEurope* 2002 initiative called the EU institutions and national public administrations to make an effort to embrace the benefits the information technology provides in order to create professional services for European citizens and business and to turn the use of internet-based services into an inescapable routine. The Commission further recommended to include activities that would encourage access to such services in every regional development plan. Such actions were deemed to be important as they were seen as both, tools for improving the transparency of the public administration, as well as tools aiming to engage the citizens in the digitalization process.¹²

Further, certain priority areas were revised within the *eEurope* 2002 framework. These were provided by the Stockholm European Council in order to strengthen

⁸ The digital divide is a concept generally defined as an inequality in access and use of information and communication technologies (ICTs) between individuals, households, businesses, geographic areas and countries, and reflects a number of differences between and within countries (OECD 2001).

⁹ See *eEurope* 2002. Impact and priorities. A communication to the spring European Council in Stockholm, 23–24 March 2001. COM (2001) 140 final, 13 March 2001. COM (2001).

¹⁰ *Ibid.*

¹¹ *Ibid.*

¹² *Ibid.*

the key activities of *eEurope* and they were formed taking into account the already established *eEurope* 2002 strategy paper, discussions in Council Working Group on Information Society Services and in cooperation with Member States as well as the Presidency.¹³ These priority areas were: adoption of regulatory framework for electronic communications, high-speed infrastructure (networks), e-Learning and e-Working skills (training of teachers, adapting school curricula, etc.), e-Commerce (implementation of the electronic signature and e-commerce Directives), e-inclusions, e-Government,¹⁴ Secure networks and mobile communications.¹⁵

The next initiative, *eEurope* 2005,¹⁶ was responsible for ensuring that information society applications and services would have increased participation by newly skilled citizens and businesses that were brought online as a result of *eEurope* 2002. The *eEurope* 2005 initiative's general objectives were endorsed by Seville European Council, where it was noted that the 2005 action plan would be "an important contribution to the Union's efforts to bring about a competitive, knowledge-based economy."¹⁷ Thus, as it still formed an essential part of the Lisbon strategy, the new initiative's overall aim was to acquire a positive impact on growth, productivity, employment and social cohesion by obtaining increased connectivity with upgraded access possibilities to higher quality services by a maximum number of citizens and businesses based on a secured broadband infrastructure.

Since the former initiative had had an objective to provide certain basic administrative services via internet, and by the third quarter of 2002, all Member States had been able to transfer at least some of the services online, it might be said that the main objective of *eEurope* 2002 was achieved.¹⁸ The new initiative hence stressed how the information society was to be seen as having gradually growing potential owing to new services, applications and other digital content accessible with multiplatform applications that were to open up economic and social opportunities improving market's productivity and thus society's quality of life if exploited fully. In addition to using a PC for access, *eEurope* 2005 proposed that other mediums, such as digital TV, third generation mobile telecommunications technology connections (3G) would make the usage of information and communication tools more attractive, especially when they were accessible via high-speed, continuous and secure broadband internet access.

¹³ Ibid.

¹⁴ The spelling of different e-solutions varies within different initiatives and strategy papers.

¹⁵ See COM (2001), *eEurope* 2002, Impact and Priorities.

¹⁶ COM(2002) 263: Communication of 28 May 2002 from the Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of the Regions—The *eEurope* 2005 action plan: an information society for everyone.

¹⁷ See Seville European Council Presidency Conclusions. Accessed 21 December 2013. http://www.consilium.europa.eu/ueDocs/cms_Data/docs/pressData/en/ec/72638.pdf.

¹⁸ See *eEurope* 2002 Final Report. Communication of 11 February 2003 from the Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of the Regions *eEurope* 2002 Final Report [COM(2003) 66 final Not published in the Official Journal].

Overall, *eEurope 2005* brought more focused ideas to the information society, as it pursued to provide modern online public services, such as actions on e-Government, e-Health, e-Learning and e-Business by the end of 2005. The initiative had two groups of actions. The first aimed at providing services, applications and content to the consumer, these included public services as well as e-Business services; while the second focus was on the broadband infrastructure, enabling of which was seen as a task for the private sector (to whom the community was to secure flexible legislative framework); moreover, as the number of internet users was still on rapid increase, yet the action plan saw the consumer as still somewhat suspicious towards the privacy and security matters, the enhancement of security was another focus point under the second group of actions. Similarly, to previous initiatives, *eEurope 2005* set forth certain key targets: connecting public administrations, schools and health care to broadband; providing interactive public services on multiple platforms, providing online health services; removal of obstacles to the deployment of broadband networks, review of legislation affecting e-Business; as well as creation of a Cyber Security Task Force. *eEurope 2005* also strived to bring Member States to work with the commission for the purpose of achieving the *eEurope* objectives as they were the same for all members; and this with a purpose of creating a commonly coordinated approach to information society issues, where the exchanging of experience, both from success and failures, would be promoted. The latter actions were combined under a MODINIS programme, with a purpose of analysing the effects of the information society to economic and societal aspects, to disseminate (good) practices, promote synergy between Member States and improvement of network and information security.¹⁹

As with *eEurope 2002*, reviews of the *eEurope 2005* goals²⁰ proved that the ambitions had been rather achievable. Among other things, the sought after expansion of broadband connections was a success as the number of connections almost doubled between 2002 and 2003; the initiative had set up an efficacious structure for creating a dialogue between countries at different level of the information society; moreover, certain new services, such as e-Government and e-Health enabled the Member States to work towards unified goals set by the initiative for common more successful market of digital services. Nevertheless, the expected private investment was not as high as expected. What is more, even though there was an increase in online purchasing and selling, majority of citizens were still afraid to

¹⁹ See Decision 2256/2003/EC of the European Parliament and of the Council of 17 November 2003 adopting a multiannual programme (2003–2005) for the monitoring of the *eEurope 2005* action plan, dissemination of good practices and the improvement of network and information security (MODINIS).

²⁰ See COM(2004) 108: Commission communication of 18 February 2004 “*eEurope 2005* mid-term review”; and COM (2009) 432: Communication from the Commission of 21 August 2009 to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions—Final Evaluation of the *eEurope 2005* Action Plan and of the multiannual programme (2003–2006) for the monitoring of *eEurope 2005* Action Plan, dissemination of good practices and the improvement of network and information security (Modinis) (Respectively the mid-term review and the review of *eEurope 2005* Action plan).

bargain online as the internet was not seen as providing secure basis for financial transactions. The MODINIS programme also received a positive assessment, although certain studies under the programme did not have the expected impact as they were not sufficiently distributed nor clear enough.²¹

Following the *eEurope* initiatives, as the midterm review of the Lisbon strategy had revealed that there had been certain shortcomings in the expected results, the European Commission introduced a new, more concisely drawn strategic framework, “i2010—A European Information Society for growth and employment,”²² which formed a part of the re-launched Lisbon strategy that had special focus on creation of a “fully inclusive information society based on widespread use of information and communication technologies (ICTs) in public services, SMEs and households.”²³ Since the leap to digital information society had increased swiftly over the preceding years, bringing traditional content—movies, music and other media services—to digital formats, and had encouraged the development of new digital services compatible with multiplatform devices, the “smarter, smaller, safer, faster, always connected and easier to use,” ICT was to be seen as a means of expected inclusion and digital reality pursued by the *e*-initiatives.²⁴

For that reason, as the digital information society had become a more tangible notion, the technological changes called for proactive policies for the Member States, which would foster the policy convergence for a more common set of regulatory framework in order to enhance the open and competitive political economy, which would aim to achieve the revised Lisbon Strategy goals. Herewith, the *i2010* initiative focused on ICT research and innovation, content industry development, the security of networks and information, as well as convergence and interoperability in order to establish a seamless information area via three priorities. Firstly, in order to achieve an open and competitive internal market without regulatory obstacles for information society and media, the *Single European Information Space* needed to be established, as it was already seen how intensely the ICT affected working conditions and social benefits of citizens and businesses: the *i2010* brought faster broadband, promotion of legal and economic certainty to encourage new services and online content, interoperable services with multiplatform access with minimized security risks. Secondly, for the promotion of growth and continuous delivery of new jobs in the information economy, it was seen that

²¹ See COM (2009) 432: Review of *eEurope* 2005 Action plan. Accessed 10 December 2013. <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2009:0432:FIN:EN:PDF>.

²² COM(2005) 229: Communication from the Commission of 1 June 2005 to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions entitled “i2010—A European Information Society for growth and employment”.

²³ Presidency conclusions of the Brussels European Council (2005): http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ec/84335.pdf.

²⁴ See COM(2005) 229: Communication from the Commission of 1 June 2005 to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions entitled “i2010—A European Information Society for growth and employment.”.

ICT needed more efficient *Innovation and Investment*; and thirdly, again to stimulate growth and employment issues, but in a way consistent with sustainable development, better public services and quality of life, an *Inclusive European Information Society* was to be created with ICT-enabled public services accessible by all and benefitting all.²⁵

The Commission's communication on the main achievements of the i2010 indicates that perhaps i2010 was the success story according to the previously set goals—by the end of the period, all Member States had ICT policies that were seen as contributors to national growth and employment sought by the initiative, the number of people online on a daily basis had increased to 56 % by 2008; Europe saw itself as the world leader in broadband internet, market penetration for mobile phones was 119 % in 2009; moreover, the 20 benchmarked public services available online had become more mainstream and approximately 70 % of the EU businesses used e-Government services. Nevertheless, even though the goals were achieved to certain extent, the rest of the world was still moving faster, Asia was seen as the leader in innovative wireless broadband, the USA had moved on to social networking and new interactive web, while EU was still trying to bring the rest 44 % of people online,²⁶—this data indicated that the ambitious Lisbon objectives were not achieved to extent expected.

As the Lisbon Strategy and its revision were depleted by the end of 2010, Europe 2020 with its newly formed Digital Agenda (DAE)²⁷ was introduced in May 2010, and it forms one of seven flagship initiatives contributing to the EU's smart, sustainable and inclusive growth. Given agenda, similarly to previous initiatives, has the general purpose of improving the economic situation and providing for sustainable market by delivering economic and social benefits and launching interoperable applications; however, the new digital society, based on technological developments, is expected to run on fast and ultra fast internet which would help to exploit ICT-enabled possibilities at EU and national levels. As the digital technologies have improved significantly and, according to the DAE, the digital economy is growing seven times faster than the rest of the economy, today's citizens and businesses ought to benefit from smart sustainable and inclusive growth more than ever before.

As a part of the Europe 2020 flagships, the Digital Agenda consists of 101 actions, which are divided into 7 pillars and the agenda has altogether 13 specific goals, such as having 50 % of the population by online, 20 % buying online cross-

²⁵ See COM (2005).

²⁶ See COM(2009) 390: Communication from the Commission to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions—Europe's Digital Competitiveness Report: main achievements of the i2010 strategy 2005–2009. Accessed 20 December 2013. <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2009:0390:FIN:EN:PDF>.

²⁷ COM(2010) 245: Communication from the Commission of 19 May 2010 to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions—A Digital Agenda for Europe. Accessed 25 November 2013. <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:0245:FIN:EN:HTML>.

border, 50 % using e-Government services and to have 75 % of the population online by 2015.²⁸ The DAE sets forth that the impact behind services moving to an online world, can, amongst other aspects, contribute to easier access to public services, better health care, cleaner environment and better environment for businesses, while such aspects will increase the overall quality of life. However, certain obstacles are hindering the full implementation of the DAE: for one thing, in order to create a platform for common set of e-regulation, a digital single market must be achieved; yet, the EU has fragmented national digital markets moving at their own pace towards digitalization without noteworthy interoperability. Moreover, with over 99.9 % of homes having access to broadband of varying quality, the number of people online is bigger than ever before, yet 22 % of European citizens had never used the internet by 2012.²⁹ Throughout the *eEurope* and *i2010* strategies, it was emphasized that as the full potential of the new technologies would be exploited, the sustainable and inclusive growth would be more tangible; nevertheless, even though the digital content is available in all Member States, regulatory barriers limit the free flow of e-services. What is more, the digital market might be said to face even more threats, such as the security questions were posed before, they are even more acute today, as malicious software distribution and online fraud has increased with the increase in use of online services. Hence, the aim of achieving a digital single market without regulatory barriers will not only be crucial for the success of the Digital Agenda, but is the only way of not failing that Europe 2020 initiative.

Overall, the key aspect of the e-regulation is information society with maximized utilization of online services for all, as introduced by *eEurope* in 1999 and still ongoing with the Digital Agenda. Since the 15-year-old *eEurope* can be marked as the threshold of today's Digital Agenda forming part of the Europe 2020 with the objective of exploiting ICT in order to enable the progress of the digital single market offering economic and social benefits to both citizens and businesses for smart and sustainable growth in a borderless digital environment, it seems that certain key aspects need to be reconsidered whether similar goals need to be set with each initiative without any of them proving to be thoroughly successful—today, we have most of the Europe online, yet we still do not have a socially inclusive and fully integrated digital market. The initiatives and agendas despite of good intentions behind have created a “wall of text” for those who should get benefited, also for lawyers who should try to predict which part of the “soft law” is relevant in interpreting *de lege lata* and *de lege ferenda*.

²⁸ Digital Agenda for Europe. A Europe 2020 Initiative. Our Goals. Accessed 25 November 2013. <http://ec.europa.eu/digital-agenda/en/our-goals>.

²⁹ Digital Single Market Online Content 2013 Data. *Internet and Skills*. Accessed 25 November 2013. <https://ec.europa.eu/digital-agenda/sites/digital-agenda/files/DAE%20SCOREBOARD%202013%20-%203-INTERNET%20USE%20AND%20SKILLS.pdf> Ecommerce Europe. Available at: <http://www.ecommerce-europe.eu/home>.

3 Unshaped Legal Framework of E-Regulation in Europe

There are several fields that the European Union wants to and ought to regulate by electronic means. There are countless strategies and legal acts that would enable the creation of electronic recognition systems, e-services and e-registers across Europe. The justification or appetite is usually deriving from the concept of digital market. As de Andrade puts it, “Electronic Identity (eID) is the backbone of modern communications and transactions in the digital world, as well as a key driver for the growth of the EU economy and the completion of the digital single market.”³⁰ It is important to emphasize that the EU does have the necessary technology to fulfil the visions of e-regulation; however, it must be noted that the legal space is not ready to support these initiatives. Hence, the following section concentrates on legal challenges and maps the current situation in the field of electronic identity for Europe, as well as emphasizes the common principles related to legal regulation of electronic identity and focuses on the problems in differentiated regulation fields so as to shed some light on those challenges.

The idea of effective e-regulation is not a straightforward goal due to numerous reasons. To begin with, there are many fields that the EU wants to regulate electronically and even though some of those fields can be seen as interlinked, some are more advanced in terms of electronic regulation, while others are simply rather ambitious visions. The capacity and experience of Member States varies noticeably from country to country; for instance, the ID legal framework is a part of citizens’ everyday life in some countries, whereas other countries remain unaware of the possibilities that the application of e-services can provide³¹; therefore it is still quite disputable how the Member States who have different expectations, different administration systems that do not overlap with EU visions of e-governance, could be able to focus on a unified European eID framework. Moreover, it is very difficult to systematize the e-regulation field because of different viewpoints: some authors propose an electronic identity to be the keyword for Europe [e-identification and e-authentication, e-signatures, a full scale common European electronic Identity Management (eIDM) system, European Information Society (EIS)]³²; others emphasize the digital single market as the platform for further electronic regulation; and some authors are stressing that the basis of “e-revolution” can only be achieved with supporting the technological operational systems. The challenge has been and will remain that of Member States’ governments giving away certain control over their national high-technology markets in order to be competitive in a globalized digital economy as a single market.³³ However, the one aspect that all authors and strategists agree upon is the importance of competitiveness for Europe in the global economy.

³⁰ De Andrade (2013).

³¹ There can be very specific problems that are derived from the specific domestic legal system, such as the field of public procurement. See for example, Poremska (2010, 2012).

³² Please see 2015: A connected and diversified Europe. eIDM Vision Paper. Accessed 27 November 2013. http://www.rand.org/content/dam/rand/pubs/technical_reports/2009/RAND_TR513.pdf.

³³ Shahin and Finger (2009).

Another challenge in seeing a bright future for the EU in e-regulation is the multilevel construction of it. Schartum calls it “interoperability,”³⁴ which means that e-regulation system consists of four different layers: technological, semantic, organizational, legal and political. A source of law has been a qualitative label for the legal norm for contemporary lawyers over the centuries. By Lamond, “[c]ontrary to Austin’s conception of law, where all laws necessarily had one source (the sovereign), there can be separate sources.”³⁵ One may claim that, first, the sovereign in the EU (e) decision-making process should be more widely defined; and secondly, these differentiated layers oppose the traditional law making. Schartum³⁶ brings forth the core problem which is the identification of the source of e-legal norm. It can be at least presumed that the relative slowness of achieving the e-EU is caused by the fact that many of the norms are rather inspired by other layers than the ones related to legal traditions. What is the *grundnorm* or legal principle that forms the basis for the creation of e-regulation? As there is no clear answer, one may see the potential threat for the so far relatively well-functioning and efficient legal system, at least from the point of view of lawyers. The problems are seen especially in the field of ICT sector where the lack of legal certainty is caused by fact that the rules are very case-specific³⁷ and do not always form the sustainable set of EU jurisprudence as a part of legal space.

One may claim that perhaps it is time for lawyers to leave the ivory tower and give up the traditional legal process of creating the legal norm. However, the legal definitions are traditionally different from technological and semantic notions. That is why, interdisciplinary thinking would become very serious challenge for the lawyers who see a “core characteristic of Europe’s integration project”³⁸ as reliance of law. However, presuming that e-revolution in the EU legal space is motivated by integrationist objectives, the paradigm suggested by Joerges and Weimer i.e. “a shift away from hierarchical regulation” preferring “soft, flexible, decentralized, and experimental regulatory techniques,”³⁹ should fit the challenges of EU e-regulation. The sanctity of legal norms should probably be revised when stepping to the new area of e-regulation. Dynamic, deliberative and inclusive process of norm-making does not mean denying the rule of law.⁴⁰ As the EU constitutional law is in transitional period, one of the elements in building up the new constitution for Europe (being federalist or not) should take into account the special characteristics of e-regulation. De Visser, trying to find the common features

³⁴ Schartum (2011).

³⁵ Lamond (2013).

³⁶ Legal definitions and semantic interoperability in electronic government.

³⁷ See presentation of Inge Graef at Interdisciplinary Centre for Law and ICT (ICRI) “Achieving interoperability in the absence of standards: a new policy under the Digital Agenda?” Accessed 25 November 2013. <http://www.eurocpr.org/data/2013/Graef.pdf>.

³⁸ Joerges and Weimer (2014).

³⁹ Ibid, p. 303.

⁴⁰ Kerikmäe (2010).

of constitutional review in Europe, refers to Hoffman-Rien, a former judge of the German *Bundesverfassungsgericht*, who said, “[a] constitution is a nation’s autobiography,”⁴¹ constitutional conformity of the EU would be closer to perfect when taking into account the special characteristics of e-regulation. Therefore, the e-regulation should, despite of its innovative nature and despite of the fact that the efficiency of establishing supportive legal framework for e-regulation is an unavoidable tool to win the race of competitiveness with other big economies in the world, clearly be linked with the constitutional law of the European Union.

3.1 *Electronic Identity for Stakeholders*

In addition to the abovementioned, one of the crucial problems is related to the variety of stakeholders seeking to gain certain control in the e-regulation field (citizens, businessmen, service providers, data processors, Member States’ governments, the EU itself), since it brings an obstacle for having a homogeneous view on the EU’s electronic future due to the growing concern over privacy, which can be undermined by large number of stakeholders. Moreover, the structure of EU legal norms does not facilitate having an efficient e-regulation framework for the benefit of the consumer. For that purpose, a crucial principle emphasized by several authors is a rather recent phenomenon of user-centricity.⁴² This principle of prioritising the end-user of the services is not clearly visible as different strategies of the EU rather emphasize the dimensions of e-regulation (research development, standards) that are not sufficiently linked with the consumer of the services.

E-governance is gradually gaining more popularity. Theorists of several disciplines are providing new concepts comparing different models and, in conclusion, strengthening the e-identity for governments, institutions and corporate enterprises. Identity assurance providers who have agreed upon the concept of e-governance are the “largest controllers of people’s identity—provision of credentials, identification, authentication, and authorization.”⁴³ Hoikkanen, Bacigalupo, etc., are proposing e-Identity as a new legal category. They argue that the new type of e-identity should not be state-allocated, but rather a user-chosen identity. They claim that there must be a right to identity which is closely related to anonymity, pseudonymity and the right not to be misrepresented (privacy). Identity management systems should avoid collusive behaviours between different service providers when dealing with citizens’ personal data. The authors try to define main elements of the e-identity (a capital asset, public good, a cost) and foresee the main problem not in creating a legal framework, but rather making the citizens to be informed of their rights and obligations. From a legal point of view, the authors

⁴¹ De Visser (2014).

⁴² De Andrade (2013).

⁴³ Hoikkanen et al. (2010).

also provide a clear understanding of dimensions or levels, or categories, for which the e-identity can be used and determine such regulative levels. For example, they argue that soft law and alternative regulatory mechanisms could be extensively used to quickly achieve results and address the most evident legal gaps, while higher-impact solutions are developed.⁴⁴ This applies mostly to the individual self-determination as the variety of separable fields of activities cannot be exhaustively listed. The coherency and continuity of legal acts would rather be a task for Member States and the EU institutions in creating a digital single market with all of its deliverances.

One of the areas of promoting e-citizenship of the EU is electronic voting. This is also a field for teleological interpretation of existing constitutional law of EU. Kuzelewska and Krašnica refer that the possible e-voting of the European Parliament can be covered by TFEU art 223 (1), which, beside of the “uniform procedure,” states that the basis of the election system could also be built on “principles common to all Member States”.⁴⁵ They are convinced that the e-voting (especially I-voting—which is internet-mediated version of e-voting) “seems to be the easiest way to unify various voting systems to the European Parliament”. Even if the internet voting can have several models,⁴⁶ there are certain principles that should be guaranteed from the perspective of protecting the e-identification of any member of e-electorate. As explained by Radek and Petr,⁴⁷ the following principles must always be applied:

1. Participation in the voting process is granted only for registered voters.
2. Each voter has to vote only once.
3. Each voter has to vote personally.
4. Security and anonymity of voters and voting.
5. Security for the electronic ballot box.⁴⁸

This discussion leads to the solution for solving the e-regulation puzzle using the principles rather than rigid legal norms as the e-identification does not concern only the EU citizens but also the migrants to EU. The issue here concerns the democratic control of information systems and the weak legal position of immigrants.⁴⁹ Besters and Brom believe that ‘European migration policy is turned into a kind of “test lab” for new technologies’⁵⁰; as it directly relates to identity of person (biometric identification, travel surveillance, and other legitimization methods of a person who wants to cross the border). Possibly this field of regulation is an outstanding example of the vagueness of the rights and obligations of an individual when

⁴⁴ *Ibid.*, p. 7.

⁴⁵ Kuzelewska and Krasnicka (2013).

⁴⁶ *Ibid.*

⁴⁷ Šilhavy and Šilhavy (2008).

⁴⁸ *Ibid.*, p. 141.

⁴⁹ Besters and Brom (2010).

⁵⁰ *Ibid.*, p. 456.

standing alone in the middle of e-regulation. It may also happen in other regulation fields that the EU creates systems affordable and efficient to the EU itself, but the legal guidelines for the individuals are left unexplained. Therefore, the proud statement of Rossi from more than 5 years ago “[i]n the current stage of European integration, the question of what principles are really fundamental in the EU becomes increasingly important,”⁵¹ should be taken very seriously in the new context. Legal certainty should not hide away even if the decision-making process is deviating from the traditional forms and the interdisciplinarity as a basis of composing the norm is more evident. As Howes warned us more than a decade ago: “There will be an expectation in the postmodern cyber-village that legal knowledge will be accessible, and that it will be both communal and personal, or interactive.”⁵² As in oral societies, the emphasis will be on conflict resolution that adapts standard laws to existing circumstances and norms.

One of the new terms in use is “digital citizenship” and an important element of this is Digital Access, or full electronic participation in society which can be identified with following ideas: “[t]echnology users need to be aware that not everyone has the same opportunities when it comes to technology. Working towards equal digital rights and supporting electronic access is the starting point of digital citizenship. Digital exclusion makes it difficult to grow as a society increasingly using these tools. Helping to provide and expand access to technology should be goal of all digital citizens. Users need to keep in mind that there are some that may have limited access, so other resources may need to be provided. To become productive citizens, we need to be committed to make sure that no one is denied digital access”.⁵³ Besides of citizens’ initiatives, there are also initiatives of business circles—one remarkable example may be e-commerce Europe that was founded by leading national e-commerce associations across Europe. E-commerce Europe represents 4000 + companies selling products and/or services online to consumers in Europe.⁵⁴ According to its president, François Momboisse, “[I]ast year, the e-commerce industry in Europe had a total turnover of € 358 billion and it was one of the few industries that grew with double digits.”⁵⁵

One of the sample fields in e-identification is certainly e-signature. Graux⁵⁶ presents a vision of IAS (Internet Authentication Service) in Europe, calling it a not-so-modest proposal. He proposes a new structure for e-authentication directive and envisages technical elements that should be adopted separately from other legal instruments. The author brings us an essential example that in fact relates to the

⁵¹ Rossi (2008).

⁵² Howes (2001).

⁵³ See Nine Themes of Digital Citizenship. Accessed 10 January 2014. http://digitalcitizenship.net/Nine_Elements.html.

⁵⁴ See Ecommerce Europe. Accessed 15 January 2014. <http://www.ecommerce-europe.eu/home>.

⁵⁵ See Ecommerce Europe. Accessed 15 January 2014. <http://www.ecommerce-europe.eu/press/press-release-ecommerce-europe-proposes-a-one-stop-shop-for-policy-coordination>.

⁵⁶ Graux (2013).

nature of e-regulation as a whole. It is a rapid development of technologies as Graux explains, despite attempts to identify e-authentication services within the directive, new services that derive from even more contemporary technologies may create “unforeseen complexities.”⁵⁷ As in this case, also other fields of e-regulation are actually facing the same challenges. There is a choice whether to have an endless flow of new legal acts, taking into account every new technological possibility, or to rely on principles and formulate new type of legal rules that would allow certain undetermined nature of the legal act which in practice means that the so-called basic acts can be supplemented with decisions widening the scope of the legal act so that the initial goal of the act would not be damaged. It is a hard task and needs a shift in mentality that must be reflected by the strategies of e-regulation of the European Union.

3.2 *Digital Divide and Other Challenges: How to Proceed?*

The issue raised by Venturelli almost two decades ago—on “how the EU ought to approach the design of the information society: the liberal market model, the public service model, and the nationalist or culturalist model,”⁵⁸ is still topical. Further studies on classification of the e-regulation areas by variables such as (a) institutional space of activity (jurisdiction of General Directorates, in case of the EU), (b) identification of end-users, (c) legal bindingness and balance between *de lege lata* and *de lege ferenda*, may be rather helpful in categorising of the e-regulation. What we are missing today, is a systematic approach in the context of legal certainty and rule of law despite the fact that the visions and technologies are born before the norm regulating, or planning to regulate these. The current contribution is just a preliminary attempt to map the current situation, refer to the challenges related to e-regulation and discuss the need for characterising the e-legislation as set of new type of rules.

How should we treat the emerging need for e-regulation? Is it just a new quality in decision-making and implementation process? Is it a revolution in legislative process that also influences previously existing laws and regulations? Is it a chance to strengthen the supranational character of the EU, widen the scope of the EU competences, using the minimum standard principle—such as successful e-voting in Estonia would become a basis for European Parliament e-voting system? A solution-oriented approach would be the encouraging of “technology-free regulation”⁵⁹ that is free from detailed references to technology and is based on legal principles. It seems that *de lege lata* deriving from the Lisbon and post-Lisbon developments is not unanimous in that regard and several legal acts tend to be technology minded.

⁵⁷ *Ibid*, pp. 114–115.

⁵⁸ See Shalini Venturelli, “Inventing E-Regulation in the US, EU and East Asia: Conflicting Social Visions of the Internet & the Information Society” at Presented at TPRC 2001 29th Research Conference on Information, Communication and Internet Policy Alexandria, Virginia, October 27–29.

⁵⁹ Lusoli and Maghiros Ioannis (2009).

The epopeya of pre-Lisbon and post-Lisbon legal and political development has been criticized, and several authors are not convinced that the *de lege lata* gives us the best ground for a balanced and innovative European Union. As, for example, stated by Piotr Tosiek, “[t]he Treaty of Lisbon is after all the agreement relating to almost every sphere of activity of the European Union. In fact the construction of the European Union and its foundations are not reformed in a revolutionary way. This is only a short step towards identification of the *finalité politique*.”⁶⁰ Thus, the first question from the angle of legal system per se should be—if the EU would use the e-regulation as a challenge to reform the whole system; or, the e-regulation remains a vision with “multi-speed” character, i.e. some of the areas are well developed, some of the areas remain wishful thinking and some of the areas are new and may have a chance to be regulated electronically. It would be useful to analyse e-regulation from the perspective provided by Alexander H Türk, who discusses the law-making processes of the post-Lisbon EU.⁶¹ As the e-regulation, by nature is dependent on digital divide of Member States, the question is whether all acts that fall into the category of e-regulation can constitute “legislative acts” rather than “regulatory acts”. The difference is that “legislative acts” are on the top of EU acts by their hierarchical status as the “regulatory acts” are rather non-legislative acts with general application. It would be the question of the efficiency of the eEurope, which way is the best to go. Also, what kind of procedure should be preferred here e.g. if the open method of coordination should be most effective in cases where the beneficiaries are the citizens and the society as this method is usually used when dealing with social policies, including information society. Another type of goals may be a basis to prefer EU agencies or even private actors as the e-regulation is also strongly related to the EU institutional development (e-governance) and business stakeholders (e-services).

Furthermore, the legal sanctity of e-regulation can be seen improper and “old-fashioned”. As Stephen Laws states: “...legislative drafters have to do their job in the knowledge that politics cannot be eliminated from the legislative process, but need to be reconciled with the things required of the legal output.”⁶² He also points out that there are certain assumptions (such as human rights standards), but also certain temptations (such as to leave certain part of the work of a legislator to the practice).⁶³ This is a hermeneutic circle—the ECJ can ground their cases only to the legal frames; however, the cases will specify narrow and define vague and aspirational norms that are often existing in such complex and always developing system as the EU legal space is. Thus, we have to admit that the glorification of the “legal” nature cannot be absolute.

Even ultra-positivist Kelsen already claimed, that law does have a necessary purpose that aims at social peace.⁶⁴ However, the ideas behind e-regulation are rather

⁶⁰ See Tosiek, Piotr. “The European Union after the Treaty of Lisbon—Still an Intergovernmental System,” p. 16. Accessed 16 November 2013. <http://www.jhubc.it/ecpr-riga/virtualpaperroom/072.pdf>.

⁶¹ Türk (2012).

⁶² Laws (2013).

⁶³ *Ibid.*, pp. 95–97.

⁶⁴ Hart (1961).

presented from the angle of becoming more competitive, thus focusing to the success of the EU and somewhat ignoring citizens in Europe. The passionate and somewhat unrealistic purposes of hardly controlled reforms can be balanced with what Chiassoni, (inspired by Hart), calls “Nirvana principle,” meaning that the “legal theorists” should adopt more modest, craftsman-like approach; they should aim at the formulation of (tentative and revisable) “cool definitions”.⁶⁵ The e-regulation is an undetermined area that can be called a “development law” where the coexistence of law/nonlaw instruments are combined⁶⁶ and the balanced interests of different stakeholders and beneficiaries are taken into account to guarantee inclusiveness and higher motivation to contribute to the eEurope for the members of European society.

There are confusingly many initiatives that relate to the digital age, but which are not (yet) strictly regulated by norms. The diversity here would raise many eyebrows for those who need to become familiar with the e-regulation in a specific area. One of the historical examples would be International Society for Digital Earth (ISDE), the initiative that was initiated in 1988 by Al Gore. In Europe, the term digital earth is rarely used, but there are many developments that strongly relate to it. At the political level, the European Commission launched in 2010 the Europe 2020 Strategy with the aim to achieve innovation-led, sustainable and socially inclusive growth.⁶⁷ As the authors found after SWOT analysis, digital earth concept has certain strengths, such as having “a strong technological component, harnessing developments in internet technologies, data availability and visualization methods among others, and provides a flexible framework to adapt to evolving technologies,”⁶⁸ which leads to the assumption that the whole e-regulation area and digital market dimensions should be screened through the variables used for digital earth analysis. Again, one of the dilemmas, deriving from the discussion, is the collision of different perspectives, i.e. political versus academic versus a technological versus legal perspective. For the sake of efficiency of any e-regulation field, these perspectives should be separated and the synergies found so that the development strategies would not be disturbed by mixing the academic visions, technological possibilities, political wishes and legal reality.

At the same time, there are certain risks such as threat to privacy or preparing useful tools for terrorists or organized criminal groupings. This discussion is most visible when talking about digital security governance, a term that according to Quirine Eijkman can be defined as “the use of digital personal data for threat analysis on the basis of (automated) risk profiling—as it enhances terrorism risk management in Europe.”⁶⁹ European security strategies emphasize that ICT increasingly plays a key role in preventing and anticipating threats such as “terrorism and cybercrime.”⁷⁰ One

⁶⁵ Chiassoni (2013).

⁶⁶ Zumbansen (2013).

⁶⁷ Annoni et al. (2011).

⁶⁸ Ibid, p. 274.

⁶⁹ Eijkmann (2013).

⁷⁰ Ibid, p. 35.

of the problems is that terrorists themselves are believed to adapt to changes and to use of new technologies. Unregulated areas are usage of bitcoins and other digital currencies that can be used for criminal purposes. Significant risks are also related to the protection of vulnerable groups, children among them. As formulated by O'Neill, "[t]he trust-reinforcement measures proposed under initiatives such as the CEO coalition of internet companies and the EC strategy for a better internet for children tackle some of the most persistent areas of risk identified in the online world."⁷¹

That is why the rule of law and human rights form a relevant part of establishing new regulations. Even more, the prerequisite of the legislative drafting to enhance e-technologies and methods is that the common values of Europe should be clearly seen as a ground of these developments. To use the words of Eijkman, "recent developments suggest that the use of ICT in the fight against terrorism requires more political and public legitimacy."⁷² This legitimacy is secured when the rule of law and human rights are prioritized already in the beginning of the process of an initiative that elaborates to the set of legal norms.

By American judge O'Scannlain, it is "better to be ruled not by a mechanical, impersonal code, but the virtuous and wise".⁷³ In his essay, he emphasizes the role of judiciary in guaranteeing the Rule of Law and makes a reference to the philosopher Leo Strauss who referred to the ideas of Plato in context of nonperfect nature of laws: "Rule of Law is inferior to the rule of living intelligence, because laws, owing to their generality, cannot determine wisely what is right and proper in all circumstances given the infinite variety of circumstances"⁷⁴ These arguments can be easily taken to the discussion of how to position e-regulation that has certain constitutional background, but is still constantly open set of legal norms due to the innovation and technological development. Is it that we are moving towards natural law? Is there a threat to allocate too much power to judiciary? At the same time, the technological details in directives can be very detailed and cannot be much interpreted. It seems that e-regulation in its very many variations is a tool for emerging constitutional law of the EU and legal principles that are consolidating the whole legal system and cannot be disputed. The e-regulation should find a link to the EU constitutional law with the extended principle of "Rule of Law". This would lead to the phenomenon called the principle of technological neutrality. Under this view, and according to Cockfield, "laws should normally be applied in the same way no matter what technologies are employed..."⁷⁵ However, the authors are not sure that the new technologies can always be suitable of being regulated by traditional doctrinal legal approaches. Therefore, special attention to some aspects is relevant.

Technology friendly EU should take a position that even if the rapid legal or judicial response to the technological advancements is assumed, the user-centricity

⁷¹ O'Neill (2012).

⁷² Eijkmann (2013).

⁷³ O'Scannlain (2014).

⁷⁴ Ibid, reference to Strauss (1987).

⁷⁵ Cockfield (2005).

should be contested with the public interest. So far, the commission demonstrated its good will in moving towards balanced and careful approach as stating in its website: “To contribute to setting-up of a legal environment at EU level which is fostering the take-up of new technologies, and is compliant with the EU Treaty and general principles of law. First, provide an early assessment on regulatory need for new technologies (in compliance with the Treaty) in order to foster their take-up. Second, early advice on legal feasibility of research projects or their results contributes to the reduction in costs for research being stopped for legal reasons or law suits resulting from research. Third, provide advice whether the EU is competent to act.”⁷⁶ The Commission also adds: new technologies (autonomous/cognitive systems, cloud computing, internet, etc.) often appear to lack a legal setting. Stakeholders have diverging opinions whether regulating new technologies resulting in a deviation from rules governing the non-digital world, is needed for take-up. As new technologies have an impact on human and fundamental rights, an early assessment of legal feasibility as well as advice on liability, privacy issues, data protection, etc. mitigates the risk of high engagement of resources in actions, which cannot be implemented.⁷⁷ What would be the best procedure to screen all these concerns? A commission established the European Group on Ethics in Science and New Technologies (EGE), in December 1997. However, several authors warned that “the constitutional status of the EGE is at best ‘grey’, given that it has no firm basis in the European Union’s constituent treaties, or the legislative structures developed to enhance the legitimacy, transparency, accountability, representativeness, effectiveness and efficiency of the European Union’s legislative and executive decision-making”⁷⁸ The website of the institution: One of the leading principles should also be a reducing the complexity of e-regulation and promoting an adaptive, efficient and flexible framework (as suggested by Australian Law Reform Commission).⁷⁹ Technology neutrality is a beautiful and simplified illusion, rather a goal than a principle. The balanced e-regulation should be tested not only by several revelations of Rule of Law but also by user-centricity and other more specific principles related to new technology regulation—we would call it a keyhole effect. There are two separate rooms—law and technology, but united by keyhole. As the communication gets more intensive, the usage of keyhole (principles) is a preparation stage in creation of key (technology neutrality) that fits exactly with the keyhole.

The digitalization and e-regulation in terms of harmonization can also be categorized by the capacity of Member States or even regions. It is important to stress that although innovative new initiatives might stand a better chance while treating

⁷⁶ Legal advice for emerging technologies. Available at: <http://ec.europa.eu/dgs/connect/en/content/legal-advice-emerging-technologies>.

⁷⁷ Ibid.

⁷⁸ Busby et al. (2008).

⁷⁹ Australian Law Reform Commission. Guiding principles for Reform. <http://www.alrc.gov.au/publications/issues-paper/guiding-principles-reform>.

Member States from egalitarian perspective, the resources and traditions of societies differ significantly. This fact is more understandable when we look at EU regulation areas that have history but where the e-regulation may be inserted to improve and develop the situation. One of the good examples can be agriculture and CAP, considered among most mysterious and controversial regulation fields in the European Union that actually deviates from the mainstream free market ideology. Labrianidis and Kalogeressis analysed the determinants of the use of high technology, and ICTs in particular in 10 European rural areas. The authors concluded that “[t]he differences observed paint quite a disappointing picture in terms of regional disparities, as well as progress towards ameliorating them. In the most developed countries—in our case Germany and the UK—rural firms appear to be more or less ‘digital’, while in the less developed ones adoption has been much slower.”⁸⁰ Another research, conducted by Brandtzaeg, Heim and Karahasanović shows that Eurostat data about digital divide is not sufficient, and there are several ways in which people in Europe use the internet.⁸¹ An overview of digital inclusion or e-inclusion is presented by Paul Timmers. His statement, dating back to 2009, that “as of today, however, there is no comprehensive approach to measuring the loss of social capital caused by digital exclusion,”⁸² still remains topical today, 5 years later, when the situation is probably very different due to the development and importance of Web 2.0 in everyday life of European citizens.

The most innovative areas (e-health, telemedicine, etc.) are delicately dealt with in order to find a balance between the EU competitiveness as a whole and the internal free market principles. For example, the so-called “next generation access networks (NGA)”, mostly used in fibre optics technology to enhance fixed wireless and mobile communication, in the European Union, need constant update in legal regulation. Baistrocchi’s research paper stresses that the guiding ideology with NGA should be as following, “[c]ompetition where possible, regulation where necessary.”⁸³ He has also pointed out that the EU policy is to find a balance between the competition and safeguarding the incentives for investment at the same time.

As to the Digital market (DSM), it was envisaged several years ago by European Policy Centre that “the next step should be to draw up a timetable to set out the concrete actions leading to a date in 2015 by which time the DSM should have been realized through implementing these policy recommendations.”⁸⁴ Looking at this deadline and some of the recommendations, one can easily see that the vision has, in many respects, failed. We could for example see that the suggestion to “create a more effective pan-European approach to taxes, including an easily accessible single VAT registration system and a harmonized tax base,” is not

⁸⁰ Labrianidis and Kalogeressis (2006).

⁸¹ Brandtzaeg et al. (2011).

⁸² Timmers (2009).

⁸³ Baistrocchi (2011).

⁸⁴ See European Policy Centre. Establishing the Digital Single Market: Policy Recommendations. Accessed 12 January 2014. http://www.epc.eu/dsm/6/Policy_recommendations.pdf.

implemented. Some of the recommendations, such as to “develop a new accounting standard which can deal with knowledge/intangible assets” is still under discussion and the respective Directive is not transposed by several Member States. That leads to the conclusion that the e-legislation should be rather principle based than norm-based. The Digital Europe Agenda is well analysed by the progress report 2011⁸⁵ and directs to the motivation of the European institutions and networks trying hard to reach the goals.

One cannot underestimate the initiatives that originate from Member States. In the end, the political will of the stakeholders is a decisive factor. One of the newest innovations related to e-regulation is the European Cloud Computing Strategy.⁸⁶ T.H. Ilves, President of Estonia—a member state that is probably the most e-governance and eEurope minded, is a Chair of the Steering Board of the European Cloud Partnership. He recently stated that, “the European Union, like most of the world, faces economically challenging times. In such times, it becomes all the more important to recognize and seize new and unique opportunities to drive growth, stimulate innovation, and to provide benefits to citizens, businesses and public administrations.”⁸⁷ From the strategy paper, it reads that the expected cumulative economic effects of cloud computing between 2010 and 2015 in the five largest European economies alone is around € 763 Bn.⁸⁸ The cloud economy is growing by more than 20 %⁸⁹ and could generate nearly € 1 trillion in GDP and 4 million jobs by 2020 in Europe,⁹⁰ with the support of the right policy framework. As the technological challenge is new for many, it is stressed that in regulating the area, one of the main goals is “establishing a shared understanding of regulatory and legal norms”. At the same time, it is recognized that in this area, the EU cannot stand in isolation and therefore another relevant principle—recognizing the international environment, is emphasized, by stating that, “solutions should be based on best practices, favouring internationally recognized norms and standards wherever possible.”⁹¹ In conclusion, instead of somewhat hectic and suspicious e-Europe, there must be a clear EU initiative to demonstrate that the e-regulation is based on common principles of the Union Member States, and can therefore be an underlying platform for more efficient legitimization of the technological advancements. Legal certainty would encourage citizens to become European e-citizens and to invest and allocate

⁸⁵ See E-Europe Programs Advance. Special Report (2012).

⁸⁶ See the European Commission’s communication on “Unleashing the Potential of Cloud Computing in Europe”, Brussels, 27.9.2012, COM(2012) 529 final. Accessed 20 November 2013. <http://ec.europa.eu/digital-agenda/en/european-cloud-computing-strategy>.

⁸⁷ See Establishing a Trusted Cloud Europe. A policy vision document by the Steering Board of the European Cloud Partnership.

⁸⁸ See Centre for economics and business research (2010): The cloud dividend report.

⁸⁹ See IDC Worldwide Cloud Black Book, 4Q 2012 update, April 2013.

⁹⁰ See IDC (2012): Quantitative estimates on the demand for cloud computing in Europe and the likely barriers to take up.

⁹¹ Ibid.

resources of Member States into development in the field. Need for courageous and methodologically firm action by the EU is, for example recently analysed in telecom and electronic services. By melody, “the model of direct European Commission intervention on matters that affect EU policy and its many information society initiatives may be only way forward”⁹² to achieve common market in the field.

4 Conclusion: Methodological Approach for Better E-Regulation

The development of any e-regulation despite of its area should be encouraged by TFEU title I that lists the EU competences, but also furnish *Article 7*: “The Union shall ensure consistency between its policies and activities, taking all of its objectives into account and in accordance with the principle of conferral of powers”. It would be suggested that the methodology in drafting and assessing legal acts covered by e-regulation should be overwhelmingly identical. The following list of policy stages is inspired by the methodology used in the field of e-signatures⁹³ and can be used, taking into account the interoperability of the nature of e-regulation, and can be used in any but especially developing area of preparing EU level e-regulation:

1. Analysis of the competences of the EU in the field, agendas, initiatives;
2. In case of new areas, the link between proposed e-regulation and common values of Europe, e.g. Rule of Law and human rights should be assessed, careful analysis of what extent the new e-norm would change the *lege lata*;
3. Assessment of the draft e-regulation from the perspectives of technological, semantic, organizational, legal and political layers, recognizing the special character of e-regulation;
4. Assessment of rights and obligations of electronic identity of stakeholders to guarantee the principle of user-centricity and the legal certainty in general;
5. Economic assessment, risks and obstacles for further development;
6. Analysis of the digital divide among Member States and have two category of e-regulation sets: a) based on minimum standard; b) based on multi-speed concept of Europe: the selection of *avangarde* EU countries for a deeper focus and feedback;
7. The context of reference for the area related market in Europe and in global context;
8. Characteristics and policies of supply-side actors;
9. An overview of the supply-side offering;
10. Characteristics of demand-side;

⁹² Melody (2013).

⁹³ The new legislative proposal for electronic identification and eSignatures, European Parliamentary Research Service. Accessed 16 December 2013. <http://epthinktank.eu/2013/11/05/the-new-legislative-proposal-for-electronic-identification-and-esignatures/>.

Following these steps would break the “wall of text” of countless strategy documents and lead to the EU policy and legal actions for realistic (implementable) and efficient e-regulation, proper decision-making procedure can be selected due to the factors identified using the aforementioned methodology.

It is a fact that e-environment is a growing phenomena and it needs careful maintenance by those who wish to use it for better Europe. However, the dilemmas related to special character of e-regulation are not yet seriously theorized. Today, we face sometimes overlapping and complex EU initiatives and agendas, the concepts of Digital Europe, eEurope, e-citizen, e-commerce, etc. are not always linked and categorized with sufficient clarity. In conclusion, the challenges related to e-regulation and need for characterising the e-legislation as set of new type of rules is an open question for many. At the same time, the stakeholders would benefit from roadmap, legal certainty and clearly determined e-identity. It is assumed that the harmonization in the field of digitalization and e-regulation depends on the capacity of EU Member States who face the problems of electronic divide. Systematic and methodologically grounded approach of EU e-initiatives and e-regulation would benefit the situation and hearten the emerging generation of skilful e-lawyers and specialists.

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