Network and political networks have become today an important challenge for Europe. In addition to the opportunities they offer, they also carry a number of risks. The Internet is changing not only the channels of political communication, but also the content of the policy. Unquestionably, the Internet is now one of the determinants of an individual’s position on the social ladder. The use of network resources and possessing digital competences are a condition of being able to access cultural heritage (online distribution channel is becoming the main channel of its promotion), access the offer of the public administration (digitalisation of the public services) and, above all, exercise and search for work (telework, job advertisements). The Digital Agenda is an important policy challenge for the European Union countries.

**Key words:** Internet, social media, political network, European Union

**Słowa kluczowe:** Internet, social media, sieć polityczna, Unia Europejska
NETWORK, NETWORKS AND THE STUDY ON NETWORKS

The Internet effectuates a series of changes in our lives – in the reality of the modern world this statement is a truism. Nevertheless, it is a truism hard to argue with. Before I move to describing the circumstances verifying the thesis about the network and networks as a European e-challenge, I would like to make a remark that the basis of a successful study to indicate the definitional extent of the studied object.\(^\text{1}\) In my work, I understand network as global links between data which initiated the creation of HTML programming language in 1991 by Tim Berners-Lee and as the infrastructure necessary to use these resources.\(^\text{2}\) Network is therefore both a knowledge reservoir and a tool of communication. On the other hand, I define political networks as a new means of organizing movements and social organisations. Political networks are, depending on a researcher’s views, a tool or space serving social and political activism.\(^\text{3}\) Taking into account the practice of the recent social movements of the digital era, political networks shall, in my opinion, be considered to be another tool of communication, not a map of a new territory. Whereas the concept of a ‘challenge’ is defined by the *PWN Dictionary of the Polish language* as a tough task, a new situation etc. requiring one’s effort, dedication etc., a test of one’s knowledge, resistance etc.\(^\text{4}\) Undoubtedly, access to the Internet and the question of digital inclusion, the influence of political networks on political processes and the democratic system as well as the conflict underlying the basis of the functioning of the WWW network – a conflict between freedom (anonymity) and security (obeying the law) – need to be viewed as tough tasks. However, before I describe these questions, I would like to reflect on the topic of what social sciences are in the 2.0 world.

Thanks to a constantly increasing role of the Internet, changes occur also in the area studied by social sciences’ researchers. Social sciences require new methods and research techniques for research to be a kind of a social photograph. It has to be underlined that it is just the future of our sciences. Currently, the greatest problem is terminological consistency of global WWW research and designation of research dealing with the Internet. Following Daniel Mider, the area of this kind of research needs to be divided into three categories: research on the Internet, research via the Internet and research of the Internet.\(^\text{5}\)

The first type of research consists of all possible research, meaning both quantitative and qualitative, primary and secondary. Here, the constitutive trait is a research

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tool – an online questionnaire, an e-survey or a chat. Research on the Internet is the type which may cover all of the material studied by social sciences.

On the other hand, research via the Internet is limited mostly to qualitative research, e.g. an in-depth interview carried out via popular internet communicators. The Internet is therefore only a tool, mostly a communicative one.

Research of the Internet means research of the Internet portrayed as a new social area – the area of communication and activism. Moreover, it might be connected with the technological layer – using certain technology, surveying the amount of data transferred. It must be noted that this type of research is the widest one in its range as it is not limited to social sciences only.\(^6\)

In my view, in the light of the changes that have occurred in the last decades, especially those concerning the increase of the Internet’s role in our social life, we need to reflect on the definition of social sciences again. Even though these are only macro-scale deliberations, taking into account the nature of this work – a description of political and social challenges of the contemporary Europe – it is important and necessary. Speaking the language of IT-specialists, social research requires a ‘hard reset’ and a creation of new methods and techniques for social studies which would be suitable for online times. This is currently the toughest task for our branch of science. Undoubtedly, in order to be able to unambiguously state what political networks and untraditional methods of political participation are, we need to wait for some ‘precise methods’ to be created. There is no doubt, however, that in this approach it can be clearly specified what defines the concept of a political participation. The concept that needs to be determined before moving to stating the scope of the \textit{definiens} of the phrase ‘political network’. In my opinion, a political network is any action undertaken by a person or a group of people whose aim is participation in public life. Such actions need to have a public sense, meaning they need to either be undertaken in public interest or at least occur in the public sphere. An important factor is also the place where online participation occurs. It is, by analogy of the possible online statuses, an online sphere. In times of political disaggregation, an extremely important issue is the question of Internet communication.\(^7\) More and more often a phenomenon of distinguishing network as a place of creation of various forms of online political participation can be perceived. However, it is mainly a projecting classification, which will be subject to review only after a certain amount of time when popularisation and development of online participation in political life occurs.\(^8\)

In order to understand what political networks are, two scientific approaches to Internet communication need to be distinguished.\(^9\) First of them indicates that communication through the Web breaks the traditional media’s monopoly, especially in terms

\(^6\) Ibid., pp. 28-29.
of agenda setting. Further on it will be identified with perceiving network as a network movement. In the second approach, the Internet is viewed as a means of facilitating communication on the one hand and limiting it on the other, taking into account a very specific language web surfers use. In the subsequent paragraphs, this approach will be equated with perceiving network as a movement via the Web. In political practice, an informative action accompanying Mexican insurgents in the Mexican state of Chiapas is one of the best known and best described example of breaking traditional media’s monopoly so far. Due to the information blockade caused by the government during the first period of the Zapatistas’ fight, no information about it reached a global audience. It was only the Internet that proved to be an effective means of achieving the desired effect – obtaining political support for the fighters and persuading the Mexican government to implement some of the Zapatistas’ postulates. This action of support is considered by some researchers, especially Agnieszka Rothert, to be one of the first social movements where the Internet played such an important role in its activism.

Another example illustrating the process of political communication on the Internet and widely described in the subject literature may be the events in Seattle that occurred in 1999. During the protests against the G8 summit held in this American city, alter-globalists used the Internet for the purpose of communication and planning their actions. By using new technologies, effective communication among all of the participants was possible. The events in Seattle showed the political role of smartphones for the first time. An identical model of communication may be observed in the Spanish Indignadas movement as well as in the Occupy movement in the USA. This was also the case during the Arab Spring, although then the governments, learning from the Mexican and American experiences, additionally attempted to block the Internet communication channels, an example of which was sealing off Egypt’s access to fibre optics by Hosni Mubarak’s regime. However, due to technological progress, connectivity (both radio and satellite) remained accessible and enabled information to be sent from Egypt and the other countries where the revolt had broken out. Despite this, it

10 Ibid.
11 Ibid.
13 Ibid.
14 Ibid.
16 Ibid.
18 Ibid., pp. 155-209.
20 Ibid.
has to be remarked that communication via the Internet, aside from numerous positive examples, also has its limitations. The main one is the language of the Internet.\(^{21}\) It is specific, technical and quite hermetic. It takes a certain amount of time to master it, but effective communication via the Web is impossible without doing so.\(^{22}\) Another limitation is the question of a bond creating role of the Internet.\(^{23}\) For a certain group of researchers, mainly Howard Rheingold,\(^{24}\) the Internet is a space where a new type of social bonds is created. Supporters of this statement claim that they are even more lasting than an old type because they are undertaken more voluntarily than in the real world. There is no shortage of opponents of this thesis. Some researchers indicate the lack of physical presence and direct contact between participants in a communication process and therefore the lack of possibility of creating any social bonds via the Internet. In my opinion, this dispute cannot be resolved.

THE WEB AND THE INFORMATION SOCIETY IN THE EU’S POLICIES

The Web, understood as data and the possibility of accessing them, has been a significant social issue in Europe for years. The European Union raised the questions of using ICT (information and communication technologies) and building an information society in its documents – the Bangemann Report – as early as in 1994. This report initiated the perception of the WWW as a new tool allowing to increase social consistency. However, it was an example of that early excitement with a technological novelty that the Internet was back then, therefore it did not provide any actions concerning digital inclusion of people not using the Web resources.\(^{25}\) Another document regulating the approach of the EU and the Member States to the question of the information society was the Green Book published in 1996. It was a document analysing the impact of the Internet on the social life. However, it was a document belonging to the previous era which predicted only the bright sides of both Web development and its increasing importance.\(^{26}\) Another act that referred to the matter of the information society development was the EU’s initiative ‘eEurope – an information society for all’ of 1999. It was an initiative portraying the Web as a chance to boost European economy so that it could become more globally competitive than it used to be on the threshold of the 21st century.\(^{27}\)

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\(^{22}\) Ibid.


\(^{27}\) M. Witkowska, K. Cholawo-Sosnowska (eds.), *Społeczeństwo informacyjne...*, p. 27.
An initiative that attracted significant attention to the problem of digital divide (digital exclusion – a phenomenon concerning people who do not use the Web resources) was the Lisbon Strategy launched in 2000. It assumed that the European society will be a society with full digital inclusion where skills and competences regarding the use of new technologies will be disseminated. The Strategy also assumed a transformation of the EU’s economy in the direction of a based-on-knowledge e-economy. Subsequent documents referring to the problems of building the information society and fighting digital exclusion were EU 2002, 2003 and 2005 strategies. In 2005, the so-called renewed Lisbon Strategy was adopted; it assumed fighting with digital exclusion as the worst type of social exclusion. However, a significant breakthrough in portraying the issue of the information society occurred in year 2006 when questions referring to dissemination of the access to the Internet became a part of The Community Strategic Guidelines on Cohesion 2007-2013. It allowed to cover this sphere with the help of EU funds. The European Union understood therefore that the Internet infrastructure is equally important as the traditional one and that the fight against digital divide is equally important as the struggle against social exclusion in the offline world. A good example of such an action was the Polish Innovative Economy Operational Programme, which had a component for digital inclusion. It is estimated that thanks to it the level of Internet access in Poland rose by about 20 per cent in years 2007-2013. The newest EU strategy concerning that matter – Europe 2020 – assumes maintaining or even increasing the expenditures on fighting digital illiteracy using the member states’ funds. It is worth noticing that from the very beginning the Union’s documents state that new communication technologies are supposed to serve primarily social development. In this regard, it has to be noted that any actions undertaken in this area are primarily of a social dimension.

In conclusion, it needs to be remarked that communicating via the Web raises high hopes. It is expected to provide a greater channel for citizen and political participation than ever before. Practice so far has shown that this view does not apply to the social reality. The dynamic growth of political networks in the last decade seems to confirm the above mentioned thesis. In addition to the political dimension, the development of new tools has also a social aspect – a network creates a new social hierarchy and there appears a new social phenomenon, i.e. digital exclusion. Another challenge which the

33 A. Rothert, Cyberetyczny porządek..., pp. 103-149.
dissemination of the network and the networking phenomenon (political network) pose is the conflict between freedom and security. This conflict relates primarily to the scope of the right to privacy within the network and to the emphasis put on the right to culture and intellectual property rights. Network and networking use is also a question of the new public policies, e.g. in terms of a fight against crime, which is now gradually becoming e-crime. Those are the very e-challenges Europe is facing right now.

WHAT A POLITICAL NETWORK IS?

Manuel Castells defines a political network as a set of interconnected knots. However, it is the classic idem per idem definition – unknown by unknown. Therefore, it is worth to start defining a political network by defining its components. The network analysis method proposed by the Italian researcher of social movements Marco Diani will be useful in that matter. In his analysis, the three key categories are: knots, limits and links. Knots are relations between network members, composed of individuals or collective social actors (participants). According to Marco Diani, knots can occur in the following relationships:

- individual-individual, e.g. demonstration participant – demonstration participant;
- individual-organization, e.g. demonstration participant – political party;
- organization-organization, e.g. political party – trade union.

As noted by Manuel Castells, each component of a network is a knot. Following this logic, it must be noted that any entity that participates in a network, regardless of their role in it, is a forming part within a relationship. However, not all network knots are necessary to the same extent, e.g. groups or individuals who have already fulfilled their functions. Then, as Manuel Castells states, reconfiguration occurs – namely a change of the role of knots within the network. An example might be the change of a hacker group’s leader or the change of the leaders of ACTA protests – depending on whether the actions took place on an online or offline ground, the protest leader changed. The advantage of a network is that it is much faster than a traditional political structure’s response to any environmental changes. It is worth to note a significant difference here – a network focuses on the aim and task whereas a traditional political structure focuses on continuance and self-development. A network has the ability to reconfigure the knots while a traditional structure can perform it only to a very limited extent. The following comparison presents further differences between a network and a traditional political structure.

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36 Ibid.
37 See M. Castells, Władza komunikacji.
38 See E. Bendyk, Bunt sieci, Warszawa 2012.
Table 1. Network versus a traditional political structure

<table>
<thead>
<tr>
<th>Field</th>
<th>Network</th>
<th>Traditional political structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership</td>
<td>Scattered, undisclosed</td>
<td>Centralized, transparent</td>
</tr>
<tr>
<td>Basis for actions</td>
<td>Aim, performing tasks</td>
<td>Statute, law of a higher order</td>
</tr>
<tr>
<td>Formalization</td>
<td>Lack or very limited</td>
<td>Declaration of membership, contributions</td>
</tr>
<tr>
<td>Structures</td>
<td>Non-territorial, usually transnational</td>
<td>Territorial, national or international</td>
</tr>
<tr>
<td>Management tools</td>
<td>Newsgroup, chat, social networking, email, instant messaging</td>
<td>Meetings, direct conversation</td>
</tr>
<tr>
<td>Orientation</td>
<td>Focus on a purpose or a task</td>
<td>Focus on the leader or structure development</td>
</tr>
</tbody>
</table>

Source: own elaboration.

Another element of a network, according to Marco Diani, is its limits.\(^{39}\) It should be noted that Diani is not the only researcher to claim that this is the most difficult task while analysing social movements. To this day, social sciences have not developed any unambiguous criteria by which those movements would be considered to be, or not to be, identified with this management model.

Following the Italian network researcher, two perceptions of the limits of a network should be distinguished: nominal and realistic.\(^{40}\) The nominal approach assumes that a researcher defines knots, i.e. political actors, by himself/herself. In this approach, an investigator defines limits of a network by himself/herself, therefore he/she, de facto, defines what a network is. This view assumes a high level of the researcher’s subjectivism. The realistic approach, on the other hand, forces an investigator to define network limits through a subjective perspective of its participant – a network is the knots recognized by other actors in the process. The nominal view emphasizes the fact that participation can be observed by a researcher, whereas the realistic view investigates the interactions between individual knots.\(^{41}\) Manuel Castells claims that network limits are also limits of its communication process.\(^{42}\) He remarks that networks are self-programming, therefore capable of self-configuration. It is extremely difficult to precisely determine their limits, which may, in the communication process, be subject to transformations. The limits of a network are the toughest to precisely define. Right now, there exists no approach which could be considered objective and fully recognized by all investigators of the issue. Accordingly, everything that either researchers

\(^{39}\) See M. Diani, “Analiza sieciowa”.

\(^{40}\) Ibid.

\(^{41}\) Ibid.

\(^{42}\) See M. Castells, Władza komunikacji.
or those self-defining movements which define themselves as networks recognize as a network should be called a network. As shown, it is a highly subjective matter. In my opinion, the development of modern means of electronic communication will only deepen the conflict because, as rightly observed by Manuel Castells, the actors of a network (the knots), aside from self-programming and self-configuration, set their goals and create network operational procedures by themselves. This process of creation may significantly define or redefine network limits. The last element which, as Marco Diani claims, creates a network is connections. Connections should be understood as interactions between network actors (knots). Following this researcher, direct and indirect connections need to be distinguished. Direct connections are based on relations. They may occur in the following configurations: individual-individual, individual-organization, organization-organization. According to Marco Diani, the relations may result from kinship, friendship, acquaintanceship, information sharing or joint participation in a movement. Moreover, in the case of organizations, those relations may be based on alliances, mobilization campaigns, communicating information, sharing skills and knowledge as well as practical assistance, e.g. financial support. In practice, this link could be observed during the protests against ACTA, when groups of the opponents of the regulation shared their hacking skills or during the Arab Spring, when certain network agents formed alliances (often despite previous mutual prejudices). Another type of links are indirect connections based on common actions. This model of connections is created when individuals or organizations cooperate unintentionally, e.g. they protest together. An example here may be the Spanish Indignants Movement, which did not coordinate the actions of its members during the first phase, therefore people and organizations could be found in the occupied areas, in respect to which interactions occurred for the first time during the protest.

Summarizing, political networks are a specific structure and a way of managing an organization. Each network, following Marco Diani, has knots, limits and links – the constitutive elements of a network.

On the other hand, Manuel Castells notes that each network is at the same time: elastic, scalable and viable. Elasticity means the ability to transform (change its limits) while maintaining the objectives even when communication issues transform (validity of the knots). In turn, network scalability is the ability to spread or shrink (change of limits) without causing greater damage to the whole network. Viability of a network is a trait differentiating a network from a traditional political structure. A network has no single centre and can operate via several knots independently. It is the feature which allows networks to have greater resistance to attacks and inner changes than traditional

43 See M. Diani, “Analiza sieciowa”.
44 Ibid.
45 See E. Bendyk, Bunt sieci.
46 See J. Armbruster, Arabska wiosna...
47 M. Castells, Sieci oburzenia..., pp. 115-55.
48 Idem, Władza komunikacji, p. 35.
political structures. The network structure moves and transforms constantly, it may consist of an unlimited number of interconnected knots and its limits are practically impossible to define precisely and objectively.

**CHALLENGES FOR EUROPE**

In my opinion, networks create two kinds of challenges for Europe. The first one is connected with the network defined as a tool for accessing data and a means of accessing them. In my opinion, 3 challenge areas should be distinguished:

- a new social stratification;
- manifestations of digital divide;
- actions for digital inclusion.

Unquestionably, the Internet is now one of the determinants of an individual’s position on the social ladder. The use of network resources and possessing digital competences are a condition of being able to access cultural heritage (the online distribution channel is becoming the main channel of its promotion), access the offer of the public administration (digitalisation of the public services) and, above all, exercise and search for work (telework, job advertisements).

After an initial period of admiration for the Internet as ‘the most egalitarian medium’, as it was referred to for the most of the 1990s, a period of reflection on this phenomenon followed. The turning point was the publication of the book *Netocracy: The New Power Elite and Life after Capitalism* by Alexander Bard and Jan Söderqvist. For its authors, the Internet is not a sign of a forthcoming ‘world egalitarianism’ and full democracy, but it is rather portrayed as a path to even greater social stratification – the main criterion being access to information. The Internet may be a perfect space for communication or the exchange of thoughts, although for a certain amount of time already, special networks appear in it creating ‘pyramids’. Places, which originally were meant to protect networks from the so-called internet trolls and as a consequence blocked almost any access for some of them, contributing to the spread of information exclusion.

In one of the chapters, Alexander Bard and Jan Söderqvist point out the issue of the fulfilment of the assumptions of Herbert Spencer’s *social darwinism*. They argue that because of humanism, which has almost become a new religion for the Western civilization, we are not able to accept its rules. Meanwhile, in the *e-reality*, its principles are beginning to spread – there is no place for the weak, namely those lacking access to the most valuable information. There occurs a constant domination of the strongest – the owners of the most valuable information. The work of the Swedish authors

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49 Internet trolls are the users whose only purpose of taking part in a discussion is to mock other users.
was a catalyst for a change in the perception of the Internet not only by researchers, but also by policy-makers and the public administration. Developed countries, especially those of the European Union, understood there is no real democracy and social equality without addressing the digital divide. For this reason, since the Cohesion Policy 2007-13 the European Union undertakes actions for the purpose of digital inclusion of the Member States’ citizens. These actions are focused on the social aspect of the issue as the EU defines the digital exclusion (digital divide) as one of the elements of social exclusion. It is a very broad, but at the same time, in my opinion, a correct understanding of the matter.

The digital divide, in the realities of the contemporary society, intensifies other factors of exclusion since it prevents people without digital competences from accessing educational and cultural resources and dealing with administrative formalities through the e-government platforms. Additionally, it limits their participation in the labour market as most job offers are published online and teleworking or telecommuting are becoming increasingly popular. Digital inclusion and the fight against digital exclusion need to remain the Union's priorities. The Union appears to be clear on this point as raising digital competences of the society is one of the aims of Europe 2000. It is a right path that offers significant opportunities to deal with this challenge.

In terms of the second area, i.e. political networks understood as a tool or space for activism, three other areas should be identified:

– the conflict between freedom and security;
– the conflict between the right to culture and copyrights;
– the phenomenon of the dark spheres of darkness – criminal network usage.

The conflict between freedom and security has always been a constant struggle for humanity. Already in the eighteenth century, Benjamin Franklin, one of the founding fathers of the United States of America, used to say that those who give up liberty in the name of a bit of temporary safety do not deserve any of them. Currently, these words are considered to be the basis for discussion about the relationship between freedom and security. Freedom on the web has two dimensions – freedom of speech and the right to anonymity (to protect the true identity). As far back as antiquity, Aristotle noticed that freedom of expression is an inherent feature of political societies. Political networks, for example groups involved with the Anonymous or the network around WikiLeaks, strongly emphasize this feature and point it out in their actions. Networks fight for the right to disseminate information, including material restricted by censorship. The position of a network in democratic countries varies from that

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in non-democratic regimes. In democratic societies, networks are elements of the civil society, where the drive for freedom of accessing information is a natural feature. In undemocratic societies, they are the voice demanding fundamental human rights. They constitute a challenge for both democratic and undemocratic governments. For democratic authorities, they become a reviewer, an entity that has no problem with the disclosure of undisclosed data – an example being the disclosure of the US Army documents by a hacking group centered around the WikiLeaks portal.\[57\] In contrast, for undemocratic governments, they are the greatest enemy, the enemy not susceptible to censorship and propaganda, moreover – actively fighting it.\[58\] The second dimension of freedom is the right to anonymity in the network, which relies mainly on the right to conceal one’s true identity. On the Internet, the dominant standard for handling Web pages are so-called cookies. These files save information such as display preferences (font size), answers in polls or access logins and passwords.\[59\] Apart from cookie files, anonymity is also limited by the IP address – this is a kind of ‘location’ of the address of a device which we use to connect to the Web resources. Many political networks attempt to circumvent the ‘tools of invigilation’, as they define the IP address and cookies, by the use of alternative forms of accessing network resources, e.g. the Tor network also known as the Onion Ring. This network is structured (layered) like an onion and it acts independently of its elements. Tracking down one of them does not mean obtaining information about other network participants as it happens in the case of traditional Internet tools.\[60\] Networks like Tor are used by the opposition in countries such as Belarus, Burma or Iran for the maintenance of anonymity and protection from arrest, but also by organized criminal groups and terrorists. It is estimated that the so-called secret Internet, which is the bottom of the iceberg (the Web is often compared to an iceberg, where only 10 per cent of its surface is visible with the naked eye), is currently the main channel of communication for gangs of drug traffickers, paedophilic groups and also terrorists.\[61\] This tool can therefore be used both to fight a regime as well as to profit from criminal activity.

The challenge for Europe is to develop solutions that on the one hand would ensure obedience to the law, but on the other hand would not limit the right to freedom of expression and the right to privacy. Networks are also an example of the clash between the right to culture and intellectual property right. This conflict was observed during the protests against ACTA – the regulations that were supposed to transfer rights of protection of the private property to the international level. It was the representatives of the young generation who protested most vehemently arguing that

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\[58\] See D. Mider, “Internet jako narzędzie...”


\[60\] See Tor Project, at <https://tor.eff.org/>, 20 June 2015.

\[61\] A. Rothert, Dezagregacja..., pp. 146-157.
the regulations limited their right of access to culture. Statements under the STOP ACTA motto were on the one hand a conflict between the right to culture and the right to intellectual property, but on the other hand they represented a conflict between the analogue generation with the digital generation as well as a demonstration of the mobilizing strength of the social movements. During these protests, the networks showed an increase in their level of participation in the political process. Projecting it can be said that the protests were a harbinger of a new policy – the policy in which the network and networks will play an important part. Understanding this and taking actions for the purpose of including networks in the European political process is another challenge for Europe.

The last challenge that needs to be referred to is the issue of security. It should be understood in two ways – classically, as the lack of danger and the security of data transmitted over the Web. In the classic sense, we need to reflect on a model of supervision over networks, e.g. in terms of the fight against crime. Should preventive or reactive supervision be applied? There are no easy answers to this question. Data security is freedom from cyber attacks and cyber terrorism. Creating an effective security system is no easy task as it needs to combine efficiency criterion and network efficiency as a data set with the criterion of freedom and anonymity.

Of all the challenges I have described the most important challenge is where no simple answers to the arising questions can be found. The development of the EU and the Member States’ policies in this area require further reflection on this issue and consultations with the stakeholders – network users and members of the network. Without their participation, there is no possibility of facing these challenges and developing relevant public policies.

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Tor Project, at <https://tor.eff.org/>.


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