

# The Role of Information and Communication Technology in the EU Response to the 2015 Refugee Crisis<sup>1</sup>

KRZYSZTOF WASILEWSKI<sup>2</sup>

ORCID: [0000-0002-5378-2822](https://orcid.org/0000-0002-5378-2822)

Koszalin University of Technology

The 2015 refugee crisis – as the mass influx of migrants from the Middle East is commonly dubbed – tested the European Union’s ability to react to large-scale humanitarian emergencies. Apart from various organizational, social and political changes that the 2015 refugee crisis has brought to the European Union, it has also marked the growing role of information and communication technology (ICT) in the EU’s asylum and migration policies. Drawing from the critical perspective of international relations and such concepts as securitization of migration, the paper aims to analyse the engagement of ICT by EU institutions and individual Member States during the refugee crisis in 2015.

**Keywords:** ICT, European Union, Refugees, Asylum policy, Securitization

## Introduction

The 2015 refugee crisis – as the mass influx of irregular migrants and asylum-seekers from the Middle East is commonly dubbed – tested the European Union’s ability to react to large-scale humanitarian emergencies. Some scholars, e.g. Anke Hassel and Bettina Wagner (2017: 61), go even further and maintain that “the summer of 2015 marked a turning point in the migration history of the European Union”. There is no doubt that the need to respond to the rapid arrival of over one million forced and

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<sup>1</sup> The term “refugee crisis” follows the EU’s nomenclature, since it has used that term in various documents concerning the influx of irregular migrants and asylum seekers. Due to the same reasons, the terms “irregular migrants” and “undocumented migrants” are used interchangeably.

<sup>2</sup> Contact: e-mail: [krzys.wasilewski@gmail.com](mailto:krzys.wasilewski@gmail.com)

irregular migrants in fewer than twelve months has impacted the EU in more than one way, with its ultimate results still yet to come (UNHCR, 2015). From the establishment of new institutions and mechanisms of cooperation, through the redesign of old ones, to the reshuffling of the EU political spectrum – the present European Union has been shaped by the 2015 refugee crisis to a greater extent than by any other event in recent history.

Apart from various organizational, social and political changes that the 2015 refugee crisis has brought to the European Union, it has also marked the growing role of information and communication technology (ICT) in the EU's asylum and migration policies. According to a glossary provided by Eurostat (2016), "ICT covers all technical means used to handle information and aid communication. This includes both computer and network hardware, as well as their software". As scholars agree that contemporary asylum and migration policies are becoming more and more dependent on ICT, it is worth analysing if and how this technology influenced the EU response to the 2015 refugee crisis. Therefore, the aim of this paper is to scrutinize the engagement of ICT by EU institutions and individual Member States during the refugee crisis in 2015. As a result, the main research questions put forward in this study are:

1. What types of ICT were engaged during the consecutive phases of the EU response to the crisis?
2. What role did ICT play in the EU's asylum and migration policies during the crisis?
3. How did ICT impact EU decisions and reactions during the crisis?

In order to answer the above questions, a number of sources were analysed. They can be divided into three main categories: primary sources (e.g. EU official papers, statements, and other publications), secondary sources (e.g. media coverage and think tank reports), and the hitherto literature on ICT, as well as the EU asylum and migration policies. All the material was first carefully read and then reviewed, using – among others – the normative analysis method. The first section of the paper, which sets the theoretical background for further research, draws mainly from the critical perspective of international relations and technology, locating this study within the field of the theory of securitization. The next section introduces the historical context, explaining the reasons, development and (temporary) conclusions of the 2015 refugee crisis in Europe. Then the foundations of the EU asylum policy are shortly described, together with its legislation and interpretation. The main part of the paper consists of an analysis of the implementation of ICT by the EU during the five phases of response to the crisis. Finally, the findings are summed up and the research questions are answered in the discussion section. Since the paper focuses on the 2015–2016 period, some ICT solutions introduced by the EU after that period or still remaining in the planning stage were not included. The same applies to

those ICT mechanisms that were of minor usage during the 2015 crisis. It concerns, first and foremost, such systems as ETIAS (a pre-travel authorisation system for visa exempt travellers), Visa Information SystemVIS and others used for legal migration.

## **ICT, refugees, and securitization of asylum and migration policies**

The impact of information and communication technology on refugee migrations and policies has been analysed by a number of studies. Most of them have so far focused on the way ICT is used by refugees during the various stages of their forced migration, that is: seeing the threat, fleeing, reaching a new home, settling in, and adjusting to the culture (Stein, 1986: 8). Smartphones, social media, as much as other computer-mediated forms of communication, are widely perceived as easily accessible tools that allow underdog groups, such as refugees, not only to exchange information among one another but also to gain presence in the host country's public sphere. For example, in their 2017 paper on Sri Lankan Tamil refugees in India, Akshaya Sreenivasan, Steve Bien-Aimé and Colleen Connolly-Ahern (2017: 90–91) observe that “mobile phones have taken on a variety of functions during times of stress, isolation, and crisis”. As a result of it, “while a refugee camp or even war can constrain one's ability to speak publicly, a mobile phone is able to transcend such severe obstacles”. Another study carried out by a group of scholars from Erasmus University Rotterdam has confirmed and expanded the aforementioned findings. In the opinion of Amanda Alencar, Katerina Kondova, and Wannas Ribbens (2018: 14) smartphones are “lifelines” for refugees, since they perform several important functions. First of all, mobile phones help to organize the journey. In addition to this, they are also used by their owners for social bonding, community-building, forming migration networks, and preserving memories of the journey. Other studies – conducted both before and after the 2015 refugee crisis in Europe – indicate that ICT not only allows migrants to reach far more distant destinations with the same resources, but also enhance their networks of social connections (Collyer, 2010: 27; Dekker et al., 2018). It thus comes as no surprise that – as has been noted by sociologist Marie Gillespie and her team, who have mapped refugee media journeys – the three most important items refugees take with them are now “water, phone, food”, in that order (Gillespie et al., 2016).

Although there is no doubt that ICT provides refugees with valuable tools to communicate and organize themselves during their journeys, some scholars underline the existence of the other – “darker” – side of modern technology. For example, the aforementioned study by Gillespie et al. also indicates the scale of danger that awaits refugees who rely on smartphones. The very same devices that help migrants to find their relatives or provide information on the host country can also be used

by smugglers to attract new victims. According to Gillespie, “when you go down the darknet, it is certainly the case that the smugglers and agents will portray a very highly idealized image of Europe as a place where you’ll get jobs, housing, access to healthcare and that can actually feed very unrealistic expectations in refugees” (Kaplan, 2018). Some studies point out that smugglers’ activity in social media may strongly influence migration routes since lured by the falsified picture of Europe, refugees often choose dangerous overseas passages rather than more accessible and secure nearby places. For example, in their analysis of Syrian refugees, Danilo Mandić and Charles M. Simpson (2017: 83–84) conclude that ICT has made refugees more prone to undertake risk, giving faith to unchecked information found online. In addition to this, government sources were treated with deep distrust. Another problem is related to the fact that while asylum seekers consider smartphones more important than food, shelter, and access to other basic services, they become more and more dependent on internet providers, which generates additional expenditure for their already stretched budgets (Carlson, Jakli, Linos, 2018). What is more, Emmanouil Dontas et al. (2017: 93) observe that “the archive of refugees’ photos, text data, and their digital traces make them vulnerable to a variety of risks and threats including unwanted state surveillance”.

The last sentence leads us to the problem of securitization of migration and the role of ICT in that process. Even though states have always strived to control the influx of foreigners into their territories, recent studies confirm that some major developments in asylum and migration policies have taken place in the last two decades. The idea of securitization was first introduced by researchers from the Copenhagen School of Security Studies. In a paper published in 1998 they argued that “we are witnessing a case of securitization” when “by means of argument about the priority of an existential threat the securitizing actor [manages] to break free of procedures or rules he should otherwise be bound by” (Buzan, Wæver, and de Wilde 1998). The idea caught hold in the academic discourse – though not everyone agreed with it (e.g. Boswell, 2017) – especially in the field of migration studies, and has been developed by a number of scholars ever since. In one of the major works on securitization of migration, Philippe Bourbeau (2011: 1) lists three main factors that have influenced asylum and migration policies: “the notion of migration in a collective sense posing an existential threat to the security of the state or society; the prominence given to immigration as a security threat; and its attendant effects in political practice, which have undergone significant and even startling changes”. As a result, states have strengthened their border control and tightened their immigration and citizenship legislation while the media have multiplied the image of refugees as an enemy force. Most scholars call this state of affairs “securitized migration” or “securitization of migration” (Weaver et al. 1993).

But what exactly does “securitization of migration” mean? One of the leading experts in security theory, Thierry Balzacq (2011: 3) defines securitization as “an articulated assemblage of practices whereby heuristic artifacts (metaphors, policy tools,

image repertoires, analogies, stereotypes, emotions, etc.) are contextually mobilized by a securitizing actor, who works to prompt an audience to build a coherent network of implications (feelings, sensations, thoughts, and intuitions), about the critical vulnerability of a referent object, that concurs with the securitizing actor's reasons for choices and actions, by investing the referent subject with such an aura of unprecedented threatening complexion that a customized policy must be undertaken immediately to block its development". In this sense, securitization of migration is correlated with the development of bureaucracy and technology. As Bourbeau (2011: 131) maintains, securitization takes the form of "routine practices of bureaucracies and security professionals in which technology and technocratic practice come to hold a prominent place" (Bourbeau, 2011: 131). It is thus unsurprising that some scholars maintain that contemporary migration and asylum policies have evolved into a "security-industrial-complex" (Gerard, 2014: 45). In other words, states invest more and more funds into the development of new technologies, believing that they will allow them to control the flow of people in and out of their borders. In one of her studies, Alina Sajed (2013: 107) even goes as far as writing about Western states' "obsession" with technology, which is perceived not only as a tool to maintain order but also as an attempt to reconstitute their national identities. In other words, the securitization of migration strengthens the idea of an ethnically homogenous society that can be protected only by the exclusion of foreigners (Huysmans 2006: x). Although politicians speak of technology as a tool to protect the wellbeing of people, including refugees, in most cases ICT is used first and foremost to strengthen state control (Maguire, 2015: 70).

Despite the examples of information and communication technology helping refugees, it becomes tangible that what the development of ICT mainly leads to is more oppressive migration and asylum policies. In the introduction to the "Migration and the New Technological Borders of Europe" Huub Dijkstra, Albert Meijer and Michiel Bester (2011: 2) point out that "migration policy does not consist solely of laws and policy measures, but increasingly of technology". As a result, technology has begun to function as an "obligatory passage point". This development carries a number of implications not only for states' migration and asylum legislation, but also for the very understanding of migration itself. It means that technology leads to securitization of migration and this in turn, to the dehumanization of migrants: "Delegating policy and implementation tasks to technological resources easily results in transformation of those tasks, thus changing the meaning of 'migrants', 'borders', 'bodies' and 'state control' and affecting migrants' position as citizens" (Dijkstra et al., 2011: 2–3).

The development of ICT has transformed the aforementioned terms, turning them from political constructs to technological constructs, often challenging the position of migrants as human beings. This statement takes us back to the Copenhagen School of Security and the perception of security as a discourse. In her analysis of migration and citizenship in the age of securitization, Alexandra Innes (2015) writes that modern

technologies allow authorities to control not only the movement of migrants, but also the migration discourse. Technology has become another element – just like state legislation and media communication – in a discursive mechanism of grouping people into various political categories, such as irregular immigrants, refugees or asylum-seekers. According to the Copenhagen School of Security, these processes “represent a security technology in the form of a representational method of organizing people in such a way that they can be understood and controlled by the categories of the state. This organization in turn limits the potential of migrants to threaten the state as a category” (Innes, 2015). When migrants, including refugees, are presented as a mass which can be quantified and divided according to some established standards, technology becomes the prevailing factor in any migration discourse. It is worth pointing out that the technologization of migration discourse is by no means a contemporary phenomenon. A closer look at the U.S. migration legislation in the first two decades of the 20th century reveals that technological advancements played an important role in anti-immigration notions that prevailed in the American society at that time (Laidler, 2013). Eugenics, intelligence tests and the automatization of work accompanied most newspaper texts and political speeches concerning immigration in the United States until the late 1930s (Wasilewski, 2017).

Having established migration as a serious threat to society, politicians then present information and communication technology as a remedy for it. According to the prevailing discourse in North America and Western Europe, states need to develop ICT in order to successfully protect their citizens from the outside danger. In this sense ICTs serve as “disciplinary technologies” – to echo Michel Foucault. Although the French philosopher defined this term as “the actual practice of power”, involving various elements of governing mechanisms (Foucault, 1984: 256), of which ICT constitutes only one element, a number of studies prove its usefulness also for the explanation of contemporary asylum and migration policies. For example, according to Kerry Carrington’s findings, the United States and the European Union – among others – have “intensified efforts to tighten borders, assert sovereignty and exclude ‘non-citizens’ through technologies of expulsion and social control” (Carrington, 2007: 179). What is more, Dean Wilson (2007: 89) argues that the usage of ICT in states’ migration and asylum policies is not about the technological advancement of certain tools, such as biometrics, but about the fact that “technology is deeply embedded and constitutive of emerging processes of social classification and discrimination”. As Wilson maintains, states engage technology in their policies as the “antidote” for their decreasing capabilities in protecting their borders. In an empirical study of the experiences of Canadian Muslims, Baljit Nagra (2017: 94–95) notices that in the post-9/11 period, disciplinary technologies have been one of the key elements in states’ national security policies to regulate and control citizens.

From the above review of literature it appears that information and communication technology influences contemporary asylum and migration policies in two major

ways. First, ICT provides states with advanced hardware and software designed to track and group people into categories designed by politicians. In this sense, technology – from the perspective of political actors – is neutral and can serve as both: 1. a tool offered for refugees and asylum seekers that allows them to communicate and find safe passages – much like in the case of mobile phones and various applications designed for them, e.g. online translators; 2. a technological supplement of border control that helps states to maintain order and security, e.g. biometrics systems, satellite surveillance, drones etc. However, the impact of ICT on modern asylum and migration policies does not limit itself to the everyday praxis of using electronics. It appears that ICT has influenced contemporary political discourse in an even more profound way that it has upgraded various devices used by migrants and border patrols. From this perspective, information and communication technology has contributed to the reconfiguration of social and political alignments, leading to the even greater securitization of migration. In other words, securitization is embedded in technology, as “technological devices are not merely the instruments used to implement policy decisions, but also shape the policy options available to decision-makers” (Léonard, Kaunert, 2019: 26). The following analysis will thus cover both ways of ICT impact on EU asylum policy.

## **The 2015 refugee crisis and the Common European Asylum System**

Although the socio-political situation in Afghanistan and the Middle East, most notably in Syria, Iraq and Yemen, had been deteriorating for quite a long time, the growing number of refugees trying to reach Europe seemed to have caught Brussels by surprise (Le Gloannec, 2017: 134). Only in the first half of 2015 over 310 000 people arrived in Italy and Greece, sparking the news of the biggest “refugee crisis” in recent history. That number had surged to almost one million by the end of the year. All in all, in the first year of the “refugee crisis”, the European Union recorded some 1.3 million asylum applications, 28 percent of which were Syrians, while the next most common applicants came from Afghanistan and Iraq (Eurostat, 2017). Despite the established rules of conduct, a “temporary relocation mechanism for international protection applicants”, which EU Member States triggered in September 2015, was implemented only partially. Due to “a lack of solidarity among EU Member States against the backdrop of the recent mass-inflow of asylum-seekers”, almost 500 000 of them were admitted to Germany alone, which meant the rise of their number by over three times in comparison to the previous year (Kohler, 2017: 258). Another 362 000 refugees and irregular migrants crossed the Mediterranean Sea and reached the EU borders in 2016. In the same year the EU and the Turkish government announced a statement (later implemented by both sides), according to which “irregular

migrants and asylum seekers arriving on Greek islands from Turkey may be returned to Turkey” (EU-Turkey Statement, 2016). In addition, the EU agreed to make available some 3 billion euros to address the needs of refugees hosted in Turkey.

At the same time the EU struggled from internal crises, such as the ongoing economic crisis in Greece, Italy and other southern Member States, terrorist attacks in France (January 7, 2015 and November 13, 2015), and the Brexit referendum (June 23, 2016), whose outcome ultimately led to the decision of Great Britain leaving the EU. Although in the following years the numbers of asylum applications were much lower than in 2015 and 2016, they still remained at a noticeable level. What is more, in 2015–2018 almost 11 500 irregular migrants and asylum seekers died trying to reach European shores, making migration and asylum policies one of the most important topics in the 2019 European Parliament election. As the “Politico” website summed up: “No issue has roiled European politics more in recent years than migration. It was a driver of Brexit and the rise of the populist right. Policymakers across the Continent are still struggling to agree on a response” (Politico 2019).

The EU has worked on its Common European Asylum System (CEAS) at least since May 1999, when the Treaty of Amsterdam entered into force. At first, the system’s objective was to harmonize Member States’ legal framework on the basis of common minimum standards (Communication, 2008: 2). In 2001 the Directive on temporary protection was introduced, allowing the EU – in “the event of a mass influx of displaced persons” – to implement “exceptional measures” in order to provide persons from EU countries with immediate and temporary protection (Council Directive 2001/55EC). After several more years, the CEAS went into its second phase with the ultimate goal of achieving “both a higher common standard of protection and greater equality in protection across the EU and to ensure a higher degree of solidarity between EU Member States” (Green Paper, 2007: 3). It resulted in the publication of the Green Paper in 2007 and the Policy Plan on Asylum in the following year. The latter document set three main pillars of the CEAS: the harmonization of standards of protection by further aligning the Member States’ asylum legislation; effective cooperation; and increased solidarity and sense of responsibility among EU states, as well as between the EU and non-EU countries (Communication, 2008). However, the Plan was introduced and agreed upon in the time when most Member States recorded “historically low levels of asylum applications”, resulting in a rather too optimistic approach to future challenges posed by irregular migrants. By consequence, in 2015 most of the rules established by the Plan, including solidarity mechanisms, remained irrelevant.

Despite the aforementioned regulations, the EU’s response to the so-called 2015 refugee crisis can be characterized as chaotic and sometimes even inept. It also highlights the depth and multitude of divisions among individual Member States, which in 2015 and the following years made it impossible for the EU to act at the expected speed and scope. Facing strong opposition from some Member States, EU institutions



responsible for carrying out the common asylum and migration policies could do nothing more but to react ad hoc, often reaching for provincial solutions instead of previously accepted and agreed upon regulations. In its evaluation of the EU's reaction to the 2015 refugee crisis, the Migration Policy Institute (MPI) underlined that although "there is no perfect crisis management system", the EU failed in providing refugees with even basic protection: "Deep political dissent and complex divisions of power between EU institutions, as well as between Member States, further hampered the European Union's ability to respond, exacerbating long-standing tensions that persist several years on" (Collett, Le Coz, 2018:1). Thus, it can be stated that the EU looked for larger and deeper implementation of information and communication technology into its asylum and migration policies as one of the solutions for dealing with its external and internal crises.

The EU response to the 2015 refugee crisis can be divided into five phases: the pre-crisis status quo (2013–2014), political escalation (spring 2015), unanticipated shifts in the flow (summer 2015), the emergence of crisis-response mechanisms (late 2015), the EU-Turkey statement and follow-up (spring 2016). During the first phase, the EU focused on the reduction of the number of fatalities in the Mediterranean, supporting and cooperating with the Member States of the region in their protection of the EU southern border. The creation of the Task Force Mediterranean and the start of Operation Mare Nostrum were the direct results of that policy. The second phase was marked by the publication of the European Agenda on Migration in May 2015, which set out general goals of the EU in the outcome of the mass influx of irregular migrants and asylum seekers trying to reach European shores. Among others, the document underlined the responsibility of Member States (and – voluntarily – associated states) for asylum applications and the organization of relocation of asylum-seekers, together with the resettlement of displaced persons. It also called for "a more direct and open dialogue" to build common policy concerning migration. In the third phase, Member States made use of ad hoc emergency funds and opted for the usage of the EU Civil Protection Mechanism, allowing for the direct and immediate support for the growing numbers of refugees in Greece, Italy, and the Balkans. According to the MPI evaluation, "money was channelled directly to large NGOs (...) allowing the European Commission to avoid having to coordinate the flow of funds itself" (Collett, Le Coz, 2018:13). In the fourth phase, as the situation of incoming refugees and irregular migrants in Europe, mainly in the Balkans, had been systematically deteriorating, on October 30, 2015 the EU Council triggered its general rapid alert system – ARGUS – which made it possible to coordinate individual activities of Member States and EU institutions. In addition to this, in December 2015 the European Commission put forward a package of proposals aimed at securing the EU's external borders while the European Council agreed to speed up actions on the establishment of hotspots. Finally, on March 18, 2016 the EU signed a statement with the Turkish government to limit the number of refugees going to Europe from Turkey – a move that marked the fifth phase.

## ICT and the EU response to the 2015 refugee crisis

Each of the five phases constituted a different political and organizational approach of the EU and individual Member States to the mass influx of refugees and irregular migrants. What is equally important, however, is the evolving role and engagement of information and communication technology during all these phases. Depending on the political priorities of each phase, ICT could perform live-saving functions, e.g. track people and save them from drowning (phase one), gather information (phase two and three), be applied to control people's movements (phase four), or serve as the main pillar of the control mechanism in refugee camps in Turkey and elsewhere (phase five). With the different functions of ICT came its different framing within the EU securitization discourse. As Maciej Stępką (2018: 22) points out, "the EU has deployed a plethora of instruments allowing to control, surveil and engage the situation in the humanitarian borderlands, be it for the purposes of 'search and rescue' of irregular migrants or 'seek and destroy' of smuggling vessels". Later, however, the humanitarian element of the EU policy gave way to the mobilization of extraordinary measures.

During the first phase, information and communication technology was first and foremost engaged in naval operations carried out by both the European Agency for the Management of Operational Cooperation at the External Borders (transformed in the aftermath of the crisis, on December 15, 2015, into the European Border and Coast Guard Agency – Frontex) and individual Member States. In order to coordinate various activities and maintain control of the Mediterranean, the European Border Surveillance System (EUROSUR) was established on December 2, 2013. The system relied largely on ICT, since it operated on the "near real-time information exchange, regular intelligence sharing and close inter-agency cooperation at national and EU level". What is more, the key role was also "played by the use of modern surveillance technology, such as the fusion of data derived from ship reporting systems and satellite imagery" (Communication, 2013: 17). The technology used by EUROSUR included such sophisticated software and hardware as: automated vessel tracking and detection capabilities, software functionalities allowing complex calculations for detecting anomalies and predicting vessel positions, as well as precise weather and oceanographic forecasts, optical and radar technology to locate vessels, and various analytical tools. For EUROSUR and its mission, ICT not only offered new and better means to tighten control of the Mediterranean but also served as an agent of securitization of migration and asylum policies of the European Union.

The surveillance mechanism of EUROSUR depends on two main elements: 1. Entry/Exit System (EES) which records the time and place of entry and the length of legal short stays in an electronic database; 2. Registered Travellers Programme (RTP), automatically segregating incoming foreigners into "high-risk" and "low-risk" groups, which in turn has an impact on the scope of control they have to undergo. In other

words, here ICT sorts people based on their racial, ethnic and class backgrounds (Topak, 2017: 30). By consequence, the establishment of EUROSUR and the implementation of stricter border control prior to 2015 marked the ongoing process of technologization of the EU's migration and asylum policies. Although the vast and popular usage of ICT was supposed to protect refugees and irregular migrants, in the end it had led to their further dehumanization – both in everyday praxis of border control and in political discourse. In his study of the EU border policy, Jorrit J. Rijpma (2017) observes that the EUROSUR should be seen “in the light of similar initiatives that diminish the role of human border guards through the use of (information) technology and a risk-based approach to the management of territorial external borders. (...) EUROSUR provides a framework for the use of modern technology allowing new (EU) and old (Member State) bureaucracies to reinforce their control over the movement of people”.

With the mass influx of refugees and irregular migrants during the first months of 2015, the EU response entered its second phase. As a result, apart from strengthening border control in the Mediterranean, the EU began to establish and develop its relocation mechanism to ease the situation in the southern Member States, with the ultimate goal to “identify, register, and fingerprint incoming migrants” (Collett, Le Coz, 2018:10). In order to accomplish that goal, the EU came up with the idea of “hotspots” in the front countries (Italy and Greece) where the incomers could be checked and sorted. This task was performed by the European Asylum Support Office (EASO) and Frontex. While the former assisted national authorities in relocating asylum-seekers and keeping them informed, the latter performed security duties: fingerprinting, registration, debriefing and organizing returns. Meanwhile, the European Commission was discussing the details of the emergency relocation program. According to the original idea, each Member State was supposed to admit a given number of refugees, estimated on the country's population size, GDP, average number of asylum applications per one million inhabitants, and unemployment rate. Some Member States accepted the calculated number of refugees while others, most notably the Visegrad Group countries (the Czech Republic, Hungary, Poland and Slovakia), refused to participate in the mechanism.

Despite the fact that the relocation mechanism never reached its optimal level, the analysis of the envisaged place of ICT in it brings some interesting findings, especially concerning the general role of technology in the EU's asylum and migration policies. The mechanism, together with “hotspots”, offered a laboratory for the European Dactyloscopy Database (EURODAC) – established originally in 2003 to collect information on asylum seekers (Regulations 2013). Since going online, the database has been filled up with three categories of people (and their fingerprints): 1. all asylum seekers over the age of 14; 2. irregular migrants arrested while trying to cross the EU borders; 3. irregular migrants arrested in one of the Member States. With the category 3 data becoming the most important for the Member States, however, EURODAC has evolved from a program supporting asylum policy into a tool widely used to combat undocumented immigration. According to Dennis Broeders (2011: 55), “the

development of EURODAC is a prime example of how data collected for one specific purpose is also made available for other purposes if this is deemed to be opportune”.

The 2015 refugee crisis sped up the process of the integration of border control via technology implementation. The future success of the mechanism depended on the establishment of a European Asylum Agency, which – in the opinion of the European Commission – could “provide operational and technical assistance” to Member States. In turn, the agency was to be equipped with all the necessary political and technical tools to enhance cooperation among Member States and EU institutions. In addition to this, the European Commission planned to set a “capability roadmap” to help the agency in the acquisition and leasing of technical equipment and technology (Proposal, 2018: 17). What can be observed in this case is the perception of ICT as an integral factor of the EU’s further integration. While software and hardware provided better means for identification and registration of refugees and irregular migrants during the second phase of the crisis, ICT also made available a closer cooperation between the Member States while the danger of the influx of undocumented migrants served as the direct reason for a more thorough implementation of technology. As Raphael Bossong and Helena Carrapico (2016: 10) point out, in the 2015 migration crisis there were “salient concerns about the construction of new barbwire fences in Eastern Europe and the Western Balkans. However, more technologically advanced, but less visible, systems, such as the EURODAC database for fingerprinting asylum seekers, usually escape public attention, even if they are at least as effective in obstructing migrants”.

During the third phase of response, the EU relied on nongovernmental organizations and Member States that individually or in ad-hoc formed groups, which organized help for incoming refugees. Reluctant to take responsibility for the ongoing humanitarian action, the EU assumed the position of a coordinator. As a result, “official data were patchy and often undercounted actual arrivals”, which made the European Commission believe that the apogee of the crisis had passed. It was on the contrary, however. Faced with growing numbers of refugees and irregular migrants, some countries (Hungary, Serbia, Croatia, Slovenia, Greece) triggered the use of the EU Civil Protection Mechanism (CPM). The Mechanism, established in 2001, can be defined as “a structure that aims to facilitate civil protection assistance between Member States and to third countries in response to major crises. (...) The CPM may be described as the most practical dimension of EU crisis management and also one of the first initiatives in the area” (Åhman, Nilsson, 2009: 83).

Countries that activated the mechanism were provided with in-kind support such as shelter, hygiene materials and medical supplies. However, within the CPM also came EU financing for other projects, including upgrading sites for refugees, establishing communication lines and organizing education for incomers. Although at this point the usage of ICT was not as obvious as in the activities carried out in the first two phases of the EU response to the crisis, nevertheless information and communication

technology was commonly perceived as a key element of the ongoing humanitarian action. For example in one of the EU official documents of that time, among the priorities of the humanitarian response were listed: “accommodating research and innovation into emergency management organizations, role of innovative technologies in the European Emergency Response Capacity, and use of specific technologies for mapping, situational awareness and analysis, early warning, crisis communication etc.” (European Civil Protection, 2015: 11). The development of ICT in humanitarian aid was also mentioned as a priority in the Annual Report of the European Union’s Humanitarian Aid and Civil Protection Policies and their Implementation in 2015.

The fourth phase of the EU response brought the emergence of institutional coordination. Having realized that the crisis was far from over, on October 29, 2015 the European Commission agreed to trigger its general rapid system – ARGUS – which became the core instrument of the three coordination mechanisms that emerged at that time. The other two were the Western Balkans Contact Group and the Integrated Political Crisis Response (IPCR), activated soon after. ARGUS is based on an online network, which “allows for a rapid information exchange between the various [European] Commission departments and it is a means of communication when ensuring high-level political coordination during a major cross-sectoral crisis” (Kjellén, 2009: 78). In case an incident occurs that may have consequences for other sectors, ARGUS provides information across all the European Commission services. Following the EU operational protocol for countering hybrid threats, the mechanism is launched to enforce communication in the event of “coercive and subversive activity, conventional and unconventional methods (...) which can be used in a coordinated manner by state or non-state actors to achieve specific objectives while remaining below the threshold of open organized hostilities” (EU Operational Document, 2016). In this sense, according to an evaluation of the EU’s management policy by Arjen Boin, Magnus Ekengren and Mark Rhinard (2014: 43), ARGUS should be perceived as a tool related to sense-making within the EU’s crisis management capacity. In their opinion, ARGUS and other high-technology tools have allowed EU institutions to collect information on a large scale, which takes precedence over political issues (Boin, Ekengren, Rhinard, 2014: 43). As the affected states were first and foremost interested in protecting their borders, ARGUS, together with its high-tech capacity, served as a means to provide information on the number and movement of refugees and migrants. Moreover, by implementing ARGUS, the EU admitted to perceiving the refugee crisis not as much as a humanitarian disaster but rather as a “hybrid threat”.

The activation of the IPCR made an even stronger case for treating the crisis as a “hybrid threat”, considering that, according to the original plans, it was to be implemented during “major emergencies or crises, inside or outside the EU, of such wide-ranging impact or political significance that require timely policy coordination and response at EU political level” (EU Integrated Political Crisis Response Arrangements, 2018). There are three operational modes of IPCR: monitoring, information-sharing,

and full activation. Each mode depends on ICT as the fast and undisturbed flow of information and data is crucial to the success of the mechanism. Much like in other such mechanisms, technologies make it possible to collect and share vast amounts of various data which in turn is used in Member States' security policy.

Finally, in the fifth phase of response, being unable to cope with the flow of refugees and migrants, the EU decided to sign a special statement with Turkey in March 2016. According to the agreement "all new irregular migrants and asylum seekers arriving from Turkey to the Greek islands and whose applications for asylum have been declared inadmissible should be returned to Turkey". In exchange, the EU agreed to disburse some 3 billion euros for concrete projects in Turkey, as well as to advance talks on visa liberalization for Turkish citizens travelling to the EU. At the same time, both sides agreed to reinforce their efforts to curb undocumented immigration in the Mediterranean region. Among others, the success of the agreement depended on ICT – from geographical information systems (GIS), used to plan, build and manage refugee camps through smartphones applications (e.g. RefAid) to satellite surveillance of the movement in the Mediterranean.

However, since the agreement's main objective was better protection of borders, both the EU and Turkey first and foremost deployed information and communication technology to achieve that goal. For example, the EU announced the development of an automated border control system – iBorderCtrl – which uses an artificial intelligence lie-detecting system fronted by a virtual border guard to quiz travellers seeking to cross borders. On the other hand, Frontex, together with individual Member States, had implemented biometrics and databases on a large scale before the crisis that allow to track migrants and sort them according to various political and security categories. At present, the EU's border security is considered one of the most technologically advanced in the world, as its Automated Border Control (ABC) comprises of biometric devices, user interfaces, processing units and network devices; and monitoring and control stations. As a result of the vast implementation of ICT in both: the EU border control system and Turkish refugee sites, the EU response to the crisis did limit the number of incoming irregular migrants and asylum seekers, since their number began to decrease in the following years. Unsurprisingly, in its 2019 evaluation of the agreement, the European Commission underlines that "the impact of the EU-Turkey Statement had immediate impact and tangible results. Thanks notably to the cooperation with the Turkish authorities, arrivals decreased significantly" (EU-Turkey Statement, 2019: 1).

## Discussion

The analysis of the five phases of the EU response to the 2015 refugee crisis allows to answer the questions considering the role of information and communication technology in contemporary EU asylum and migration policies. The first research question was:

- **What kind of ICT was engaged during the consecutive phases of the EU response to the crisis?**

The process of technologization of the EU's asylum and migration policies had been launched long before the outbreak of the refugee crisis in 2015. Frontex, which is responsible for border control, had engaged software and hardware in order to tighten control of the Mediterranean and other external EU borders. What is more, the very establishment of Frontex in 2004 (it became operational a year later) marked the role of technology in the EU's asylum and migration policies, since its tasks are not only "to coordinate joint operations and training but also to carry out risk analyses, to set up pilot projects and to follow up on research and development relevant for border management" (Rijpma, 2017). In this sense, the 2015 crisis became a chance for Frontex to test and introduce new systems, such as biometrics, satellite surveillance, together with tracking systems. Since the crisis, the annual budget of Frontex, a considerable part of which is spent on ICT, has been systematically increased. The planned budget for 2020 is 101.4 million euro, which means an increase of almost 32,5 percent in comparison to 2019. Moreover, databases comprising hundreds of thousands of records of asylum-seekers and migrants have been either created or developed, becoming a high-tech tool to control the flow of foreigners. In addition to this, the EU disbursed millions of euros to strengthen security mechanisms in countries from where the greatest numbers of future migrants were recruited. Among other – no less important – software and hardware used to combat the crisis were: automated vessel tracking and detection capabilities, software functionalities allowing complex calculations for detecting anomalies and predicting vessel positions, as well as precise weather and oceanographic forecasts, optical and radar technology to locate vessels, and various analytical tools.

- **What role did ICT play in the EU's asylum and migration policies during the crisis?**

It can be observed during all the five phases of the EU response to the 2015 crisis that ICT served first and foremost to support further securitization of asylum and migration policies. At a time of political, economic, and social upheaval, technology was believed to offer the right answer to all these problems. First, high-tech software and hardware made it possible to track people, prevent the undesired from entering the EU borders or expel undocumented migrants who had already been in the EU. Second, politicians and EU officials would often refer in their speeches and statements to ICT, making technology one of the main elements of the EU official discourse on the migration crisis. For example, a 13 May 2015 communication from the European Commission to the European Parliament read: "Managing our borders more efficiently also implies making better use of the opportunities offered by IT systems and technologies. (...) The full use of these systems can bring benefits

to border management, as well as to enhance Europe's capacity to reduce irregular migration and return irregular migrants" (Communication, 2015: 11). Third, the engagement of ICT in the EU's asylum and migration policies fostered cooperation among the Member States, as well as allowed Frontex and other EU institutions to take control over the crisis.

#### • How did ICT impact EU decisions and reactions during the crisis?

The 2015 refugee crisis caught both the EU and individual Member States by surprise. Although EU legislation anticipated that in "the event of a mass influx of displaced persons" some "exceptional measures" should be implemented (such as a relocation mechanism), due to political disputes between the European Commission and some Member States, most of them were never used. Instead, a number of ad hoc solutions were introduced, most of which relied heavily on ICT. With the ability to track, identify and divide people into political categories, information and communication technology allowed the EU to regain (not only discursively but also in numbers) control over the crisis. Satellite surveillance or biometrics made it easier to establish hotspots and refugee camps, as well as sign the agreement with Turkey to strengthen protection of the Mediterranean region. As a result, the decisions made by the EU and the Member States during each of the five phases of the response to the crisis resulted – among others – from the available technology at that moment.

## Conclusions

The EU response to the 2015 refugee crisis highlighted the role of information and communication technology in the EU's contemporary asylum and migration policies. The empirical material presented in this paper supports the critical approach to securitization as presented in the theoretical section. If, according to the Copenhagen School of Security Studies, securitization takes place when "by means of argument about the priority of an existential threat the securitizing actor [manages] to break free of procedures or rules he should otherwise be bound by", ICT can be considered as its defining element. In fact, in many aspects, the 2015 refugee crisis served as a real-time laboratory to test new high-tech solutions, the effect of which can be observed in the ever-growing budgets of Frontex and other institutions that research on the development and implementation of ICT in border security. Although, ICT made it possible to save a number of lives, as well as helped to provide better on-site protection to irregular migrants and asylum-seekers during the 2015 refugee crisis, it was engaged first and foremost to secure EU borders. As such it should be regarded as an essential part of the EU's asylum and migration policies, one that impacts each of their aspects: legislation, everyday praxis and, last but not least, discourse.



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