

Comparative Analysis

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Executive summary

The deliverable focuses on the role of the media in political communication of key security issues and threats. It describes media coverage of three security-related issues and their role in shaping public opinion on security risks and on application of new tools of prevention such as 3D body scanners at the airport or CCTV cameras monitoring the public space. The aim is to describe and compare how the security related issues are communicated with citizens' via media and how much attention is paid to security and risks in European and transatlantic context. Deliverable also concentrates on negative aspects of public surveillance and the trade-offs among security, privacy, health and personal dignity.

For this purposes, in-depth qualitative comparative analysis of media content was used. Comparison of three security issues such as Stuxnet (which represents cyber terrorism), 3D body scanners (security measure against terrorism and organized crime but with possible negative impact on passengers' health) and CCTV cameras (a tool of security which can endanger people's privacy) was carried in ten countries. To provide relevant cultural and political diversity, three kinds of countries were selected for comparative purposes: old member states of EU (Germany, Italy, Great Britain, Spain) new EU member states (the Czech Republic, Slovakia, Poland) and non-European countries (Mexico, the USA, Turkey).

Analysis showed that media and public are aware of the trade-offs between security, privacy and the need of regulation of the security measures. On the other hand, the aspects of internal and external security are not neglected because terrorisms and organized crime are perceived as relevant security threats. In other words, consensus on a certain degree of surveillance is necessary. Despite of this fact, newspapers reflected that greater security does not necessarily require a loss of privacy and vice versa. In this respect, newspapers fulfilled their function to be a platform for critical discussion.

Three security-related topics did not attract the same level of media attention. Newspapers focused more on issues of CCTV cameras and 3D body scanners while lowest media attention was reported in case of Stuxnet because it was not a technology directly affecting daily life of common people. The United States were leading country in debate about 3D body scanners and Stuxnet but played only marginal role in discussion about CCTV cameras. Key factor influencing the discussion about security measures was the past experience of the countries with some kind terrorist attack (the United States, Great Britain and Spain) as well as and the probability of future attacks.

To conclude, security related-issues, surveillance, right for privacy and its protection are not clearly defined and unchangeable terms but their perception is influenced by security context, mass media, cultural variables, laws and specific context of particular state. Media play key role in communication of security issues and threats, they are the important source of information and significantly influence and shape people's attitudes about security.



1. Introduction

Work package four - Security and Society - has several objectives during the first two years of the project. First, the work package has a goal of conceptualising security and risk as a social phenomena. Second, analyse the mutual interplay in public opinion and attitudes and then identify policy interactions between policy makers, industry (stake holders) and citizens (consumers).

In order to supplement the quantitative analysis of secondary data, and to further strengthen the linkages to the case studies, the Prague Seconomics team organised and successfully implemented the Prague Graduate School in Comparative Qualitative Analysis 2013. The school serves as a framework for obtaining qualitative data for comparative analysis of risk and security related discourses and patterns of communication. This framework will enable the Prague Seconomics team to not only identify effective channels and patterns of communication and risk prevention for relevant target groups, but also generate unique corpus of comparative data on ten countries over the period of forty month. The interim product is a corpus of almost 3200 articles (2800 in national newspapers and 400 in blogs) related to issues of 3D body scanner for airport security case study, Stuxnet for critical infrastructure security case, and CCTV camera systems for public transport security case.

The articles that are analysed in the study were selected from the period between January 2010 and April 2013. Each article was sourced from the two most circulated quality dailies (i.e. mainstream newspapers, excluding yellow press) in the following countries: the old and the new EU member states the Czech Republic, Germany, Italy, Poland, Slovakia, Spain, the UK; as well as non-EU member states important in either shaping the global discussions on the selected issues (the USA) or key in providing relevant cultural diversity (Turkey and Mexico). Additionally, four expert security blogs were selected to supplement information on communication patterns for the general population with those among and towards the security expert community. The expert blogs see Lacina 2014.

The three topics that we included in the analysis didn't attract the same level of attention among the studied countries. United States acted as a leading country in the case of 3D body scanners and Stuxnet, providing the discourse for the rest of the countries that we have analyzed. On the other hand, in the third analyzed topic it played only a marginal role. CCTV cameras caused major attention and controversy in Poland and Germany. Poland belongs among the strongest supporters of the installations of CCTV cameras while German articles revealed it standing on the opposite side and arguing mainly negatively towards these devices.

Table 1: Comparative Assessment of Salience of Security Measures

Salience / 3D Body scanner Stuxnet CCTV cameras Measure
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Low salience	Turkey Poland Mexico	Italy Poland Slovakia	US Italy Poland UK Expert blogs
Medium Salience	Czech Republic Slovakia Spain Italy Expert blogs	Czech Republic Spain Turkey	Mexico Spain
High Salience	US UK Germany	US Germany Mexico UK Expert blogs	Turkey Slovakia Czech Republic Germany

Source: SECONOMICS ISASCR

Salience is a term in public opinion, communication and policy research, originally developed in semiotics and referred to relative prominence of a sign. In communication research salience refers to accessibility of frames (i.e. narrative structures in which information are presented) in (mass) communication.

For the purpose of this study, salience is defined as public perception and reception of security issues and more particularly of security measures; for this purpose salience signifies the degree of acceptance (positive salience) and the degree of rejection (negative salience).

In the following figures we offer the comparative preview into the saliency of the three selected issues in the ten countries over time.

Graph 1: The Salience of the 3D body scanner issue in the media between 2010 and 2013 (in N = number of articles)





Source: SECONOMICS ISASCR

The corpus of articles on 3D body scanner comprises almost 500 articles. As the graph one demonstrates, most articles in this sample were identified in the US media, followed by the UK and Germany. We can say, that the issue of 3D body scanner was most salient in these three countries and least salient in Turkey, Poland and Mexico. Furthermore, the graph one also demonstrates that 3D body scanners were most salient in 2010 and is gradually becoming less salient over time.

Graph 2: The Salience of the Stuxnet issue in the media between 2010 and 2013 (in N = number of articles)





Source: SECONOMICS ISASCR

The corpus of articles on Stuxnet comprises also almost 500 individual articles. As the graph two demonstrates, most articles in this sample were identified in the US media, followed by Germany, Mexico and the UK. We can say that the issue of Stuxnet was most salient in these four countries and least salient in Italy, Poland and Slovakia. Furthermore, the graph two also demonstrates that Stuxnet issue was most salient in 2012 and is rather stable over time, with a slight drop in salience in 2013 (in the first four months of 2013).

The corpus of articles on CCTV cameras (graph 3) is significantly larger than the previous two, and comprises also almost 1900 articles. Furthermore, in the figure three Turkey can be clearly identified as an outlier, as it contributes 1000 articles to the overall sample. The saliency¹ of the CCTV cameras in Turkish media is caused by the frequent use of CCTV cameras, as well as its utilization by police during investigation. Nonetheless, excluding Turkey, CCTV cameras would still remain the most salient issue. As figure three demonstrates, most articles in this sample were identified in Turkish media, followed by Slovakia, the Czech Republic and Germany. It is also important to note, that the selection concentrated on articles referring to the use of CCTV in public transport. This restriction was applied to eliminate possible inflation of the sample by articles related to the general use of CCTV cameras in criminal investigation. In graph three we also see, that the issue was least salient in the US, Italy, Poland and the UK. Furthermore, the graph three also demonstrates that the saliency of the CCTV camera issue is relatively stable over time with a subtle growth in 2013.

¹ Salience is a term in public opinion, communication and policy research; originally developed in semiotics and referred to relative prominence of a sign; in communication research salience refers to accessibility of frames (i.e. narrative structures in which information are presented) in (mass) communication.







Source: SECONOMICS ISASCR

A cross section of findings is provided in the national reports (and the expert report²) and in the comparative report. This report offeres an in-depth descriptive analysis of actors, topics, and justifications over time including fitting quotations; and analyse the general trends of the main discussions on each topic. The authors look for prevailing themes, dominant patterns of interaction and comparing the three topics in terms of intensity and type of debate, as well as the influence of domestic and international context.

The comparative analysis is based on national reports and merged data set. Comparison is done separately for the three case study-based topics in 9 countries. The Turkish articles were collected but for some technical problems it was not possible to realize the in-depth qualitative analysis of the Turkish press.

2. Methodology

In the study of risk perception, analysis of quantitative data offers important insights into and general overview of citizens' perceptions and attitudes toward risk and security, conditionality of these, as well as attitudes to the various trade-offs. However, given the limited availability of relevant current data, alternative strategy is outlined in the conclusions to obtain own data directly related to research needs of the SECONOMICS project. The reason for choosing the media analysis are that communication channels and communication patterns between

 $^{^2}$ The analysis of blogs is not national, but rather international as four English speaking blogs were selected based on their relevance among the security experts.



policy makers, stake holders and citizens in the area of security and risk is currently under-researched, and media offer a good basis for comparative analysis on the topic. Identification of effective channels and patterns of communication and risk prevention for relevant target groups will thus provide an important scientific and practical contribution to the field.

Based on series of consultations, three current media salient themes were identified as relevant for comparative qualitative analysis (3D body scanner, Stuxnet and CCTV camera systems). Relevant articles from period between January 2010 and April 2013, i.e. 40 months were deemed satisfactory to cover the recent development in the area. Criteria for country selection included EU member states (both new and old, with priority given to countries relevant to case study partners - the Czech Republic, Germany, Italy, Poland, Slovakia, Spain, the UK) as well as non-EU member states important in either shaping the global discussions on the selected issues (the USA) or key in providing relevant cultural diversity (Mexico and Turkey).

In all countries one left-wing and one right-wing media was selected. In Spanish case it was one national and one Catalonian daily was selected, because the case study on public transportation is provided in Barcelona. In the following figures we offer the first comparative preview into the saliency of the three selected issues in the ten countries over time.

Country	Media						
Czech Republic	Mladá fronta Dnes, Právo						
Germany	Süddeutsche Zeitung, Franfurter						
	Allgemeine						
Great Britain	The Telegraph and The Guardian						
Italy	Do la Popublika, Il Giorpallo						
Italy	De la Republika, Il Giornalle						
Moviko	La lardana La Deferma						
Mexiko	La Jordana, La Reforma						
Poland	Gazeta Wyborcza, Rzeczpospolita						
Slovakia	SME, Pravda						
Spain	El Pais, La Vanguardia						
Turkey	TIME (ZAMAN), SPOKESMAN (SOZCU)						
USA	The New York Times, The Wall Street						
	Journal						

Table 2: Overview on selected media



Blogs

The Register; HITB - Hack in the Box; RW - Roger-Wilco; Bemosa

Three coding schemes (one per each topic - 3D body scanner, Stuxnet, and CCTV cameras) were elaborated by the Prague SECONOMICS team, tested and finalized during several rounds of pre-test on all selected countries. The role of the coding scheme as a research tool is twofold - first, it provides structure and guidelines for the analysis, and second, it ensures comparability of the individual national reports.

The intercoder reliability oscillated between 80 and 90%, which from a methodological perspective is an excellent result in international and multicultural comparative research. The results of the intercoder reliability test were extensively discussed within the SECONOMICS expert group and, when necessary, also with individual coders whose coding stood as outliers. This tool proved to be crucial in providing an understanding of the general logic of qualitative comparative analysis, gaining insight into the coded material as well as the ability to fully grasp the meaning behind the individual codes.

Our main task was to conceptualise security and risk as a social phenomenon and to analyse their mutual interplay in public opinion and attitudes; and to identify policy interactions between policy makers, industry (stake holders) and citizens (consumers). We have used the method of comparative qualitative analysis as a tool for obtaining qualitative data for comparative analysis of risk and security related discourses and patterns of communication. This tool enabled us to identify effective channels and patterns of communication and risk prevention for relevant target groups, but also generate unique corpus of comparative data on nine countries over the period of forty month. The interim product is a corpus of almost 3200 articles related to issues of 3D body scanner, Stuxnet, and CCTV camera systems.

Both during the pre-test and main coding period, the minimum discursive elements of a coded statement included the following (1) Actors: a determination of which actors were taking part in the communication (both in terms of origin and type) and which were the dominant patterns of interaction among them; (2) Topics: an account of how the discussion of each topic was structured by choice of or focus on specific subject matter; (3) Argumentative strategies: a description of the ways in which statements were structured (definitive, evaluative and advocative strategies³) with a focus on the positive and negative aspects of evaluative and advocative statements; (4) Motivations and justifications: an analysis of major recognized motives (providing an answer to the question of why a certain statement is used and how it is validated) brought to the fore or denied by

³ Three argumentative categories are recognized and conceptualised following Dryzek and Berejikan: (1) Definitive: focused on the meaning of terms; (2) Evaluative: evaluation of positive or negative statement of worth; (3) Advocative: determining the desirability/non-desirability of given elements (Dryzek Berejikan 1993).



dominant actors, with special attention paid to ideas about security, privacy and freedom.

3. Media landscape in countries covered by research

The national reports clearly showed a necessity to be aware of existing ties between political actors and the media, which have important implications for any media analysis. Although our sample of countries is highly diverse and includes Central European (the Czech Republic, Slovakia, Poland) and West European countries (Germany, Italy, Spain, the United Kingdom) together with two overseas countries (USA and Mexico), we can observe some global trends in the media sector as well as some diversity. In particular, the analyzed sample and time period point towards some major changes in ownership structures and regulatory frameworks. The main focus here is on print press and its online versions, which were used in the national reports.

The global economic downturn of the past five years has hardly hit the media sector. Profit margins are much lower than in the 1990s, several news houses were forced to lay off investigative and international journalists, reduce outputs and limit the amount of overseas branches. All major British newspapers experienced headline circulation drop in the past three years. BBC and the reduction of its BBC World section is a case in point. As early as in 2010, the Central and East European countries had lost from 30% to 60% of their income (Open Society Fund 2010). As Hronešová and Caulfield (2013: 15) noted, "one of the strategies how to lower costs has become multi-skilling of staff and cutting specialist correspondents, foreign bureaux and investigative journalism, which has only reinforced the trend of journalistic dumbing down." News coverage has focused on informative reporting rather than large investigative and analytical pieces, which are more costly and require a larger pool of staff. Media content turned towards entertainment and tabloid-style news for commercial purposes. This has led to a negative trend in the media referred to as "infotainment", i.e. the presentation of news information in an entertaining and more appealing form (see Beláková 2013a). More importantly, media independence has suffered by an increased dependency on governments and large business to support their outputs. Political and business interests have crept into media content, especially in countries, which were greatly hit by the crisis. On the positive side, the latest media development has also seen a great technologization of news reporting and preference for online platforms due to their efficiency, accessibility and lower cost (Hronešová and Caulfield 2013).

While stressing these underlying factors and global pressures on the media sector, the national case studies included in the national media analyses highlight several regional and national characteristics. The three Central European countries - Poland, Slovakia and the Czech Republic score high in terms of press freedom in the *Reporters without Borders* 2013 ranking, with the Czech Republic performing the best out of all analyzed countries (see Table 3). Although freedom of press and



the right to information are constitutionally anchored and the press is regulated by state press acts, the latest development has seen the media especially vulnerable to financial pressures through business and indirect political meddling. Newspapers in the region have been in the hands of large media companies such as Mafra in the Czech Republic, Agora in Poland and Media Group in Slovakia.

Country	Rating	World Rank
Czech Republic	10.17	16
Germany	10.24	17
Poland	13.11	22
Slovakia	13.25	23
United Kingdom	16.89	29
United States	18.22	32
Spain	20.50	36
Italy	26.11	57
Mexico	45.30	153

Table 3: World Freedom of Press 2013

Sources: World Press Freedom 2013, Reporters without Borders

As a consequence of the financial crunch, foreign investors left the region and media conglomerates were bought by local businessmen with diverse business interests. The departure of foreign business has undermined the independence as well as guality of the press. As both Beláková (2013a) and Sojka (2013) note that this business-media elites have used the media to advance their own business or political interests. In addition, self-censorship is difficult to establish as it is driven by the fear of losing a job in very precarious times (see Gawrecká 2013). In the Czech Republic, the so-called Muzzle Law of 2009⁴ undermined the constitutional right to inform and be informed and introduced strict restrictions over the freedom of speech. Only after a sever criticism was the law amended in 2011 and today leaves out cases, which are in high public interest (such as political corruption). In Slovakia, the media have been negatively affected by politically motivated libel lawsuits and the distribution of state advertising (Beláková 2013a). As Beláková noted (Beláková 2013a: 10), "since by 2010 virtually every national daily had been involved in some libel case, media professionals felt that the threat of libel was shaping what was published". In a similar fashion, Polish media has been politically polarized since the 1989 transformations with occasional direct interference of major political actors as documented by Sojka (2013).

⁴ The so-called *Muzzle Law*, Act 52/2009 Coll., amending Act No. 141/1961 Coll., introduced a ban on publishing any account from police wiretapping in newspapers, the Internet, TV, or radio.



As for West European countries, Italian media is certainly in the most precarious situation. De Gramatica's report clearly shows how media ownership in Italy directly determines what type of news can or cannot be published. Yet the situation is different than in Central Europe, as *"the Italian media Iandscape breaks down into a myriad of partial, but not insignificant, holdings"* (de Gramatica 2013: 10). Yet one actor dominates the Italian media sector, the former Prime Minister Silvio Berlusconi. Berlusconi's media empire has turned Italian public broadcasters into extended hands of his political interests, which was apparent during every round of elections. Especially the newspaper *II Giornale* has been very supportive of Berlusconi's *Forza Italia*. Due to these open political influences, Italian press freedom is usually assessed very poorly, which is reflected on all independent rankings.

The situation in Spain is to some extent similar. As Pereira-Puga and Hronešová (2013) noted, *"although media freedom and independence has been respected in practice since the first democratic opening in 1975, the majority of media are economically dependent on the state and close ties with some political parties indirectly influence news reporting".* Reporters without Borders have often criticized the ruling Popular Party for interfering in the appointment of editorial boards of the main Spanish media houses. Similar to the Central European situation, Spain has also undergone some serious media ownership concentration, whereby the main media houses are now in the hands of only a few holdings. Post-1975 Spanish newspapers such as *El Pais* have a very high reputation, though, and despite their clear social democratic position are considered as highly professional.

Germany and the United Kingdom present a different media landscape due to their long-standing journalistic traditions. Their media markets are also large and diverse, reaching beyond their borders. As Nitschke (2013) noted, Germany has over 300 dailies, 30 weeklies and over 10,000 magazines, including one of the most respect weeklies in the world *The Spiegel*. The United Kingdom was in fact the pioneer of journalism as we know it today. Britain was also the first country to develop a "public sphere where public opinion can be formed (Hronešová and Caulfield 2013). Despite high journalistic standards on both countries, there are two caveats. First, due to the stricter security measures in the first post-9/11 decade, both countries have adopted legislation curbing journalistic freedoms. The German Terrorist Act of 2009 gave the police greater power to conduct covert surveillance. In the UK, journalists are not only required to reveal sources and turn over material important for state security but the 2006 Terrorism Act criminalizes speech inciting terrorist actions, which can be very precarious in certain cases. Secondly, in Germany and the United Kingdom there are established links between high politics and media owners and executives, which occasionally translate into influences on the news coverage.

The British case is also interesting for the unique self- regulatory nature of the British press. The analysis in the British national report shows that until recently an independent commission was overseeing the regulatory structure in the UK. However, since the 2011 phone-hacking scandal at the weekly *News of the World*, the British government launched a public inquiry into the general regulatory



framework, which is currently undergoing major reforms. The scandal in fact uncovered an important malfunctioning of the British media ownership regulations as private media outlets have come to hands of a few business companies with political interests. Each main daily has a somewhat different ownership structure, whereby *The Guardian* has the most transparent one. The management of the paper is answerable only to its owners (Scott Trust Ltd.), and conducts and external annual audit. The paper also has an independent Ombudsman, who is in charge of complaints.

Unlike the direct influence in Italy and Spain, US media have been assessed as one of the most politically independent and most commercial in the world (Beláková 2013b). Media freedom is one of the anchors of the US constitutional system and the courts have in the past often ensured that they are protected from libel and defamation suits with public figures. As the press is predominantly in the hands of private companies, the news sector is driven by commercial interests. This also leads to only a limited diversity of provided news as the focus is on newswire reports. The financial crunch had a serious negative impact on investigative journalism in a similar fashion as elsewhere; however, it has also led to the change of ownership structures. Previously, individual owners (most influential families) owned main news outlets. In the aftermath of the financial downfall, though, large corporations and tycoons have started to bail out media outlets in financial difficulties. Most notably, the Amazon founder Jeff Bozos bought Washington Post in 2013.

Lastly, the position of media is dramatically different in Mexico. Mexico is a dangerous place to be a journalist. Due to the ongoing war between the state and drug barons, tens of journalists get killed every year. Moreover, political censorship is omnipresent. It was especially strong during the controversial July 2012 elections, which brought back to power the Institutional Revolutionary Party (Vamberová 2013). Citing Reporters without Borders 2013 report, Vamberová highlights the low level of journalistic freedoms as well as threats journalists are facing: *"They are threatened and murdered by organized crime or corrupt officials with impunity. The resulting climate of fear leads to self-censorship and undermines freedom of information"* (Vamberová 2013). In terms of quality of the press, Mexico is dominated by the so called red press, i.e. *"news focusing on assassinations, kidnappings, and drug crimes"* (Ibid.). Mexico also faces a high concentration of media ownership in the hands of only a few influential businessmen such as Mario Vázquez Raña.

The global economic malaise of the past few years has had a clearly negative impact on the media sector in the studied countries. Ownership has slowly been shifted into hands of businessmen and tycoons, whereby ownership restrictions have relaxed limits on market shares (with the exception of the UK).⁵ The quality of the produced news and analyses has also suffered under financial constraints. Journalists have been faced with unprecedented financial challenges, whereby they often had to compromise their journalistic ethics for commercial profit. This has

⁵ Table 2 provides a general overview of newspaper ownership structures in the coded countries in 2013.



resulted in growing self-censorship, which is difficult to measure. In addition, there has been a trend of political meddling into editorial policies and the news content as media owners often have close ties to main political actors. There is a clear difference in terms of freedom of press and the quality of journalism across the studied countries, though. While Central European media score highly on media freedoms, the quality of news reporting is much lower, whereby informative rather than analytical pieces dominate. On the other hand, both the United Kingdom and the United States provide investigative and analytical news reporting at highest professional journalistic standards. Italy and Spain struggle with influences of large business and politics over media content but still offer diversified and quality journalistic reporting. Lastly, Mexico is a clear outlier in the set of analyzed countries and was even assessed as the most dangerous country for journalists on both American continents, mainly due to the on-going cartel wars (Reporters without Borders 2013).

4. The domestic and international context

In the recent years, security threats such as terrorist attacks, global organized crime and cyber attacks have come to the forefront of the world attention, creating a new setting for worldwide security challenges. As analyzed in the SECONOMICS country reports, the 21st century is facing a post-modern type of challenges and risks, associated with latest technological development and a new virtual platform of crime. Terrorist attacks, intelligence leakages as well as direct or indirect participation in global or national cyber-attacks have significantly influenced the latest policy priorities in the field of national security. The protracted financial crisis has further intensified concerns for public safety as crime is expected to grow during times of economic malaise. These developments have been reflected on national security concerns and strategies⁶ of all studied countries, which have reacted by adopting new security measures and legislatives. In the studied period in 2013, a series of high-profile cases related to leakages of top-secret intelligence data have questioned the legality of security practices applied by national governments. These eye-opening events have intensified debates about the extent of powers of the national intelligence over the publics. Whistleblowers Bradley Manning, Edward Snowden as well as the Wikileaks initiator Julian Assange have embodied the scope of the secretive intrusions of the state into private lives of their citizens, usually justified by the war on terror and carried out under the vestige of counter-terrorism. As indicated in the individual country reports, negative perceptions of security and the question of who controls the controllers have gone hand in hand with debates about the need for increased protection against global crime.

⁶ Italy is among the studied countries the only one with no clear security strategy (see de Gramatica 2013).



In view of these global events and taken into account the domestic political and economic developments, each of the studied countries has prioritized a specific aspect of its national security. Countries, which are generally more active on the international scene or have had a previous experience with domestic and international terrorism, are generally more exposed to (and hence concerned about) potential terrorist attacks. Such countries (UK, US, Spain, Germany) prioritized airport security in the form of body scanners and intensified CCTV coverage (Nitschke 2013). Surveillance and improved transportation security measures have been on top of the governmental priorities, especially since the 9/11 attacks in New York City and the 7/7 2005 attacks in London. The current trend towards installing more surveillance systems and scanning devices in public spaces have chosen invasive security devices such as the 3D body scanners at the cost of intrusions into privacy. Countries dealing with large-scale organized crime such as Mexico, which finds itself in the midst of a drug war, have also been strengthening its surveillance capacities (Vamberová 2013).⁷

On the contrary, in countries with no real danger of a terrorist attack by international extremist groups, there is a low policy interest in advanced and costly security devices such as full body scanners the topic of 3D body scanners. Although some countries in Central Europe such as Poland and the Czech Republic have become part of the global war on terror by contributing their soldiers to the military actions, the governmental assessment of potential terrorist risk is very low (see Sojka 2013). Nonetheless, surveillance is also very topical for reasons of improving overall public safety - especially in capitals and transportation knots. Though for different reasons, concerns for national and public security have thus in the studied period ran very high in all studied countries.

After the most medially exposed terrorist attacks of the last two decades, a series of new policy approaches has been introduced, which fall within the scope of the three studied topics of this project. The 9/11 terrorist attacks in New York and especially the Christmas Day 2009 bomb attempt in Northwest Airlines have shaped US security policies in a significant fashion. As Beláková (2013b) noted, the failure of the US intelligence to act pre-emptively during the 2009 bomb attempt "triggered a fierce discussion among lawmakers, authorities, experts and advocacy groups about air travel security measures." In Europe, the 2004 Madrid train bombing and the 7 July 2005 attack in central London provided evidence that after 9/11 terrorism is a global, rather than a domestic issue as it used to be in the past in the UK (IRA) and Spain (ETA), which merits global strategies and approaches (Pereira-Puga and Hronešová 2013). As documented in the report by Nitschke (2013), Germany has successfully prevented at least seven terrorist attempts in the past decade. Italy experienced its last terrorist attempt in 2002 but the death of Italian soldiers due to a bomb attack in 2010 in Afghanistan also led the government to introduce transport security devices (de Gramatica 2013).

These attempts across the studied countries in Western Europe and overseas have intensified calls for a need of a transnational counter-terrorism strategy. In

⁷ Since 2006, an estimate of 40,000 and 70,000 people have died during the drug war (Vamberová 2013).



particular, cooperation in the field of transport and airport security has increased. The so-called multi-layered approach to security was developed by the US Department of Homeland Security and the Transportation Security Administration, which included "increased sharing of intelligence and boarding pass information, the widespread use of body scanners, officers monitoring human behavior (sic) in airports and closer relationships with airport officials around the world" (Beláková 2013b). Anti-terrorism databases have been created in Germany and other countries, sharing information about main terrorist groups across the world (Nitschke 2013). In the UK as well as in the US, the already discussed full body scanners were introduced at airports (Hronešová and Caulfield 2013). The scanners were believed to improve security in aviation by detecting liquids and non-metallic objects. However, their introduction stirred some religious as well as human rights groups since the scanners virtually stripped passengers naked. The invasive nature and the consequences for human dignity and intimacy of the scanners (see Nitschke 2013) as well as their potential health hazards were discussed by the European Parliament in 2010. So far, a neither a global nor a European position on the application of these devices has been adopted.

Furthermore, the installation of monitoring devices has significantly increased in the last two decades. In the US, the number of CCTVs had increased by approximately 30 million from 2001 to 2011 (Beláková 2013b). Out of all the studied countries, Great Britain has the highest number of closed-circuit television cameras per person. According to the British Security Industry Authority, 5.9 million CCTVs have been installed in the country since the 1980s (Hronešová and Caulfield 2013). That is why the UK report has been titled "Xanadu of surveillance". Similarly to the body scanners, the main discussed topic surrounding the introduction of CCTVs has been their intrusive nature and potential consequences for breaches of the right for privacy. Such debates were most prominent in the US and the UK but have often been shunned given the alleged benefits for general safety. For the sake of higher public safety, stricter security measures have been generally accepted by the public. As reported in the UK national report for this project, "from the initial outrage at living in 'one nation under CCTV', watched by the Orwellian 'Big Brother', CCTV has become a point of ridicule, mockery and humour" (Hronešová and Caulfield 2013: 7). Similarly, as shown by Sojka (2013: 7) for the post-communist part of Europe, "CCTV cameras have become in a very short time a social status symbol and constitute an inseparable part of the post-1989 modernization processes." In the Slovakian case, Beláková (2013a) argues that the relatively high occurrence of private surveillance was due to the fact that CCTV in private homes has become trendy in the country and a sgn of a social status.

The main pro-CCTV argument used in the past two decades has indeed been the decreasing criminality rate around the world despite the looming economic malaise. CCTV footage has generally been used a crime solution mechanisms and a deterrence device. As Beláková (2013b: 25) noted, "[t]echnological advancements, including surveillance equipment such as CCTV cameras were thought by some to have contributed to the downward trend in crimes statistics." However, not all analysts agree with this assessment, arguing along the socio-demographic lines



rather than changes in crime-prevention policies (see Hronešová and Caulfield 2013). Although the link between increased usage of surveillance systems and lower criminality rates worldwide has still not been confirmed (see Beláková 2013b and Hronešová and Caulfield 2013), it is clear that CCTV can be sused as a good mechanisms for solving crimes and identifying perpetrators. Immediately prior to the studied period, on 15 April 2013, an improvised bomb exploded by the finishing line of the Boston Marathon, killing 13 people and injuring over 260. Surveillance footage as well as private videos from smartphones were used during the following (and successful) manhunt on the suspects. In this respect, surveillance footage can rapidly increase the time of solving a crime and finding the perpetrators (see Pereira-Puga and Hronešová 2013).

Recently, cyber crime has become a typical high-volume crime in the UK, which often outnumbers burglary and robbery cases (Hronešová and Caulfield 2013). Cyber crime uses information systems and technology to commit extortion, identity theft, espionage or even paralysation of critical infrastructure. As analyzed in this project, in June 2010 a worm was developed by the USA and Israel to interfere with uranium enrichment in the Iranian nuclear facility at Natanz, which opened a new era of cyber wars. Stuxnet was designed as a highly sophisticated malware, which targeted a very particular section of the Iranian nuclear facility. The reason why Stuxnet has shaken the public views about cyber security is that it was unprecedented in its scope and effectiveness. As a highly sophisticated weapon, it was able to penetrate into the Iranian nuclear facility in a quasi-autonomous fashion (see Beláková 2013b). However, Stuxnet has been only one among many current cyber attacks, though it has certainly been the most destructive one so far. In response to these developments, the British Government responded with the release of National Security Strategy and Strategic Defence and Security Review in October 2010 and devoted over £650 million to increase cyber security (Hronešová and Caulfield 2013). Also in the US network intrusions were reportedly widely considered as one of the most serious potential national security challenges in 2012. Cyber Intelligence Sharing and Protection Act was passed, aimed at protecting private computers (see Beláková 2013b).

Furthermore, the global threat of terrorist attacks and cybercrime has revealed itself also on the adoption of new legislatives. This trend was especially strong in the United Kingdom and the United States. The British Terrorism Act of 2006, Counter-Terrorism Act of 2008 and Terrorism Prevention and Investigation Measures Act of 2011 introduced strict measures and zero tolerance towards any extremist views, which could potentially lead to violent terrorist acts (Hronešová and Caulfield 2013). Even countries running a smaller risk of terrorism have adopted new measures. Although *"terrorism does not represent a threat to the population"* in Italy, the government adopted new anti-terrorism legislation in 2005 (de Gramatica 2013: 14). Stricter laws have inspired a counter-trend in regulating the intrusive nature of monitoring systems, which have recently started to be regulated in some countries such as Slovakia and Spain (see Beláková 2013a, Pereira-Puga and Hronešova 2013). In all European countries under study, CCTV footage is strictly limited to be kept only for a certain period of time and is to be used only for the purposes of criminal investigation. The weak rule-of-law state in Mexico, though,



allows for misuse of the footage (Vamberová 2013). The legal repercussions of the new security risks have thus combined both increasingly stricter laws with a growing concern for arbitrariness in state intrusions into privacy.

In 2013, the countries under study have been influenced both by domestic political developments and domestic crime as well as international political developments, especially related to the ongoing military actions in Afghanistan and Iraq. In the aftermath of reoccurring terrorist attacks, law-enforcement authorities and politicians periodically called for introduction of more advanced surveillance technologies, including face recognition and full body images. Even in countries with lower exposure to terrorism, concerns for potential growing criminality under the conditions of an economic crisis as well as the global emergence of cybercrime have inspired stricter security measures. It can be expected that post-modern security risks will only intensify with advancing modern technologies. As a consequence, a growing concern for the respect of privacy and intimacy - both physically and online - will require an adequate legal response from individual states.

5. Comparative analysis

5.1 3D body scanners

5.1.1 The most salient actors and argumentative strategies related to the 3D body scanners

The debate about 3D body scanners in the selected countries can be simplified in the same manner as the debate in the USA over the security starting after the terrorist attempt in a plane to Detroit in 2009. The rest of the countries reacted mostly to the events happening in the US and bringing their own agenda into it. Among the European countries the topic has not developed much. The UK, Netherlands and Italy are supporters of this technology, the rest of the analyzed countries is evaluating it rather negatively. The tendencies are divided between the different actors in a very similar way in each country. "Transport security agencies" and "politicians" argue in favour of the scanner. "Passengers", "advocacy groups" and "experts" argue against it. Only Italy makes some exceptions - "passengers" surprisingly seem to be very much in favour of the scanners and all the Italian debate is framed mainly by "politicians".

The development of the actors through the time lapse is very similar in all the analyzed countries. In countries that didn't develop the debate as much we observe the use of mostly informative and neutral argumentation styles. The actors are mostly international and we are not able to capture much of the national discourse. These countries are Slovakia, Poland, Spain and partly the Czech



Republic. The rest of the countries provide some distinct debates and we can make a guess about their position. The strongest actor in the 3D body scanners field is the United States where the 3D body scanner controversy involved the most attention of all three analyzed topics. However, an interesting debate about its use has been developed in Italy, Germany and Great Britain as well. In the USA the topic was settled. There is a strong support of "government" and "transport security agency" (TSA) for the introduction of body scanners. Immediately after their implementation many other groups of actors joined the debate in the media to support or oppose them. There were strong voices questioning health and privacy issues, coming from "passengers", "experts" and "civil society groups", so in the next stance, "government" and TSA had to respond to these concerns and find argumentation for actions to remain legal in the eyes of public. Other countries that developed the discussion react primarily to the US events and then open the same circle of debate in their national context. In the EU countries the biggest proponents of 3D body scanners are Italy, Great Britain and Netherlands, while other countries remain sceptical. In the EU scene the topic is in a stage of discussion. Generally we can say that the number and diversification of actors involved in this issue increases through time as more groups join the discussion. The dynamic of the whole debate is also interesting. Almost all of the articles were published in a relatively short period after the discussion had started and then the topic left the discourse again. The curve of public support to the installation of the security measures would follow the same trend as the level of perceived threats increases rapidly after an accident or attack, but it tends to wane as guickly as it appeared (Mansfeldová and Guasti 2013).

Graph 4: Overview of the top 5 actors in articles about 3D body scanners





Source: SECONOMICS ISASCR, based on table 4

Table 4: Overview of the most important actors in articles about 3D body scanners, 2010-2013

Actors	E	CZ	I	MEX	PL	SK	D	GB	USA	Total
	No.	No.	No.	No.	No.	No.	No.	No.	No.	
Institutions	0	5	0	1	0	4	0	0	16	26
State institutions	45	5	0	5	7	14	9	6	36	127
President	8	0	0	0	0	0	0	2	2	12
Politicians	0	0	29	1	0	15	16	23	23	107
Transport Company	0	0	7	1	0	0	0	2	0	10
Police	0	0	0	0	0	0	8	0	0	8
Transport Security Agency	3	12	24	3	0	9	0	10	74	135
Private company	1	11	0	2	0	6	0	0	19	39

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Transportation Company	1	0	0	0	2	3	0	7	28	41
Advocacy Group/civil society	0	0	0	2	2	3	5	25	17	54
Journalist	69	12	16	4	7	0	9	90	72	279
Passengers	5	6	0	4	0	6	2	4	34	61
Scanners	0	4	0	0	0	8	12	1	11	36
Experts	3	12	0	2	2	4	15	4	35	77
Activists	4	4	0	0	3	0	0	0	0	11
Others	1	0	0	1	1	3	0	1	19	26
State (s)	0	4	7	3	3	21	0	0	10	48
Total	140	75	83	29	27	96	76	175	396	

Source: SECONOMICS ISASCR

Note: The top 5 actors in each country are marked in yellow

Table 5: Overview of argumentative strategies in the articles about 3D body scanners

Argumentative strategies	E	CZ	I	MEX	PL	SK	D	GB	USA
definitive	110	62	70	16	15	66	29	149	174
evaluative	16	15	38	16	11	14	56	31	169
advocative	11	0	15	4	2	15	1	1	40
Total	137	77	123	36	28	95	86	181	383

Source: SECONOMICS ISASCR

Table 6: Overview of argument direction in the articles about 3D body scanners

Directions of argument	E	CZ	I	MEX	PL	SK	D	GB	USA
positive	11	2	37	7	6	7	14	5	80
negative	17	20	20	7	7	28	40	27	123
neutral	9	55	66	22	15	60	32	149	180
Total	37	77	123	36	28	95	86	181	383

Source: SECONOMICS ISASCR

In the United States the debate over 3D body scanners is sovereignly the most developed when compared to the other countries. The articles are filled with different actors providing statements (see graph 4). In a similar number of articles there are far more actors coded in the US than in other analyzed countries. If we take a look at table 5, we can see that the US articles contained the biggest number argumentative strategies of all the selected countries. The number of evaluative strategies (169 codes) almost reaches the number of definitive strategies (174 codes) and there is quite a high number of advocative strategies as well (40 codes). It shows us that the debate is not presented only at the surface by giving us the facts, but there are many voices and opinions presented in the field. The biggest distribution among the actors is also found in the US. The total number of 396 codes was divided between 14 different categories of actors (table 4).



3D body scanners are primarily the topic of the US. We can observe that when we look at the origin of actors. In the US the actors coded in the articles were 89% domestic (Beláková 2013b) while in other countries the international actors dominated in the debate.

The main actor providing statements about 3D body scanners in the US was "Transport Security Administration" (TSA), which is the institution responsible for introducing the full body scanners at American airports. *"The 3D body controversy in the US newspapers revolved around the 'backscatter' type of scanners that the TSA wanted to introduce at US airports in increasing numbers after the failed terrorist bomb attack from Christmas Day 2009"* (Beláková 2013b: 32). The second most important actors with almost the same number of codes were "journalists", approximating the topic to the public. We could also perceive inputs from "passengers", who were divided almost equally between the group of supporters and the group of critics. The "passenger's" opinions are an important entry here: *"Passengers who had experienced the scanners were often dissatisfied with the quality of service. They described scenes of confusion, undignified situations with security staff behaving in a bullish way, making an impression that passengers could not refuse to go through a scan, or even suspicious selection criteria applied by airport screeners" (Beláková 2013b: 35).*

The same space given to "passengers" was given to "experts" who would talk mostly about health issues in connection to the scanners and to various state institutions mostly advocating the use of body scanners for the sake of security. "The biggest concerns of the scanner critics were potential health risks, privacy issues linked to the quality of service provided at airports, and even doubts about the ability of the scanners to efficiently prevent a terrorist attack" (Beláková 2013b: 34). In total, the USA according to the coded articles, stands somewhere in the middle between acceptance and criticism of 3D body scanners, but tends slightly towards criticism.

Why is the debate so developed in the US while in the other analyzed countries this topic is rather overlooked? There are several answers to this question: First, 3D body scanners have already started to be massively used in the US as a part of increasing security controls at the airports while the European Union keeps forming its opinion about this technology. Second, the terrorist attempt on Christmas Day in 2009 took place in the USA and the implementation of 3D body scanners have been justified in connection with this attack. And finally, introducing all kinds of security measures to protect American citizens became an important political issue in the US during the past decade. That the topic became highly political shows us an example from the US national report: *"President Obama claimed that the measures were 'the only ones right now that they [TSA and his counterterrorism advisers] consider to be effective against the kind of threat that we saw in the Christmas Day bombing"* (Beláková 2013b: 33).

As mentioned above, the rest of our analyzed countries could be seen as reactive to the happenings in the US. The debate very much follows the US trend. In the



rest of the countries the topic hasn't drawn much attention, which is surprising, especially in countries where 3D body scanners have already been installed. For example the United Kingdom and Italy are among these countries (Permanent Representation of the Czech Republic to the European Union 2010).

The debate in Italy seems to be quite lively and distinct at the same time. The leading voice in the debate about 3D body scanners comes from "politicians". It is interesting in comparison to other analyzed countries where politicians themselves did not have the leading role in media debates. In the neighbouring country, Spanish "politicians" did not get a single code as actors. In general the debate about 3D body scanners in Italy was more political than in other countries except for the USA, where national security is the number one political priority. "Politicians considered in this analysis tended to stress the urgency of the implementation of security measures, but at the same time they drew attention to the high security standard already reached. It was a double-sided discourse; on one side they tended to underline security matters as pivotal points on the agenda, reassuring voters. But on the other hand they stoked feelings of insecurity, guaranteeing voters' trust" (de Gramatica 2013: 21). The debate about 3D body scanners in Italy was connected to the general debate over security during Berlusconi's fourth government and was fed by Northern League (right-wing political party in Italy), which blamed illegal immigrants for causing an increased feeling of insecurity, and declared that the state needs effective security measures.

The second important actor in Italy was the "Transport Security Agency" (ENAC in Italy). ENAC carried a parallel function as "politicians" in the debate. It supported the use of 3D body scanners. "Journalists" - the third most important actor - were opposed to "politicians" and ENAC. They evaluated the use of body scanners mainly negatively and their arguments were supported by "expert's" opinion.

An interesting position in the Italian debate is assumed by "passengers". While in other countries passengers were of the strongest opponents of 3D body scanners, in Italy they were unanimously for the scanners. *"But passengers were aware that it required a trade-off. They often repeated the slogan frequently used by politicians, 'better naked and alive than dead"* (de Gramatica 2013: 91).

Here is the place to mention the role of the church in the debate. Did Vatican take a stand about the use of 3D body scanners? The Italian report shows that it played a very small role. "Only 2% of statements were given by religious organizations, but this data is highly representative of the Italian context. The Pope's opinion was covertly adverse to the body scanner, due to privacy reasons. He never referred directly to the device, but his allusion was clear; the dignity and integrity of human beings are their most valuable capital. As often happens in Italy, the Vatican's opinion about moral and ethical issues is publicly declared but in a veiled manner" (lbid.).

Italy together with Great Britain and Netherlands are countries speaking in favour of body scanners. Italian authorities asked for regulation in a European level and wanted common criteria to be settled. But the reluctant countries led by Germany



didn't support the Italian initiatives and the installation of scanners is regulated on national level. Italy is one of a few EU member states where the scanners have been installed so far (Permanent Representation of the Czech Republic to the European Union 2010).

There are no major inputs coming from Spain, Poland, the Czech Republic nor Slovakia, which would enrich the debate about 3D body scanners. The topic didn't cause any major attention there. The actors providing the statements were not of a domestic origin in most of the cases and the statements were mostly informative. We cannot proclaim any strong conclusions due to the lesser importance of the topic in these countries, but according to the coded statements they tend to evaluate 3D body scanners negatively. Another country that tends to be critical about 3D body scanners is Germany (see table 6). One of the reasons, as the author of the German report demonstrates, is brand marking the 3D body scanners as "Nude scanners" in German media at the beginning of the discussion (Nitzche, 2013) which marked it negatively in the eyes of public from the first moment they heard about it. The actors speaking most frequently in German newspapers are "politicians", followed by "experts".

In the case of Great Britain we can see the strong position of "journalists" themselves in the statements. Government entities and "politicians" have entered the debate quite a lot as well, arguing in favour of the scanners in response to terrorist threats. Great Britain is one of the countries where the scanners are already being used, so we could see relatively active debate in here. The argumentative strategies were more negative than positive thanks to various "advocacy groups", "experts" and "passengers". There is a lot of debate on the subject of privacy between "politicians" and civil rights advocacy groups.

On the contrary to its northern neighbour the debate over 3D body scanner has not developed much in Mexico, where it was the least covered of all the three topics. Mexico could be characterized to be somewhere in the middle between support and criticism towards the 3D body scanners. Mexican media mostly transmitted the US articles and commented it "from the other side of the border". The general opinion can be approximated by the title of one of the articles that says: "*They will undress Mexicans*" (Reforma 2010). It indicates the position "them" (Americans) against "us" (Mexicans) which can be found in the Stuxnet case as well.

5.1.2 The most salient topics and justifications related to the 3D body scanners

The United States were indisputably a leading country in the debate about implementation and acceptance of 3D body scanners. The reasons are threefold. First, US debate was the richest in terms of arguments and its justifications. In American newspapers, there appeared the most topics (407) and justifications (238) of body scanners (for more details see graph 5). All main topics (except the "privacy") and all main justifications were highly salient for observed US daily papers (see Tables 1 and 2) conservative "Wall Street Journal" and liberal "New York Times".



Second, the USA also shaped and significantly influenced the informing about 3D body scanners in other countries which were included in our comparison. In other words, the American debate spilled over to many states. This trend was visible particularly in Mexico, Poland and the Czech Republic. Media in these countries reflected mainly the situation in the USA and relied particularly on US media such as The New York Times, CNN and press agencies, for example AP, DPA.

Third, US security context and implementation of anti-terrorist measurements are highly relevant worldwide. The United States is key actor of the world security and the war against terror and one of the countries which is highly endangered by terrorist threat as well as has numerous experiences with these attacks. Similarly, the USA spends the highest amount of money on its internal and external security (Strouhalová 2013).⁸ The highest number of scanners worldwide is installed in the US airports, for example, 385 body scanners were installed in 68 airports and in 2010 (Academic.ru 2013).

On contrary, the debate about the full body scanners was weakest and featureless in Poland (just 30 topics and 11 justifications) Mexico (26 topics and 19 justifications) and regarding the low number of 21 justifications also in Italy. Attention paid to 3D scanners in these countries was low (see Tables 1 and 2) with shallow public debate and repetitive information taken from particularly US resources. This fact is interesting particularly in the case of Italy because there the scanners were installed but general public debate on their pros and cons or broader analytical context was missing.

It was expected that the debate about body scanners would be more sophisticated and this topic would be more salient in countries where scanners have already been installed. In countries from our sample, the scanners were installed mainly it the airports in USA, some airports in UK, Italy, and they were tested in one German airport (Permanent Representation of the Czech Republic to the European Union 2010).⁹ The assumption was confirmed in the case of USA and Great Britain and partly in Germany. Nevertheless, it was not proven in Italy.

Scanners have not been installed yet in new EU member states and in Mexico. Polish, Czech, Slovak and Mexican newspapers perceived scanners more or less as an external problem which was not particularly interesting for general public. In fact, the scanners are relevant for common people also in the countries where they have not been implemented yet. Citizens could have experience with body scanners during their travelling to the countries where the scanners have been installed. For example, Czech journalist described his negative and humiliating experience with the scanning procedure from US airport.

⁸ US military costs were 661 billion USD in 2009. It is a 43% share on global security expenses (Strouhalová 2013).

⁹ Scanners were installed also in further EU member states such as France, the Netherlands and Finland (Big Brother Watch 2013) but these countries are not included in the project.



Past experience with terrorist attack is other important aspect in perception of antiterrorist measurements such as 3D body scanner (Mansfeldová and Guasti 2013). In the countries with this experience such as the United States, Spain and Great Britain, there was reported higher media attention to the topic of 3D body scanners and the debate was deeper and more analytical.

"Report on Perception of Security and Acceptance of Risk" mentions that good tool of evaluation of the cross-country differences in risk perception are public opinion surveys (Mansfeldová and Guasti 2013). According to "European Social Survey" from 2008, people in old EU member states particularly from the countries where terrorist attacks happened felt more endangered by terrorist threat what could explain higher interest of media in the problems of anti-terrorist measurements. This trend could be illustrated by the answers of respondents on question whether they considered terrorist attacks probable following year. Almost 85% of British and 82% of Spanish citizens expected terrorist attack following year.¹⁰ Lower subjective feeling of threat exhibited citizens in Germany and Poland where 68% respectively 64% of people thought that terrorist attack was probable. The lowest concerns of the attack were reported in Slovakia and the Czech Republic where the same threat was real only for 56% respectively 44% inhabitants (Mansfeldová and Guasti 2013).



Graph 5: Comparative assessment of salience by countries and main topics related to the 3D body scanners 2010-2013

Table 5: Categorization of topics according to salience 2010-2013

Body Security	Privacy	Increased	Health
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¹⁰ The original version was: "Do you think that a terrorist attack somewhere in Europe during the next twelve months is... Select answer: very likely, likely, not very likely, not at all likely" (Mansfeldová and Guasti 2013).

Source: SECONOMICS ISASCR



	scanner	related rules and regulations		number of body scanners	Issues
	USA	USA	Spain	USA	USA
high	UK	UK	UK	Spain	UK
salience		Spain		Slovakia	Czech Republic Germany
	Italy	Slovakia	USA	Poland	Italy
medium salience Czech Republic	Slovakia		Slovakia	Great Britain	Slovakia
	Germany		Germany		
	Czech Republic				
	Spain	Czech Republic	Czech Republic	Czech Republic	Spain
low	Mexico	Mexico	Mexico	Mexico	Mexico
salience	Poland	Poland	Poland	Italy	Poland
		Italy		Germany	
		Germany			

Source: SECONOMICS ISASCR

Graph 5 and table 7 show that prevailing topic was "body scanner" itself. This topic was high salient particularly for the USA and Great Britain. US press mentioned the topic of "body scanners" 150 times what was almost twice more that in Great Britain while in Poland it was mentioned only in 13 cases. Nevertheless, body scanner is very general topic and that is why it was used also in cases where more specific topic was not available. This topic was used in descriptive articles and usually it was not mentioned with any justification or presentation of attitudes towards the scanners. Topic of body scanners was often connected with the second most salient issue "security related rules and regulations". These topics were particularly interesting for newspapers in 2010.

Security related issues prevailed particularly in the USA, Great Britain and Spain. Regarding two above mentioned topics, newspapers often mentioned installations of scanners and described the process of scanning. US newspapers also discussed the alternative security rules and measurements such as thermal cameras, metal detectors, tiered screening or the usage of specially trained dogs capable of detecting drugs, weapons and explosives.

Debate about implementation of body scanners was rapidly changing in time. Debate was connected with national and international context in observed countries and particularly in the USA. Firstly, all the observed countries paid attention to the failed terrorist attempt on the flight from Amsterdam to Detroit on 25 December 2009. After this failed attacked, many countries (for example the Netherlands, UK, France and Italy) started to install the 3D body (Permanent Representation of the Czech Republic to the European Union 2010).



In 2010, newspapers justified scanners by pointing to the strengthening security and their efficiency. "Efficiency" was the most salient kind of justifications among all countries and it was very often connected with the topics "body scanners" and "security rules and regulations". Proponents of the scanners claimed that full body scanners are necessary and effective tool for strengthening the airport security in response to the global terrorist threat. Efficiency of scanners was high salient topic for the USA, Germany and Slovakia while the United Kingdom surprisingly belonged to the countries where this kind of justification was not important (see table 8).

In some countries, other aspects than security and efficiency were. This trend was visible particularly in Italy. Italian debate follows the principle of Italian renaissance politician and philosopher Niccolò Machiavelli that the ends justify the means. In the most of Italian articles *"the dilemma of security versus freedom was solved with a calm resignation stating that privacy could smoothly be put aside for security reason"* (de Gramatica 2013: 50).

In the end of 2010 and during the year 2011, new topics and especially new justifications pointing also to the negative aspects of scanners' implementation and security rules and regulations started to appear in newspapers of many countries. Opponents of the full body scanners mentioned three important arguments against scanners' usage "privacy", "health" and "quality of service" (for more details see graph 6). Regarding these three kinds of justifications, the USA and Germany was the most critical to the body scanners because they mentioned their negative aspects most often. In this respect we should mention relative lack of critical public debate in UK. Despite of high interest in the issue of body scanners itself and their implementation, British newspapers did not justified their arguments often. For comparison, negative salience of full body scanners with regard to the privacy, health or quality of service was presented in British daily papers altogether only 19 times while in German press it was 44 times and in American newspapers even 121 times.

First and the most important was the justification "privacy" which was highly salient for both English speaking countries, Germany and the Czech Republic. "Privacy" was often used also as topic. Regarding the privacy, fear of potential misusing of the scanners images and problematic data storage were mentioned. Similar concerns appeared also in articles dealt with another security topic - CCTV cameras where people also feared of their personal data.

Media focused also on cultural differences in defying privacy because sensitivity to the security rules and regulation can be influenced by passengers' religious, ethical or ethnical background (Mansfeldová and Guasti 2013). The New York Times informed about the case of two Muslim women who refused the scanning procedures from religious purposes and that is why they could not board the plane although they had the valid air tickets. Media in other countries cited this information.



Issue of privacy and misusing of the scanners pictures was connected with passengers' rights, dignity and even with sexual harassment because scanners originally revealed the naked bodies of passengers. In this respect, newspapers sometimes used expressive language for describing scanners such as the terms "stripped or "naked" scanners. According to British and Slovak newspapers, there was also a potential threat of misusing scans of children for the purpose of child pornography. In 2011, newspapers informed of a new technology of scanning which was able to blur the intimate parts of human body and made the process of scanning less problematic in regard of privacy.

Second concern of scanners' critics was potentially increasing risk of cancer caused by radiation released during the process of scanning. Newspapers cited the experts who claimed that the amount of radiation was very small however it could be significantly increased in the case of malfunction of the scanners. Heath was used often as a topics as well as it justified the author's negative view on problematic that is why it was something difficult to distinguish between themes and justifications.

"Health" issue was particularly salient in the USA, Germany and the Czech Republic while this topic totally absented in Poland where "privacy" was only aspect of criticism (see graph 6 and table 8). Regarding the risk of cancer, Czech newspapers pointed to the negative aspects of trade-off between security and health. They reflected the paradox when new technologies instead of protecting the citizens became a potential threat to them: *"The effort to stop the risk of a possible terrorist attack could raise another treat for human life with the same probability"* (Gawrecká 2013: 43).

Third point of criticism towards body scanners was addressing to the low "quality of service". Unlike the others justifications, "quality of service" was not mentioned in many countries from our sample but only in the United States, Germany and occasionally in Spain (for more details see graph 6 and table 8). In the rest of countries, this justification absented or was only marginal. American and German press accented also business aspect of air travelling. Passengers were not only the citizens who should be protected but also consumers whose satisfaction is important. In this respect, people complained about long and tiresome waiting on scanning procedures, rude behaviour of the security staff and sometimes humiliating security inspections which lowered the comfort of travelling. This justification was sometimes connected with the issue of privacy.

European newspapers (particularly media in new member states such as Slovakia, Poland and the Czech Republic) also paid attention to European perspective of aviation security and body scanners. They informed about EU context of purchase and installations of body scanners as well as of the attempts to regulate their use on EU level. Although installation of body scanners belonged under national legislation of EU member states, newspapers called for certain type of their regulation for example common private policy procedures, or regulation of health aspects of scanners. In this respect Slovakian newspaper quoted resolution of European Parliament that "*passengers should have the right to refuse body scanner*



control, while they would have to undergo a different kind of control, which will ensure the same level of security as well as full respect for the rights and dignity of the checked person" (Beláková 2013a: 16).

Graph 6: Comparative assessment of salience by countries and main justifications related to the 3D body scanners 2010-2013



Source: SECONOMICS ISASCR

Table 6: Categorization of justifications according to salience 2010-2013

	Efficiency	Privacy	Health	Security	Quality of Service
	Slovakia		Czech Republic	Slovakia	USA
high salience	Germany	Germany	Germany	Germany	Germany
°,	USA	UK	USA	USA	
		USA			
	Italy	Spain	Spain	Spain	Spain
medium		Italy	Italy	Czech Republic	
salience			Mexico	Mexico	
			Slovakia		
	Spain	Mexico	Poland	Italy	UK
Czech Republic		Poland	UK	Poland	Slovakia
low salience	Mexico	Slovakia		UK	Poland
low sallence	Poland				Mexico
	UK				Italy
					Czech
					Republic



Source: SECONOMICS ISASCR Note: Based on means for each justification

5.2 Stuxnet

5.2.1 The most salient actors and argumentative strategies related to the virus Stuxnet

The Stuxnet case has a special position among our other two topics due to its technical character. The debate was led almost strictly on the level of state officials and "experts". "Journalists" providing statements of mostly explanatory character were also present in the debate (see graph 7). Unlike in the other two topics, the public and various civil society groups had only a marginal position among the actors. But the topic, at least in the country of its origin, attracted public attention quite a lot according to the number of articles published in the selected period and the number of actors providing statements. The United States were indisputably the leading country setting up the agenda for others. The reason is clear. Stuxnet, the cyber-virus used as a weapon to delay Iranian uranium enrichment programme, was a domestic topic for the United States. Media in other of the selected countries followed the American debate, firstly by informing about the character of the virus and explaining the situation, and in the second turn by evaluating and analyzing events that had occurred. Apart from the USA the discussion is guite similar in all our selected countries with an exception of Mexico, which looked at the problem from a slightly different perspective, that of a potential target of cyber-weapons in the future. The other selected countries, according to the analyzed articles, provide rather the point of view of a detached observer.

The topic was opened in 2010 by the attack on Iranian uranium enrichment facility in Nataz. At first journalists only informed about the character of the attack trying to explain its complexity without providing any evaluations. Then, the question about the origin of the virus was settled. After initial speculations about the involvement of countries, namely the United States and Israel in the attack, the presumptions were confirmed in 2012. Since then the debate pointed at the United States and its president leading the operation under the cover name Olympic Games. Step by step the discussion about Stuxnet moved from the specific terms regarding the attack and its initiators and providing mostly informative statements, to more abstract debate about cyber weapons in today's world and their role in a potential cyber war. The discussion then circled around the need for regulations and protection against possible future threats on the national level.

The case of Stuxnet is relatively distant from individuals and thus does not attract much attention away from the US. In terms of risk perception, it relates to the risk perception of a state rather than that of an individual. Nevertheless deployment of



cyber attacks in the future could have enormous consequences for the public and so it is desirable for people to be informed about these issues.





Source: SECONOMICS ISASCR, based on table 9

Table 7: Overview of the most	important actors	s in articles about	t Stuxnet, 2010-
2013			

Actors	E	CZ	I	MEX	PL	SK	D	GB	USA	Total
	No.	No.	No.	No.	No.	No.	No.	No.	No.	
State institutions	36	3	4	12	6	5	7	22	53	148



President	5	5	0	10	0	10	13	4	16	63
National Security Agency	0	0	6	0	0	2	0	2	14	24
Private company	17	22	3	15	2	0	2	0	12	73
Journalist	59	7	0	22	20	16	1	71	53	249
Experts	25	17	7	20	16	17	16	74	54	246
Virus/Malware/Worm	0	3	0	1	0	6	3	0	2	15
Stuxnet	3	15	0	2	5	16	14	3	15	73
Flame	5	6	0	1	0	2	1	0	3	18
Other	0	0	0	1	2	0	0	3	13	19
State(s)	0	4	5	7	11	27	6	1	37	98
Media	0	3	0	0	5	14	4	3	4	33
Total	150	85	25	91	67	115	67	183	276	

Source: SECONOMICS ISASCR

Note: Top 5 actors in yeach country are marked in yellow

For Stuxnet as well as for 3D body scanners the main actor among analyzed countries was the United States (see graph 4 and 7). There is quite a lot of codes in Great Britain and Spain for this topic, but after the analysis, we can say that these mainly point to the American actors as well. In the rest of the European countries Stuxnet didn't draw so much attention. Mexico plays the role of adopter of the US articles, who adds his own point of view on the problem. In terms of actors the most cited ones were "experts" (249 codes) followed by "journalists" (246 codes) and representatives of "states" and "state institutions" (together 246 codes). This trend was due to the character of the topic similar in all the studied countries.

Table 8: Overview of argumentative strategies in the articles about Stuxnet

Argumentative strategies	E	CZ	I	MEX	PL	SK	D	GB	USA
definitive	137	70	28	81	57	109	39	174	198
evaluative	1	2	6	3	4	2	27	6	62
advocative	0	1	0	1	1	0	0	5	15
Total	138	73	34	85	62	111	66	185	275

Source: SECONOMICS ISASCR

Table 9: Overview of direction of argument in the articles about Stuxnet

Directions of argument	E	CZ	I	MEX	PL	SK	D	GB	USA
positive	0	1	6	3	1	1	8	6	28
negative	1	3	0	2	2	15	20	1	59
neutral	137	69	28	80	59	95	38	178	188
Total	138	73	34	85	62	111	66	185	275

Source: SECONOMICS ISASCR


The Stuxnet topic was due to its technical and expert character framed mostly in a definitive way. Only the United States and Germany provided a significantly higher number of evaluative statements in the articles. As we can notice in table 11 the evaluative strategies used in the articles about Stuxnet are rather negative than positive. Only Great Britain and Italy tended to evaluate Stuxnet slightly more positively. Germany and Slovakia would be, except for the USA, the biggest critics of Stuxnet according to the studied newspaper articles. However, if we take a look at the Slovak articles we can find out that most of them are transmitted from abroad and that is why they cannot be seen as reflection of the Slovak opinion. USA, with the biggest number of coded argumentative strategies also stands on the side of critics. That is apparently thanks to "journalists" acting in the statements and expressing their opinion and "experts" arguing mainly against the deployment of the virus. But the coded statements in the US did not always evaluate the virus itself. For example the positive ones also expressed the need for establishing some international cyber-warfare rules (Beláková 2013a). "Presidents Bush and Obama, and other US officials were among the supporters of Stuxnet. They viewed the virus as crucial in their effort to delay or hinder the Iranian uranium enrichment programme, which they considered a direct security threat for the US and the West" (Beláková 2013a: 46). According to the American report, some of the officials viewing the issue positively even questioned the more aggressive use of cyber-attacks, for example against North Korea or Al Qaeda operations. Among critics on the other hand, there were many commentators, "experts" and American businesses that became victims of retaliation of Stuxnet attacks. They feared the diffusion of cyber-attacks in the future with unpredictable consequences. "Other experts and commentators saw the development and deployment of Stuxnet by the US and Israel as dangerous because it could lead to a militarisation of or even an uncontrolled arms race in cyberspace" (Beláková 2013a: 50).

To sum up, the single most frequently coded actor in the United States were "experts" (54 codes) but the topic in the media was dominated by various "states" and "state institutions" or their representatives, namely president of the US (with 106 codes altogether). "Journalists" themselves also provided a high number of statements (53 codes, see table 9). The issue was not framed only in domestic terms, there were actors from Iran and Israel providing statements as well.

Among other countries, Mexico and Germany can be emphasized, followed by the rest of the European countries with rather similar results. Mexico tracked the American debate, most of the articles were of US origin translated directly to Spanish. But occasionally the commentators enriched the debate with their own points of view, expressing the role of Mexico in this situation. Seeing itself as a potential target in the future, there are voices calling for the necessity of struggling against the cyber threats by the development of effective protection in cyber space. "*The attacks against Iran demonstrate that the infrastructure of a country can be destroyed without the need of bombing it or infiltrating saboteurs*" (Reforma 2013). Mexico gave quite a lot of space to Iranian experts and state representatives to express the situation in which they had found themselves (Vamberová, 2013). That also points to the presumption that Mexican media tends to stand rather on the side of Iran, criticizing disrupting a state 's sovereignty.



Germany, as mentioned above, showed a large number of evaluative strategies (27 codes) with a negative direction of argument. Among actors, the most frequent ones in German newspapers were "experts", followed by the "president" (of the United States), state officials and "institutions". Despite of the small number of articles, from which we can guess a low importance of this issue for German public, the discussion seems to be more interesting than in the rest of the analyzed European countries as Poland, Slovakia, the Czech Republic or Spain, where the statements are mostly informative and all of the actors are of foreign origin (if they are not journalists themselves). The reason could probably be the involvement of the German company Siemens, which made the equipment attacked by the virus. The second reason could be a general interest of Germany in the privacy-security issues which the analysis has revealed so far (Nitzche, 2013). Slovakian newspapers made just one notable exception in its informative style by mentioning that according to international law, the attack of USA and Israel on the Iranian power plant was in fact illegal: "Attack on the infrastructure of other states needs to be assessed in the same way whether they are caused by missiles or by a computer virus. The cyber-attack of USA and Israel is thus a breach of international law" (Mačák 2012).

In UK the debate seems to be sovereignly in hands of "journalists" and "experts" with the highest number of coded statements (see graph 7). The articles contained a lot of commentary by computer security researchers. Italy revealed the same situation and in Spain. "Journalists" surprisingly dominated the debate about Stuxnet. The Spanish writing style about this issue was purely informative, although it captured some interesting points. Spanish media as well as the Mexican ones expressed fear of being attacked by a similar force in the future: "*This also points to the fact that many state representatives were trying to chase away worries of its citizens that their country could also be targeted by a similar attack*" (Pereira-Puga, Hronešová 2013: 38).

Cyber security is an important topic on the European Union level, rather than on the level of the particular member countries. A cyber-attack can be deployed against any of its member states and therefore there should be a broad discussion led on the EU stage about cyber-space protection, future development in this field, possible international regulations and more generally about European stands on sovereignty of the national states all over the world.

5.2.2 The most salient topics and justifications related to the virus Stuxnet

Unlike two other security issues, Stuxnet is not a technology directly affecting daily life of common people. The aim of Stuxnet is not to improve security of individuals by monitoring public places as CCTV camera systems or detect weapons and prevent from terrorist attack as 3D body scanners. Computer virus Stuxnet is a weapon itself. Stuxnet was not developed to protect critical infrastructure but on contrary to destroyed it. From all of the three security topics involved in our comparison, Stuxnet has the greatest impact on geopolitical stability and questions



of international law and security. Therefore, this topic is highly relevant not only for global security context on macro level but also for security of individuals although this saliency on micro level seems to be indirect and even marginal today.

Three to certain extent interconnected perspectives are typical for media coverage of Stuxnet in observed counties.¹¹ In some countries such as the United States, Germany and partially also in Slovakia there were presented all these three levels of media perception of Stuxnet and that is why the debate was sophisticated and detailed. Nevertheless, in the most of states, for example, the Czech Republic, Poland, Great Britain¹² and in Spain, media coverage of Stuxnet was reduced to one maximum two perspectives. Media in these countries provided mainly descriptive articles on Stuxnet issue but wider context and justifications of presented arguments were missing. In other words, newspapers answered the questions WHO, WHAT, WHERE but the most essential answer to the question WHY - which covers justifications of arguments about Stuxnet, its legitimacy and broader debate about virus consequences and impact - was mostly missing.

First and prevailing perspective was purely informative when newspapers described virus Stuxnet and its functions as well as they informed about the attacks on Iranian nuclear program. In general, the articles describing the virus were longer, more detailed, factual and contained opinions of experts more often than the articles dealing with the functions of other two security-related issues CCTV cameras and 3D body scanners.

Prevailing topics were "Attack on Iran" and "Iranian enrichment uranium programme" (for more details see graph 8). These topics were very closely interconnected because the aim of the virus was to damage and hinder Iranian nuclear programme. In this respect, newspapers informed that virus targeted on two Iranian nuclear facilities - centrifuges for uranium enrichment in Natanz and Bushehr nuclear power plant. These cyber-attacks on Iran were particularly salient topic for newspapers in the United States, Great Britain, Spain and Slovakia (see table 12) but the attention to cyber-attacks was also paid in the rest of countries from our sample.

Other two important topics were "Stuxnet" itself and "Deployment attack using Stuxnet". Nevertheless, topic "Stuxnet" is not particularly relevant for our comparison because it was mostly used when no other suitable topic was available. Similar situation happened also in cases of 3D body scanners and CCTV cameras when topics "body scanners" and "CCTV cameras" appeared relatively often but did not provide any particular interesting or new viewpoints.

"Deployment attack using Stuxnet" is more salient topic for our comparison. This topic was relevant especially for American, Slovakian and Spanish press. Newspapers paid relatively lot of attention also to the attacks deployed in other

¹¹ These levels of media perception of Stuxnet were described in Italian report (de Gramatica 2013) but similar appeared also in majority in other countries.

¹² Despite of relatively high media attention paid to Stuxnet in British media.



states. They mentioned that target of Stuxnet was not only Iran but this virus also attacked critical infrastructure in Indonesia, India, Azerbaijan and Pakistan. Another important sub-issue was the origin of Stuxnet. In this regard, press speculated who could afford to develop this virus. Newspapers supposed that only the rich and powerful states have enough financial and human resources to create such expensive and sophisticated kind of virus. *"According to experts, a great amount of time and money had to be invested in order to create the virus. It is therefore unlikely that some hackers created Stuxnet just for fun. Some powerful state must be behind Stuxnet that was able to detect weaknesses in the industrial systems the virus targeted" (*Gawrecká 2013: 38). This assumption was confirmed later when it was revealed that virus Stuxnet was created by the United States and Israel within the secret operation "Olympic games".

Development of topics during the time followed the international context of Stuxnet affair and development of key issue of cyber security. The highest attention to Stuxnet was from the first informative perspective paid in 2010 when newspapers wrote about virus itself, described its functions and informed about attack of Iranian nuclear programme as well as they speculated who developed this virus. In 2011 and 2012 newspapers focused on cyber-attacks in other countries and on occurrence of new viruses such as Flame, Stars, Duqu and Red October which were Stuxnet successors.



Graph 8: Comparative assessment of salience by countries and main topics related to Stuxnet 2010-2013

Table 10: Categorization of topics according to salience 2010-2013

Attack on Iran	uranium enrichmen	Deploymen t/attack using Stuxnet	Stuxnet	Cyber war
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Source: SECONOMICS ISASCR



	Spain	UK	USA	USA	Spain
high	Great Britain	USA	Slovakia	UK	Czech Republic
salience		Slovakia	Spain	Germany	USA
		Spain			UK
	Slovakia	Poland	Italy	Czech Republic	Germany
medium salience	Germany	Czech Republic	Mexico	Italy	Poland
cultonico	USA	-		Mexico	Italy
					Mexico
	Czech Republic	Germany	Germany	Spain	
low	Italy	Italy	UK	Poland	
salience	Mexico	Mexico	Czech Republic		
6 6560	Poland				

Source: SECONOMICS ISASCR

In the second perspective of media coverage, Stuxnet incident was framed to the global cyber security context, industrial espionage and cyber war. The USA played leading role in informing about Stuxnet from "macro" perspective, the USA was followed by Germany and Slovakia (see graph 8 and table 12). American newspapers justified their opinions the most often from all observed countries. Almost one third of statements contained justification what was exceptionally high number among countries included in the comparison. On this "macro" level, newspapers informed about wider consequences and negative impacts of Stuxnet attack on geopolitical stability such as potential counterattack as well as they discussed legitimacy of cyber-attacks in regard to international law.

Nevertheless, newspapers were not only critical to the virus and cyber-attacks in general. On contrary, proponents of Stuxnet virus got relatively lot of the space particularly in American debate about security issues. Moreover Stuxnet "efficiency" was the dominant justification (see graph 9). "Efficiency" was particularly salient for the USA, Germany and Slovakia. This trend is similar to other two security issue where "efficiency" also appeared among prevailing justifications.

In the USA, Stuxnet proponents appreciated the complexity and efficiency of this virus and emphasized the security needs of their country. In this respect, justifications "security" and "defence" appeared. Iranian uranium enrichment programme meant a big security threat because it could enable Iran to develop nuclear bomb. Therefore, the attack by using of Stuxnet was justified from global security perspectives according to the motto that *"the best defence is good offence"* (Beláková 2013b: 39). In other words, Stuxnet proponents considered this virus as a quick and non-violent weapon useful for preemptive strike which could prevent from development of weapons of mass destruction. Moreover, cyber-



attacks were for them less harmful than bloody conflicts as well as the expenses of these kinds of attacks were relatively low comparing to conventional forms of making war.

On the other hand, concerns of virus uncontrolled proliferation and possibility of counterattacks appeared in 2011 and 2012. Scanners opponents warned against a worldwide proliferation of cyber weapons which could endanger also industrial systems and systems of critical infrastructure of many countries. Deployment of Stuxnet was according to the its American and Czech critics similar to the releasing of genie out of the bottle or opening the Pandora box because in the future, Stuxnet be modified and used for different targets also in Western countries. In this respect, the Great Britain, the USA and Germany and Mexico felt endangered by possible attack.

Regarding negative aspects of Stuxnet, some of interesting viewpoints appeared also in media coverage of Stuxnet in the states of Southern Europe and in Mexico. This was surprising finding regarding to entirely absence of justifications in Italian and lack of justifications in Spanish and Mexican press (see graph 9 and table 13).¹³ Spanish newspapers considered Stuxnet as milestone in cyber weapons which meant a new kind of making the war but also a new kind security threat. According to Spanish left-leaning daily paper El País, experts are afraid of side effects of this cyber weapon: "(Stuxnet) makes reality what was just part of science fiction, some experts warns on its capability of make a facility get burst" (Pereira-Puga, Hronešová 2013: 28).

Although Mexican newspapers did not paid a lot of attention to Stuxnet (see Graph 8 and 9), the approach of Mexican press is valuable for our comparison because it is focused also on aspects of legitimacy of the attack and approached to Stuxnet incident also from Iranian point of view. Mexican perspective is exceptional because no other surveyed country gave so much space to Iranian side of the conflict and considered the Iran as victim of attack not only as potentially dangerous state which covered under the nuclear programme deployment of the weapons of mass destruction. *"We can say that Mexico stands rather on the side of Iran sovereignty against the US cyber-attack. It sees itself as a potential target of these weapons"* (Vamberová 2013: 43). Arguments concerning legitimacy and legality of the attack were mentioned also in Slovakian and American press but attention paid to these topics was not significant in the whole context of the debate.

Nevertheless, Mexican voice was not unequivocally critical to the USA. Mexico similarly to the other countries included in our research, often relied on US information resources which influenced to certain extend media perception of Stuxnet. To conclude, Mexican approach was worth because it did not emphasise only one side of the conflict and did not marginalize another and because broader scale of arguments of pros and cons of Stuxnet was presented in Mexican debate.

¹³ Graph 9 shows that Italian newspapers justified their arguments about Stuxnet only in one case, Mexican 6 times and Spanish 7 times.



The third "micro" level of informing about virus Stuxnet was represented at least countries from our comparison. Partly this approach was presented in the United States, Italy and Poland but this perspective was only marginal there and certainly it did not dominate to the security discourse in these countries. Nevertheless this perspective is important because it offers new and more sophisticated viewpoint not only on the issue of Stuxnet but on cyber security on micro level. It contextualized Stuxnet in regard to the other methods of surveillance and tracking of personal data. *"It dealt with the daily and often hidden reliance on services provided and supported by technology. Bank accounts, health information, internet communication, business, smart grids, and critical infrastructure services all depend to a great degree on an efficient and trustworthy technology system"* (de Gramatica 2013: 44).

In other words, the Stuxnet issue reminded us the numerous threats of cyber world which can ordinary people face every day during their common activities such as online communication and sharing the information via social networks, internet banking, paying with credit card etc. This third perspective shows us the reasons why Stuxnet issue is very relevant not only for expert on information technologies, security experts and decision makers but also and especially for general population.





Source: SECONOMICS ISASCR

Table 11: Categorization of justifications according to salience 2010-2013

	Eficiency	Security	Preemptive strike	Defense	Expert opinion
	Slovakia	Germany	Mexico	Spain	Germany
high salience	Germany	USA	Poland	Mexico	UK
	USA		Slovakia	Poland	USA

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			USA	Slovakia USA	
	Poland		Spain	Italy	Czech Republic
medium salience	UK		Czech Republic Italy	Germany	Slovakia
			Germany		
	Spain	Spain	UK	Czech Republic	Spain
	Czech Republic	Czech Republic		UK	Italy
low salience	Italy	Mexico			Mexico
iow suiterioo	Mexico	Poland			Poland
		Italy			
		Slovakia			
		UK			

Source: SECONOMICS ISASCR Note: Base on means for each justification

5.3 CCTV cameras

5.3.1 The most salient actors and argumentative strategies related to CCTV cameras

The distribution of articles about CCTV cameras is quite different than that of the other two studied topics. The United States, the leading country in the debate about Stuxnet and 3D body scanners seem not to give much attention to CCTV cameras in the public space. According to the number of coded actors, the US, together with Italy and Mexico and partially Spain, can be seen as a country with low interest in the debate about CCTV cameras. The biggest number of coded actors appeared in countries that didn't play any important role in the other two topics, Germany, Poland and Slovakia. The Czech Republic and Great Britain stand somewhere in between (see graph 10). It is important to note that articles about CCTV cameras provided in newspapers are predominantly of informative character (informing about the specific crimes that were captured by cameras for example) with no focus on cameras themselves and no discussion about their use. These purely informative articles had to be removed from the analysis because they did not fulfil our criteria.

If we take a look at the most important actors (table 14) coded in the articles about CCTV cameras, we can name "journalists" as the most influential actor (378 codes in total). In opposition to "journalists", there is a group of actors containing "state institutions", "politicians" and "municipality" having together 333 codes.



Another single important actor is "police" with 100 codes. Strangely, public or civil society groups are not present among the top 5 actors of the articles about CCTV cameras. That means the debate was led mostly on the level of state authorities who informed about the cameras, but there was not as much space for the public to express their concerns about this issue. The articles about CCTV cameras appeared usually in the domestic sections of studies newspapers. We can say that the topic was taken rather as domestic issue under the authority of each country. This perception of the topic made the debate relatively distinct in each analyzed country, showing us some general trends which the country follows, and revealing its position on the security-privacy axis.

Among supporters of the surveillance camera system we can name Poland, Slovakia, the Czech Republic and Italy according to the coded statements with positive direction in table 16. The biggest opponent is then Germany. Great Britain shows prevalence of negative argumentation as well, while the US tends to evaluate CCTV positively. In the USA, public opinion has gone through a dynamic development. At the beginning of the studied period, the CCTV cameras seemed to be perceived rather negatively in the US and there was not much attention dedicated to this issue. After the attack in the Boston marathon in April 2013, where CCTV cameras played an important role in the identification of the culprit, the general opinion started to be more tolerant about CCTV cameras (Beláková 2013b). The remaining countries have their argumentation more or less balanced between support of CCTV and its criticism in the studied press articles.

The argumentation, again as in the other two topics, is led mainly in a definitive way with a neutral direction of argument (see table 15), but unlike the Stuxnet topic, there is a relatively high number of evaluative and even advocative strategies present. Germany makes an exception among the rest of the countries showing dominance of evaluative argumentation in the coded statements. It points to the widely developed discussion about CCTV cameras in Germany. Also Slovakia, the Czech Republic and Poland express quite a high number of its statements in an evaluative way. The resembling trends could be explained by the similar historical experience of these countries.

According to the national reports used for this analysis it seems that the perception of the CCTV cameras is experiencing radical shift towards a better acceptance every time some kind of terrorist attack is committed, but the tolerance of the surveillance measures tends to vanish quite rapidly after the information about the attack leaves the discourse in media. This is also a trend shown in several studies on risk perception (see Mansfeldová and Guasti 2013). The perceived risk can also vary cross-nationally. Mansfeldová and Guasti in their Report on Perception of Security and Acceptance of Risk explain why significant differences exist in the past experience seems to be the most important factors here. The analysis points out that a country's past experience with terrorist attacks significantly influences subjective feelings of threat. Therefore among European countries, the United Kingdom and Spain, thanks to their past experience, show higher subjective feeling of threat than the rest of the covered European countries (Ibid.). An interesting



division can be noticed among the old EU member states and the new member states that have not yet experienced a terrorist attack in such a direct manner. The topic CCTV cameras then, in broader context, can be an important theme on the European level despite of its national character.





Source: SECONOMICS ISASCR, based on table 14

Table 12: Overview of the most important actors in articles about CCTV cameras, 2010-2013

Actors	E	CZ	Ι	MEX	PL	SK	D	GB	USA	Total
	No.	No.	No.	No.	No.	No	No.	No.	No.	
Institutions	0	0	3	2	0	0	0	0	0	5
State institutions	21	21	0	8	53	24	32	3	8	170
Government security agency	3	0	0	8	1	0	0	0	2	14
Politicians	1	0	8	5	4	11	34	25	3	91

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Municipality	0	31	2	12	2	13	9	0	3	72
Transport Company	0	19	0	5	0	0	0	0	0	24
City council	22	0	0	0	22	0	0	9	0	53
Police	8	28	0	0	7	25	10	19	3	100
Private company	0	4	0	19	6	10	1	1	9	50
Transportation Company	0	0	0	1	0	12	8	0	8	29
Advocacy Group/Civil society	0	4	0	1	0	0	6	9	6	26
Individuals	0	6	0	0	0	13	0	2	0	21
Journalist	81	44	3	10	78	37	55	40	30	378
Citizen/Passenger	11	6	3	0	4	30	0	0	12	66
CCTV Cameras	6	8	0	8	3	28	11	0	6	70
Experts	0	0	0	0	17	21	11	8	8	65
Activists	0	0	0	5	16	0	0	1	0	22
Others	0	0	0	3	14	37	7	0	3	64
Total	153	171	19	87	227	261	184	117	101	

Source: SECONOMICS ISASCR

Note: Top 5 actore in each country are marked in yellow

Table 13: Overview of argumentative strategies in the articles about CCTV cameras

Argumentative strategies	Е	CZ	I	MEX	PL	SK	D	GB	USA
definitive	120	134	21	60	101	181	72	95	51
evaluative	14	40	4	16	97	62	117	16	38
advocative	4	3	7	8	30	16	1	7	10
Total	138	177	32	84	228	259	190	118	99

Source: SECONOMICS ISASCR

Table 14: Overview of direction of argument in the articles about CCTV cameras

Directions of argument	E	CZ	I	MEX	PL	SK	D	GB	USA
positive	14	29	9	17	65	57	41	6	25
negative	4	17	2	9	57	47	73	16	19
neutral	120	131	21	58	106	155	76	96	55
Total	138	177	32	84	228	259	190	118	99

Source: SECONOMICS ISASCR

Poland, according to the press articles, seems to be the strongest supporter of CCTV camera systems among the studied countries and that is why we will dedicate special attention to it here. Poland, together with Germany, has the highest share



of evaluative and advocative strategies compared to the other analyzed countries, which points to the broad discussion about this topic on their national level.

The title of the national report: "Poland -Surveillance Eldorado?" describes the Polish discourse guite well. This topic caused the most attention out of our three cases in Poland. The main actors providing statements, apart from "journalists", were "state institutions" and "city council" (75 codes together). On the other hand, "experts" and "activists" got a significant space in media as well. "Experts" included mainly professors and psychologists. "Activists" were represented by various organizations concerning human rights. Strangely there are no actors from "transport companies" present in the debate about CCTV cameras in Poland. "The issue of CCTV's use in public transport is virtually non-existent in the Polish debate, despite the fact that CCTV is present in Warsaw's buses and metro, as well as train stations" (Sojka 2013: 41). The reason is the fusion of public transport monitoring with the general public domain monitoring in the city. Because of this, there is no specific debate about transportation surveillance system present in media. The CCTV cameras discourse in Poland is led by state related institution and the civil society actors. Citizens are rather marginalized in the debate. This is interesting compared to Slovakia, where the topic is perceived similarly. Slovakian "passengers" obtained quite a large space in media (30 codes, see table 14). "Journalists", the single most important actor, also influence the debate. They don't only appear in the role of informing entities, but directly join the debate offering evaluative statements. The role of "politicians" is of little importance but due to the new law being prepared for regulating the use of monitoring systems in public places, it will probably increase in the near future.

The topic in Poland, as well as in the rest of the covered countries, is framed mostly in domestic terms with 97% actors being Polish (Sojka 2013). The topic is communicated by cities as a great achievement for public in Poland and therefore positive connotations towards CCTV cameras prevail in the statements. On this matter, the *Panoptycon Foundation* notes that "[in Poland] *cameras are nowadays a symbol of social status. We are proud that we can use a camera to watch a nanny or a cleaner. Also a city that has public monitoring is considered to be modern. This is very interesting, as in the rest of the world the trend is quite the opposite" (Płociński 2012). The surveillance cameras are considered to be an important part of the process of modernization of Poland.*

In Slovakia and the Czech Republic the topic was also mostly framed by state related institutions. Slovakian press, however, gave a lot of space for "citizens" and "passengers" to express their opinion, which was not very often in the rest of the countries except for the USA. Slovakia and the Czech Republic could also be assigned among the supporters of CCTV camera systems according to the positive coded statements. Slovak acceptance of CCTV cameras probably derives from the relatively strict law regulating its use in public and private places. "*The monitored premises must be visibly labelled and the video footage has to be deleted after seven days. The only exception is if it is required by the police in criminal investigations. The rules concerning the use of CCTV camera systems by individuals to monitor their private properties are even stricter*" (Beláková 2013a: 43).



"Municipalities", local mayors, the "police" and "passengers" or "citizens" were mostly in favour of the use of these devices while psychologists turned out to be against them in most cases. "Citizens" tend to be more supportive of CCTV cameras when it is a question of crime prevention and crime detection, but they seem to be less in favour of them when they enter their private spheres. This appears to be an issue especially in regard of installation of cameras in schools in Slovakia. Despite that, in Slovakia and the Czech Republic there were also agents pointing out the threats to privacy. The general approach of the two countries could be simplified by the citation of the Czech national report: "A qualitative content analysis of the two papers revealed that (the general view is that) increased surveillance is a fair price for strengthening security regardless of the trade-off, which is a decrease in privacy" (Gawrecká 2013). The Czech Republic in contrast to Slovakia lacks efficient legislation to protect privacy and regulate the use of CCTV cameras.

Germany, the strongest opponent of CCTV cameras according to the use of negatively oriented statements in the press, presents a slightly different approach to this topic. The most influential actors here are state related institutions again, but we can hear a lot from "experts" in the statements as well. Surprisingly there was not a single code for "passengers" or "citizens" assigned in Germany. The discussion about surveillance systems, however, seems to be quite advanced. While the general opinion is rather negative compared to the other analyzed countries, there were voices in Germany criticizing the decreasing circumspection towards the security meassures. "Peter Schaar [federal commissioner for data protection and one of the biggest opponents of CCTV cameras in Germany] determined that the surveillance of the citizen has "radically increased" and he detects "the end of the privacy" (Nitzche 2013: 18). The acceptance of CCTV cameras in Germany slightly increased after a bomb was found at the main station in Bonn, which is a development that can be observed in the United States as well. But as mentioned earlier, the increased tolerance towards CCTV cameras in public places caused by emergent events seems to diminish again as the time passes.

Contrary to the other two topics where the United States was the leading country setting up the discourse for the others, CCTV controversy did not attract much attention there. Unlike in the other studied countries, the most cited actors apart from "journalists" were "citizens" or "passengers". For example in Mexico, Great Britain and Germany, "passengers" didn't get a single code. They were followed by "private companies", "transportation companies", "experts" and "state institutions" providing statements. The US discussion was framed as value-free, factual information. In the statements with evaluative or advocative connotation positive direction prevailed. It is important to point out that there was almost no discussion about CCTV cameras in the USA until April 2013 when the marathon in Boston was disrupted by a bomb. CCTV cameras then played an important role by helping to track the suspects of the bombing. The public support of CCTV cameras then dramatically increased and the attack opened up the issue as a topic of discussion. It is interesting that American newspapers pay such little attention to the use of CCTV cameras if we take in account the fact that they are omnipresent in public space, inside shops, official buildings or in the public transportation



system. The increased salience of the topic was in the United States observed only after mayor terrorist attacks (Beláková 2013b).

CCTV camera systems attract significantly more attention in Great Britain. The main actors providing statements in our selected period were "journalists" followed by "politicians", city council and "police". A significant amount of space was dedicated to various "advocacy groups" and "experts" as well. According to table 16 Great Britain would belong among critics of CCTV system. The police and city councils, although initially defending the camera systems, would eventually decide to remove them in some critical areas: "We can fight crime and the threat posed by terrorism far more effectively by working hand in hand with local people, rather than alienating them through a technological solution which does not have broad community support" (Lewis 2010). The debate however is present mostly in the articles about inappropriate use of CCTV with a strong emphasis on privacy and civil liberties. Another big issue is the installation of CCTV in Taxis causing major debate between civil rights groups and city council. Despite of the critics, the British report points out that "CCTV is fairly well accepted already in the UK, and the government itself understands the need for regulation to keep its use appropriate" (Caufield 2013).

Mexico provides another relatively distinct approach to CCTV cameras. As in the rest of the countries the articles are mostly of informative character which does not suit our criteria and cannot be used in the analysis. However, there is still a sufficient number of articles providing some discussion about public surveillance systems. According to the troubled security situation in the country, the CCTV cameras seem to be a good tool to help diminish the citizens' feel of insecurity. Therefore the installation of CCTV cameras is a popular political and municipal theme which provides them extra points among the public. The most influential actor though, are "private companies" providing statements of mostly definitive character but also advocating for its use having considerable amounts of money in the surveillance system all over the country.

In the two remaining countries, Italy and Spain, we didn't capture any broader discussion or controversies going on in media. Both countries belong among supporters of this security measure according to the positive coded statements. In Spain it seems that the topic caused quite a lot of attention regarding the number of published articles, but the debate on privacy and security was completely missing among the coded articles. The discourse in Italy was, as expected and compared to the other two topics, led by "politicians", while in Spain the dominance of state related institutions was detected in the coded statements. In Italy "*citizens' risk assessments are largely affected by the political discourses and by the frequency with which these discourses are cited. Security related themes dominate in the debate and privacy is perceived as a price to pay to improve security"* (de Gramatica 2013: 43). The last sentence of the citation at the same time essentially characterizes the general discourse among studied countries regarding security measures such as CCTV cameras or 3D body scanners at airports.



5.3.2 The most salient topics and justifications related to CCTV Cameras

Debate about CCTV cameras significantly differs in many aspects from two other security issues 3D body scanners and virus Stuxnet. There was no dominant country which shaped the debate in European and worldwide context as the United States did in the case of full body scanners and Stuxnet. CCTV cameras were more salient issue for the countries included in our comparison than 3D body scanners and Stuxnet. This interest can be explained by the experience with CCTV monitoring in all observed countries. In other words, cameras became domestic issue which is more interesting for newspapers readers. Newspapers informed mainly about CCTV cameras in relation to domestic context and they just rarely quoted information from foreign media or press agencies.

The highest attention to CCTV cameras was paid in Poland where newspapers mentioned this topic 193 times and justified it in 74 cases. From graph 11 and table 17 we can see that press in Spain and Great Britain approached CCTV cameras from informative perspective often because high interest in topic of CCTV cameras itself were reported in these countries (cameras were mentioned 152 respectively 137 times). Nevertheless, Spanish and British newspapers did not justify their arguments often so the debate about scanners use was not as sophisticated as for example in Slovakia and Germany (96 respectively 92 justifications of CCTV cameras). New member states of EU such as Poland, Slovakia and the Czech Republic focused on this issue a lot while they were not particularly interested in 3D body scanners and computer virus Stuxnet. On contrary, lowest interest and shallow debate about cameras was reported in Italy and Mexico. General trend is that Mexican and Italian press did not exhibit higher attention also to other security related issues and mostly ignored the debate about the trade-offs between security and privacy.

Graph 11 shows that there were not presented so big differences in number of topics related to the CCTV cameras as in the case of full body scanners where the topic "body scanners" dominated equivocally in whole sample. Regarding the CCTV cameras, newspaper generally interested most of their "purchase and installation". This topic was salient particularly in Spain, the Czech Republic and Slovakia. On contrary, USA and Great Britain paid to this issue almost no attention. "Purchase and installation" of CCTV cameras were mainly presented in shorter and more informative articles. Broader debate about the purpose of installation or negative aspects of CCTV cameras was mostly missing. If articles contained justification or author's opinion, the purchase and installation of cameras was evaluate positively as an effective tool in the fight against crime. In this context, it should be mentioned that "efficiency" and "crime prevention" belonged to the most salient justification for the whole issue of CCTV cameras (see graph 12).

Interesting aspect of cameras' purchase and installation is typical for new EU member states, particularly for Poland. Cameras became a symbol of social status and modernization. Citizens were almost proud of being monitored because they considered it as modern. In other words, CCTV cameras were a part of discourse



"catching up with the West" (Sojka 2013). Polish ombudswoman Irena Lipowicz commented this Polish pride in camera monitoring with following words: "In other countries at the entrance to a city you can see signs 'University city,' 'City of culture,' in Poland - 'Monitored city' - My foreign guests ask me why Poles are so proud of surveillance? Is it a post-communist trauma?" (Sojka 2013: 41).

Apart from this quote, communist experience in relation with CCTV cameras and other surveillance technologies was not reflected in EU new member states. Czech media sometimes described CCTV cameras with term "big brother" but it was used just as metaphorical expression which was not directly linked to communist past. Moreover, term "big brother" was used often in neutral and sometimes even positive context, for example in the article called *"Thieves beware. Big Brother monitors you continuously in the streets"* (Otipka 2011) where newspapers mentioned the purchase of cameras which would protect the citizens against crime.

In my opinion, debate about communist surveillance would be appropriate. It could extend the arguments of new critical perspectives and it would remained negative experience with state controlled monitoring of public and private space in communist Poland and former Czechoslovakia. On contrary, debate about misusing of surveillance technologies in own totalitarian past took place in Germany in relation to former Nazi regime. It focused not only on reflection of the past but also on prevention of misusing of monitoring in the future.

Topic of general interest was "public domain monitoring" which was salient for all observed countries except Italy and UK (see table 17). Similarly to "purchase and installation" of CCTV cameras, "public domain monitoring" was often connected with the justifications of "efficiency", "crime prevention" and also "privacy". Nevertheless, negative aspects of monitoring were mentioned more often than in the case of previous topics. Together with the topic "public domain monitoring", newspapers in all the observed countries mentioned also "private domain monitoring". Attitude of the press towards "private domain monitoring" in schools, hospitals, working places, housing estates, prisons were much more critical than towards monitoring of public space in streets, traffic infrastructure or in means of public transport.¹⁴ This difference between acceptance of public and refusal of private monitoring was particularly visible in Slovakia, Poland and Spain.

Other two important topics "surveillance" and "security related rules and regulations" were often mentioned together. Topic "security rules and regulations" was often connected with negative aspects of surveillance technologies, for example, endangering the people's privacy. In this regard, newspapers called for better legislative regulations of CCTV cameras.

Similarly topic "Surveillance" had often negative connotation and was connected with a fear of losing privacy. This topic was salient for Poland, the Czech Republic

¹⁴ Nevertheless sometimes it is difficult to distinguish between public and private domain monitoring.



and particularly for Great Britain. British and surprisingly also German press called Britain "surveillance state". For German newspapers Britain was cautionary tale of surveillance and journalist warned against the same situation in Germany. Newspapers pointed to sharply increasing number of CCTV cameras which invaded to people privacy, for example, "*in London, the average citizen is caught on CCTV cameras 300 times a day, and in the United Kingdom alone there are more than 4 million CCTV cameras"* (Cavallaro 2007: 166).

Graph 11: Comparative assessment of salience by countries and main topics related to the CCTV cameras 2010-2013



Source: SECONOMICS ISASCR

Table 15: Categorization of topics according to salience 2010-2013

	Purchase/ installation of CCTV cameras	Public domain monitoring	Cameras CCTV	Security related rules and regulations	Surveillanc e
	Spain	Spain	Germany	Spain	Czech Republic
h i sih	Czech Republic	Poland	Poland	Poland	Poland
high salience	Slovakia	Slovakia	Slovakia	Slovakia	Germany
Sulferioe		UK	UK	UK	UK
		USA			USA
		Czech Republic			
	Mexico	Mexico	Mexico		Slovakia
medium	Poland		Czech		
salience			Republic		
	Germany		Italy		
			Spain		



	UK	UK	USA	USA	Spain
	USA	Italy		Italy	Italy
low				Mexico	Mexico
salience				Germany	
				Czech	
				Republic	

Source: SECONOMICS ISASCR

Dominant justifications used by proponents of CCTV cameras were "efficiency" of camera systems in the fight against crime and strengthening the security. Above mentioned security aspects of CCTV cameras were salient for more than half of countries from our comparison: Germany, USA, Spain, Poland, Czech and Slovakia (for more details see Table 2). On the other hand, the efficiency of cameras was numerously questioned what is similar to the situation with 3D body scanners. In Italy newspapers pointed to the fact than cameras purchase was often subsidized and that is why camera systems were sometimes installed regardless their efficiency. Moreover, evaluation of cameras efficiency is often problematic because comprehensive international statistical data are not available.¹⁵

Interesting difference appeared among English speaking countries and Germany and the rest of states included in the survey. In USA, Great Britain and Germany cameras were considered a useful tool in fight against home and international terrorism. Ability of cameras to prevent the future attack or help to track the perpetrators of terrorism legitimized the cameras installation in public space. Interest in CCTV cameras in relation to the fight against terrorism can be explained by the fact that USA, GB and Germany had the recent experience with the terrorist acts or the attempts of the attack.

In the rest of countries from the comparison, CCTV cameras were not primarily used in terms of counter-terrorist systems but they were considered as efficient deterrents against the acts of vandalism, robbery, pickpocketing in public transport or the tool for strengthening the security in the road traffic. Voices calling for higher security were particularly strong in Mexico where the security situation was the worst from all observed countries because Mexico was facing to the long-term problems with high criminality and war between drug cartels and police and even army forces (Vamberová 2013).

Regarding vandalism two interesting aspects were mentioned. First, in Slovakia cameras were used to monitor vandals and hooligans in football stadiums. Second, economic aspects of using CCTV cameras against vandalism was emphasized in Czech Republic where newspapers pointed that real estate prices were rising if the place was monitored by the cameras because it was better protected from vandalism as well as inhabitants of the estates felt more secure.

¹⁵ On the other hand, partial police statistics from 2007 showed that despite of high presence of CCTV cameras in Great Britain there was still approximately 80% crimes unsolved (Davenport 2007).



Despite of relative high support of cameras installation, negative aspects of monitoring also appeared in press of observed countries. Disadvantages of surveillance technologies were salient issue for almost half of countries from our sample (for more details see table 18). Opponents of CCTV cameras pointed out particularly the fact that camera systems endangered our rights for "privacy" and personal freedom. Similarly to 3D body scanner, problems of data storage and their potential misuse were mentioned. Right to privacy was accented particularly in Poland, Germany and Slovakia and partial interest was reported in British and US press. On contrary, broader debate of negative aspects of camera's implementation absented in Italy, Mexico and the Czech Republic.

International comparison of CCTV cameras' articles showed difference in development in topic or justifications in time among three groups of states (1) old member states apart from Germany (2) new EU member states and Mexico (3) the the United States and Germany. First, CCTV cameras in old EU member states such as the United Kingdom, Italy, and Spain were installed in the end of last century or even sooner. Therefore citizens were familiar with them and they were mostly aware of their pros and cons. Advantages of CCTV cameras were emphasized more often in Southern European countries. Good example is Italy where the lack critical perception of cameras there because people considered CCTV cameras as common part of their lives and did not question their purpose. Critical approach to cameras and fear of being monitored is in context of new member states typical for Great Britain. Despite above mentioned regional differences between UK and Spain and Italy in justification and evaluation of cameras, none substantial differences in development of the debate in time were reported. In other words, British, Italian and Spanish newspapers used the same topics and justifications from 2010 to 2013.

On other hand, interesting development of the topics was visible in new member states and in Mexico. In these countries, technology of CCTV cameras was not so established because cameras were installed to public space later. In 2010 and 2011, newspapers in Poland, Slovakia and the Czech Republic focused on CCTV cameras itself, their purchase and installation and efficiency in crime prevention, detention and solution. In 2012, interest in CCTV cameras culminated and the debate became more sophisticated and deeper. Newspapers questioned the efficiency of cameras, pointed to the lack of privacy and emphasized the need of clear legislative regulation for CCTV cameras. The change in style and content of the articles published in 2012 indicated also titles of articles. Good example of this trend represented polish left-leaning paper *Gazeta Wyborcza* which published following articles in 2012: *"One can see everything," "Poles watched," "We need courage, not cameras"* (Sojka 2013).

Situation in the USA was different. CCTV cameras became salient issue after the attack targeted on Boston marathon in April 2013. *"Public discussions about the benefits of surveillance only really started after the tragic Boston Marathon bombing of April 2013, when CCTV footage proved crucial in tracking down the suspects"* (Beláková 2013: 53). Newspapers paid to the CCTV cameras almost no attention before this attack despite of high presence of CCTV cameras in public space. This situation supports theory that citizens are interested in methods of



surveillance particularly when they feel endangered. Moreover they are willing to substantially reduce their civil rights and freedoms in return to feeling safe and secure. This trend illustrates well following data from New York Times/CBS News opinion survey which took place only a week after Boston attack. According the survey, almost 80 % respondents considered CCTV cameras as good idea (Beláková 2013).

To certain extend similar situation happened in Germany after finding a bomb Bonn in railway station in December 2012. Citizens' interest in CCTV cameras increased among German population and their attitudes which were before the attack mostly critical got better. Nevertheless, that kind of difference was not as strong as in the USA. German attitudes towards the CCTV camera and others tools of surveillance was much more cautious than in the USA. Hesitancy is typical feature of German security debate and it is sometimes called with term "German Angst" (German hesitancy). We can find more examples of these attitudes in recent German security policies such as "the requirement of an extension of Google Street View to hide whole buildings (Germany was the only country that stopped the expansion of Google Street View)... anxiety in subjects such as H5N1 avian influenza, BSE or the risks of nuclear power plants" (Nitzche 2013: 10).



Graph 12: Comparative assessment of salience by countries and main justifications related to the CCTV cameras 2010-2013

Table 16: Categorization of justifications according to salience 2010-2013

	Efficiency	Crime Prevention	Right to Privacy	Safety	Crime solution
	Spain	Spain	Poland	Poland	Spain
high salience	Slovakia	Czech Republic	Slovakia	Slovakia	Germany

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Source: SECONOMICS ISASCR



	Germany	Slovakia	Germany		USA
	USA	Germany			
	Spain	Mexico	UK	Germany	Slovakia
medium salience	Czech Republic UK	Polnad	USA	USA	
	Italy	Italy	Spain	Spain	Italy
	Mexico	UK	Czech Republic	Czech Republic	Mexico
low salience		USA	Italy	Italy	Poland Czech Republic
			Mexico	Mexico	UK
				UK	

Source: SECONOMICS ISASCR Note: Based on means for each justification

6. Summary

6.1 The most salient actors and argumentative strategies related to the 3D body scanners, CCTV camera systems and virus Stuxnet

The three topics that we included in the analysis didn't attract the same level of attention among the studied countries. The United States acted as a leading country in the case of 3D body scanners and Stuxnet, providing the discourse for the rest of the countries that we have analyzed. On the other hand, in the third analyzed topic it played only a marginal role. CCTV cameras caused major attention and controversy in Poland and Germany. Poland belongs among the strongest supporters of the installations of CCTV cameras while German articles revealed it standing on the opposite side and arguing mainly negatively towards these devices.

Table 17: Dominant actors in the analyzed countries for CCTV cameras, Stuxnet and 3D body scanners

Actors	CCTV cameras	Stuxnet	3D body scanners
	Spain	Spain	Spain
Journalist	Czech Republic	Mexico	Czech Republic
	Poland	Poland	Poland



	Slovakia		Great Britain
	Germany		
	Great Britain		
	USA		
		Italy	Czech Republic
Exporte		Germany	
Experts		Great Britain	
		USA	
			Mexico
State institutions			Poland
Politicians	Italy		Italy
POINTCIAITS			Germany
Private company	Mexico	Czech Republic	
Transport Socurity Agonov			Czech Republic
Transport Security Agency			USA

Source: SECONOMICS ISASCR

Note: More than one dominant actor in the country means that there were more actors with the same amount of codes

In table 19 we can take a look at actors that dominated in the countries we have analyzed. In the case of CCTV cameras there is a strong dominance of journalists. The latter were the most important actor in seven countries. In Italy, politicians providing statements prevail, which is typical for all of the 3 analyzed topics in Italian context. Stuxned is a topic framed mainly by "experts", which we can see in the domination of this actor in four countries. In the debate about 3D body scanners many different actors were involved and the dominance is not so clear.

Table 18: Above-average occurrence of argumentative strategies in analyzed countries for CCTV cameras, Stuxnet and 3D body scanners

Argumentative strategies	CCTV cameras	Stuxnet	3D body scanner
	Spain	Spain	Spain
	Czech Republic	Slovakia	Great Britain
Definitive	Poland	Great Britain	USA
	Slovakia	USA	
	Great Britain		



	Poland	Germany	Germany
Evaluative	Slovakia	USA	USA
	Germany		
Advocative	Poland	Great Britain	Spain
	Slovakia	USA	Italy
	USA		Slovakia
			USA

Source: SECONOMICS ISASCR

Note: Countries that dominated in each category are highlighted

Regarding argumentative strategies there was a dominance of definitive and neutral argumentative style in all the three cases. However, the discussions about 3D body scanners and CCTV cameras in the press contained quite a high number of evaluative strategies as well. Only Stuxnet can be seen as almost strictly framed in definitive and neutral way. That is understandable as the topic is remote from the general public due to its technical character and thus needs to be brought to the audience first by giving an explanation of what is actually going on. Table 20 shows the above-average use of particular argumentative strategies in the three topics. That is, which country used the distinct category of argumentation more, compared to the other countries. In case of evaluative and advocative statements, it reveals to us where the discussion about the distinct topic was developed the most and where the character of the articles was only informative.

The United States are indisputably the leading country in the debate about 3D body scanners according to the number of different actors providing the statements in the press. The discussion there was opened after the failed terrorist attack in the Detroit-Amsterdam plane in 2009. The most influential actor providing statements in the US is Transport Security Agency arguing for implementation of body scanners. A lot of space in the media is given to "experts" who were mainly speaking about the health risks of the scanners and evaluating them negatively. The rest of the countries are rather reactive on the events happening in the US. In Great Britain and Spain there is a strong voice of journalists themselves in the statements. Italy makes an exception among other countries with the strongest position of "politicians" in the debate in media. Slovakia, Poland, Czech Republic, Spain or Mexico did not pay much attention to this issue according to the number and quality of articles published. They mostly just adopted the US or other foreign articles and informed about the case at hand. Great Britain and Italy can be seen as supporters of this technology in the EU, the rest of the covered countries rather evaluates it negatively regarding the media articles. It is important though, to discuss this topic on the European level. The regulation of the use of 3D body scanners is now in the hands of the member states and for a better use of this device having in mind its weaknesses as well it would be helpful to settle some common criteria for all the EU.



Stuxnet represents a special case among our three topics. It is not directly connected with the public but at the same time it can have unprecedented consequences in their lives. Therefore, it is desirable for people to be informed about these issues. The topic in media was opened in 2010 by the cyber-attack on the Iranian power plant. At the beginning it was framed almost entirely in a definitive way. The leading actors of the statements were "experts" and various state officials from Iran and the United States. As time passed, the debate moved from specific happenings to a more abstract level discussing potential cyber war and involving a wider variety of actors of not strictly expert character. The evaluative strategies used in the articles about Stuxnet were mostly negative but we can say that generally the countries apart from the US played the role of a detached observer rather than giving any significant opinion about the case. The only exception was Mexico where some articles included a fear of being similarly targeted in the future, identifying itself rather with the victims than with the perpetrators of the attack.

The last topic, CCTV caused major attention among the studied countries and the roles of the leaders in the debate changed completely in comparison to the other two topics. USA unlike in the other two cases did not play any important role. CCTV cameras apparently do not cause mayor controversies there. They attracted more attention only after the attack in Boston Marathon in April 2013 when they helped to reveal the culprits. The leaders of the debate about CCTV cameras among our selected countries were Poland and Germany expressing completely opposite insight. While Poland evaluates CCTV use positively viewing it as part of the country's modernization, in Germany negative evaluations regarding the right to privacy prevail. The main actors providing statements in the articles about CCTV, apart from journalists themselves, were various state related institutions. In Italy, again, we observed a strong position of politicians providing the information and opinion about CCTV cameras. In Mexico the most frequent actors were "private companies" working on the installation of CCTV devices. The debate about CCTV cameras is mostly framed in domestic terms and is relatively distinct in each of the analyzed countries. It is connected to cultural differences, security situation in the country and its past experience with terrorist attacks.

6.1.1 The most salient topics and justifications related to the 3D body scanners, CCTV camera systems and virus Stuxnet

Overview of total number of topics and justifications for all three security related issues shows us that the highest media attention was paid to the 3D body scanners while newspapers in observed countries were focused lowest on the virus Stuxnet. Nevertheless, distribution of number of topics was relatively equal among all three security-related issues (see Graph 13).¹⁶ On contrary, bigger differences appeared in occurrence of justifications when low number of justifications was typical for

¹⁶ Five most salient topics related to Stuxnet were mentioned totally 974 times, in case of CCTV cameras it was 1059 times and 1173 times in articles about 3D body scanners.



articles about virus Stuxnet comparing to relatively high amount of justification in case of CCTV cameras and 3D body scanners (see Graph 14).¹⁷

Graph 13: Total number of the most salient topics related to 3D body scanners, CCTV cameras and Stuxnet in 2010-2013



Source: SECONOMICS ISASCR

Graph 14: Total number of the most salient justifications related to 3D body scanners, CCTV cameras and Stuxnet in 2010-2013



Source: SECONOMICS ISASCR

As was mentioned above, newspapers paid the highest attention to the first security-related issue of 3D body scanners. Nevertheless, we should take into account that this fact was caused by high interest in this topic in the USA which significantly shaped the debate and media perception of scanners while scanners were external and that is why not interesting topic for relatively high number of other states included in our comparison. It is no surprise that 3D body scanners were salient particularly for the countries where scanners had been implemented (the United States, Great Britain, Germany) and for the countries with recent experience with the terrorist attacks (the United States, Great Britain, Spain).

¹⁷ Number of justifications used in the articles of CCTV cameras and 3D body scanners is relatively similar (429 justifications for cameras and 493 for body scanners) while Stuxnet incident was justified only in 168 cases which was almost three times less than in the case of previous two topics.



Issue of body scanners was also more important for the old EU member states and the USA than for new member states and Mexico. The most sophisticated debate about 3D body scanners took place in the United States while less attention to this issue was paid in Mexico and Poland.

In the most of the countries newspapers focused on the trade-offs among security, privacy and health. Lot of attention was paid to the "security rules and regulations", "installation of scanners" and description of scanning procedures. On one hand, body scanners were justified by pointing to their "efficiency" (which was in some respects questioned) as well as they were considered as useful tool in anti-terrorist fight. On the other hand, newspapers mentioned that price which was paid for security was sometimes too high. Daily papers were also focused on negative aspects of scanners installation such as the threats for human "privacy", dignity and freedom and they also informed about the lower comfort of air travel and worse "quality of services".

CCTV cameras were only the second security-related issue in regard of its total media coverage; in fact it was more salient issue for more countries included in our comparison than 3D body scanners and Stuxnet. The reason was that CCTV cameras were a domestic issue and that is why they were also interesting and relevant for newspapers readers. No dominant country shaped the debate in European and worldwide context as the United States did in the case of full body scanners and Stuxnet. CCTV cameras were even not particularly salient topic for the United States.

The highest attention to CCTV cameras was paid in Poland, then followed Spain, Great Britain and the Czech Republic. It is interesting that new member states of EU such as Poland, Slovakia and the Czech Republic were focused on this issue a lot while they were not particularly interested in 3D body scanners and computer virus Stuxnet. The lowest interest and shallow debate about CCTV cameras was reported in Italy and Mexico. Mexican and Italian press did not exhibit higher attention to 3D body scanners but their media coverage of Stuxnet was interesting contribution to the debate about this virus.

Regarding the topics connected with CCTV cameras, newspapers generally interested most in their "purchase and installation", "security rules and regulations" and "surveillance". Topic "security rules and regulations" was often connected with negative aspects of surveillance technologies, for example, endangering the people's privacy. In this regard, newspapers called for better legislative regulations of CCTV cameras. On the other hand, the purchase and installation of cameras was evaluated positively as an effective tool in the fight against crime by cameras proponents. "Efficiency" and "crime prevention" belonged amnong the most salient justifications of CCTV cameras. Nevertheless, efficiency of cameras was numerously questioned what is similar to the situation with 3D body scanners.

Interesting difference appeared among English speaking countries and Germany and the rest of states included in the survey. In the USA, Great Britain and Germany



cameras were considered a useful tool in fight against home and international terrorism. In the rest of countries from the comparison, CCTV cameras were not primarily used in terms of counter-terrorist systems but they were considered as efficient deterrents against the acts of vandalism, robbery, pickpocketing in public transport or the tool for strengthening the security in the road traffic.

Lowest newspapers' attention was paid to virus Stuxnet. The reason of relatively low media coverage of Stuxnet incident could be that unlike 3D body scanners and CCTV cameras, Stuxnet is not a technology directly affecting daily life of common people. That is why information about Stuxnet is not so interesting for general population. Similarly to case of 3D body scanners, the USA was leader of debate, then followed Germany and Slovakia.

The articles describing Stuxnet were longer, more detailed, factual and contained opinions of experts more often than the articles dealing with the functions of CCTV cameras and 3D body scanners. Prevailing topics were "Attack on Iran", "Iranian enrichment uranium programme" and "Deployment attack using Stuxnet" and newspapers also speculated about origin of this virus. Issue of Stuxnet was framed to the global cyber security context, industrial espionage and cyber war. Newspapers informed about wider consequences and negative impacts of Stuxnet attack on geopolitical stability such as potential counterattack and discussed the legitimacy of cyber-attacks in regard to international law. In Mexico there was even partly approached to this topic from Iranian perspective.

Regarding the justifications, proponents of Stuxnet appreciated the complexity and efficiency of this virus and emphasized the security aspect. They considered this virus as a quick and non-violent weapon useful for premptive strike which could prevent from development of weapons of mass destruction. On the other hand, concerns of virus uncontrolled proliferation and possible threat of counterattacks appeared in 2011 and 2012.

7. Conclusion

In the qualitative comparative analysis, we have concentrated on the key role of media in political communication - both transmitting information and shaping opinions on key security issues (case studies include cyber terrorism as an example of risk and 3D scanner and CCTV camera as an example of security measure, although it was pointed above, that some media framed Stuxnet as a security measure). The main factors shaping the media reporting on terrorism threats and security measures are past experience with a particular security threat, as well as probability of the country being targeted in the future. These factors account for the main differences in the extent of coverage dedicated to the issue in the domestic media.

In this report, we aimed at filling the existing gap in study of terrorism and security risk, by concentrating on comparison of coverage of transnational issues in media



outlets of ten countries. We find that the media landscape is undergoing transformation with growing importance of international context. The example of British and German media shows that the media is shifting from focus on security threats to awareness of possible trade-offs of security measures in terms of health, privacy and freedom. Terrorism and organised crime are increasingly framed as transactional and beyond the scope of nation-states. The public is becoming more sensitive not only of threats but also the costs of security. The media play key role in shaping political communication and public attitudes. The media fulfils its informative and educational functions, and increasingly provide platform for public political discourse, including provision of space for the expression of dissent. The media are also channel for advocacy of political viewpoints (need for regulation, adoption of security measures) and to a significantly lesser degree acting as a 'watchdog' or guardian of freedoms.

To conclude we can state that the balance of security and freedom is the crucial task of contemporary governments, the role of critical media as a platform for public political discourse and guardian of freedoms is gaining considerable importance.



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