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# DIGITAL CROSSINGS ALONG THE MEDITERRANEAN ROUTES

EMPOWERMENTS AND CONSTRAINTS OF DIGITAL TECHNOLOGIES  
IN MIGRANTS MOBILITY

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## ABSTRACT

The intersection between digital transformation and migratory dynamics has fundamentally reshaped the way irregular crossings along the Mediterranean Sea are undertaken, monitored and accomplished. Migrants and civil society organisations rely on creative usages of ICTs and new technologies to bypass governmental control whilst gaining the necessary visibility — both in physical and advocating terms — to make a safe journey towards European southern shores. Meanwhile, national and supranational actors increasingly expand their digital arsenal through sophisticated military and surveillance technologies, aiming at securing the EU external borders and prevent irregular entries alongshore. Yet, few studies have focused on a joint assessment of the digital practices carried out by the different stakeholders involved, and even less, on how such mediated activities interrelate and counteract. This paper seeks to fill this gap by critically analyzing the ambivalent nature of digital technologies in migrants' mobility along the main Mediterranean routes. By concurrently granting novel affordances as well as new limitations to their mobility and enjoyment of rights, digital technologies come into play as a new determining (f)actor in migrants' crossings, as crucial as a calm sea and the fluid functioning of the engine.

*Key Words: Digital Technology; Migrants; Mobility; Digital Migration Studies; Mediterranean Sea, Irregular Crossings*

## TABLE OF ABBREVIATIONS

AI	Artificial Intelligence
AFSJ	EU Area of Freedom and Security
CEAS	Common European Asylum System
CFR	Charter of Fundamental Rights of the European Union
CRC	Convention on the Rights of the Child
CSO	Civil Society Organization
EAW	European
EctHR	European Court of Human Rights
EDPS	European Data Protection Supervisor
EES	Entry/Exit System
EU	European Union
EURODAC	European Dactyloscopy
EUROPOL	European Police Office
EUROSUR	European Border Surveillance System
FRONTEX	European Border and Coast Guard Agency
GDPR	General Data Protection Regulation
GPS	Global Positioning System
ICT	Information and Communication Technology
IOM	International Organization for Migration
MENA	Middle East and North Africa
NGO	Non-governmental Organisation
OHCHR	Office of the High Commissioner for Human Rights
SAR	Search and Rescue
SIS	Schengen Information System
TFEU	Treaty on the Functioning of the European Union
UDHR	Universal Declaration of Human Rights
UN	United Nations
UNHCR	The UN Refugee Council
UNSC	United Nations Security Council
VIS	Visa Information System

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## INTRODUCTION

Since the ‘long summer of migration’ of 2015, ICTs and new technologies across the Mediterranean emerged as pivotal (f)actors, capable of determining the accomplishment of a successful crossing. While national and supranational agencies involved in border and domestic security diversify their digital arsenal through the exploitation of new sophisticated military and surveillance technologies — aimed at securing the ‘European Fortress’ (Jünemann et al., 2019) through the prevention and monitoring of irregular entries —; migrants traveling across the main Mediterranean routes, alongside dedicated civil society organizations, engage in novel digital activities to bypass governmental control, while gaining the necessary visibility to make a safe journey towards Europe. The intersection between these two coincidental digital forces has reshaped the way mobility is undertaken, managed and perceived in Europe and beyond.

Yet, among the available academic literature, few studies have focused on a joint assessment of the digital practices carried out by different stakeholders involved in the Mediterranean context — namely migrants, civil society actors, national and supranational entities — and even less, on how such mediated activities interrelate. Intending to address this gap, this paper seeks to explore the complex and ambivalent nature of new technologies on migrants’ mobility and enjoyment of rights. The deployment of ICTs, biometrics, military and surveilling technologies by non-governmental organisations, national and supranational authorities and migrants themselves is currently establishing novel connections and relations of power across European external borders. Drawing from this initial assumption, the research revolves around a critical understanding of digital technologies and practices alongshore as ‘viapolitical’ mediums (Walter, 2015; Noori, 2020), intended — just like ‘vehicles, roads and journeys’ — as both the objects and arenas of political action, contestation and struggle.

The research has been developed from a migrant perspective. Therefore, considering that some of the activities carried out by civil society may involve, in some way or another, a breach of International, European and/or National Law — as in the case of the German *fluchthelfer.in*'s employment of digital technologies to assist irregular crossings, or again, the smuggling services mushrooming in the webspace — the assessment of these practices within the context of migrants’ empowerment shall by no means be interpreted as a stance in favour of such entities, rather an implicit assessment of the advantages brought to migrants’ mobility and overall opportunities.

In order to investigate the above-mentioned dynamics, the study is organized into three Chapters. The first Chapter seeks to provide a solid theoretical basis to guide the reader through a critical understanding of the forthcoming contents, by decomposing the thesis' topic into its main areas of investigation: namely, migratory movements across the Mediterranean Sea and digital technology through a human rights lens. Each dedicated section outlines the evolution as well as the empirical and legal dimension around these two subjects; here, the initial connections with specific human rights provisions will be drawn in relation to the overall topic. The final section of the Chapter ultimately frames these phenomena within the evolving field of research of Digital Migration Studies, which will function as a compass needle for the thesis' bearing.

The empowering effects of digital technologies on migrants' mobility and emancipatory knowledge are analyzed in Chapter 2. This chapter dives into the multiple ways through which mobile ITs and new technologies afforded to people on the move novel mediums to gain visibility along their journey; establish socio-virtual ties and eventually emerge as a collective. Alongside the migratory population, a network of transnational 'helpers' has gradually come into being to assist migrants in accomplishing the Mediterranean crossings — whether via humanitarian and/or advocating deployment of technologies — whilst also challenging EU immigration policies and border management activities alongshore. In these lines, past and present digital practices carried out by civil society and non-governmental organizations will be assessed in relation to the benefits that such insubordinate intervention brought to the migratory population.

Chapter 3 moves to a critical evaluation of the detrimental impact on migrants' mobility and integrity, attributable to an increased reliance on sophisticated technologies by EU authorities involved in the management of immigration and border control. The first section briefly outlines the background motives and purposes behind the overarching digitalization of the EU external frontiers as well as outlining the key implications of a culture of borders. The subsequent sections shift into a more detailed examination of the technological instruments deployed by national and supranational agencies alongshore and across the Mediterranean routes to surveil migratory flow and monitor the permanence of third-country nationals across the European territories. An assessment of the specific human rights provisions endangered by such activities will be incorporated throughout the analysis.

The paper revolves around a critical qualitative inquiry of academic publications, ethnographic researches, non-governmental and civil society reports in order to provide an exhaustive evaluation of the convergence between digitalization and migratory dynamics,

specifically applied to the Mediterranean context. Cited academic sources have been retrieved from a wide variety of disciplinary foci concerned about the study's subject matter: particularly, digital migration studies; media studies; surveillance and security studies; migration and mobility studies; racial and diaspora studies; anthropology and development studies. Such literature material is then combined with direct evidence and real testimonies of secondary sources. Moreover, two brief case studies of technologies for the purpose of migrants' empowerment and constrain have been located in the final sections of the respective chapters, to illustrate in empirical terms the relation of power between the actors involved.

A socio-constructivist approach is employed to comprehend the interaction among the different stakeholders — migratory population, civil society and non-governmental organizations, national and supranational agencies — involved in Mediterranean migration. Looking at migration dynamics through such a theoretical lens will eventually allow investigating the ways in which “a social group constructs things for one another, collaboratively, creating a small culture of shared artifacts with shared meanings” (Davis et al., 2017). Top-down and bottom-up practices analyzed in the following chapters should indeed not be considered individually, as self-driven and mutually exclusive, rather as part of the same ecosystem within which various actors — with overlapping interests — deploy the digital resources available to them with the intent of fulfilling their own aims and aspirations. In addition, drawing from an understanding of digital affordances as closely interlinked with the offline socio-political context, the work in hand incorporates a non-media-centric perspective to ensure that the subjects of digital mediation, and not the material devices, are at the core of the analysis. Through such an approach, the study will eventually attempt to move beyond the ‘exceptionalism’ of media-centric researches, which tend to describe as “special and unexpected that people coming from outside of Europe are carrying a relatively cheap piece of technology when fleeing from war, violence, and prosecution” (Leurs et al., 2018: p. 8).

When referring to migrants, the study embraces the International Organisation for Migration (IOM)'s definition in *lato sensu*, intended as any individual displacing from his/her habitual residence, whether crossing domestic or international borders and “regardless of (1) the person's legal status; (2) whether the movement is voluntary or involuntary; (3) what the causes for the movement are; or (4) what the length of the stay is” (IOM, Glossary on Migration). A similar wide approach is adopted in relation to the definition of third-country national within the context of the European Union (EMN Glossary), embodied by any person not being a citizen of an EU member according to the conditions enshrined in Article 20 of the Treaty on the Functioning of the



European Union (TFEU); thus including applicants of international protection, irregular migrants, refugees, forced migrants and foreigners. By no means the research intends to blur the distinction among the various ‘categories’ of people encompassed by such umbrella terms; each of them might, in fact, have different needs, entitlements and legal status. Nevertheless, for the purpose of this study — which is mainly to assess the empowering and constraining implications of digital technology in migratory mobility and overall dynamics — and the environmental context of Mediterranean migration — particularly characterized by a mixed flow of people (IOM, 2017b) — it is considered appropriate to make use of such terminology in *lato sensu*, unless differently specified.

## **CHAPTER 1: DECONSTRUCTING MEDITERRANEAN MIGRATION AND DIGITAL TECHNOLOGIES**

In order to determine the role played by digital technologies in migrants’ mobility across the Mediterranean routes, it is first worthwhile to deconstruct the phenomenon into its two main fields of research. Accordingly, the first part of Chapter 1 delves into the intrinsic characteristics of Mediterranean migration — in terms of numbers, routes and legal coverage — while the second will shift the focus into the digital revolution and its implications within the human rights’ framework, narrowing the lens into the European scenario. Finally, in the third section the two topics will be (re)merged together once again, under the interdisciplinary foci of Digital Migration Studies.

### **1.1 MEDITERRANEAN MIGRATION**

Migration across the Mediterranean Sea has been a structural challenge for southern European Union (EU) member states since the very beginning of 1970, when after the Organization of Arab Petroleum Exporting Countries’ (OAPEC) oil embargo and consequent global recession, several national governments began restricting the access of temporary workers from the Middle East and North Africa (MENA) as a way to tackle the increasing level of unemployment among nationals (IOM, 2009). Against the wishes of European regulators, migrants’ recruitment continued to happen irregularly, enhancing the formation of smuggling networks that could

eventually allow people to smuggle across EU borders clandestinely. The situation further exacerbated in the aftermath of the Arab Spring's uprisings in North Africa (Kingsley, 2015), paralleled with the outbreak of the decade-long Syrian civil war (Valenta et al., 2020), which left the MENA region with profound wounds and unstable socio-economic situations. Such destabilization of the African shores eventually trespassed the Mediterranean Sea, with thousands of women, children and men fleeing their home countries seeking a new life in Europe for a wide variety of reasons. Over the last decade, the European Union has indeed experienced the largest influx of international migrants since the end of World War II (UNHCR, 2016), reaching its peak in 2015 with an estimated one million people irregularly accessing European shores (Clayton et al., 2015) on board dilapidated vessels, mainly through Greece and Italy, or mainland through Southeast Europe.

#### *1.1.1 Across Different Routes of Irregular Mobility*

A report drafted by the International Organisation for Migration (IOM) entitled *Four Decades of Cross-Mediterranean Undocumented Migration to Europe* (2017a) estimates that over 2.5 million international migrants accessed in an unauthorized fashion to Europe by sea in the past 50 years, undertaking different journeys depending on their country of origin and/or mobility conditions. Thus far, there are three main routes across the Mediterranean Sea through which migrants seek to entry in Europe;

- The Central Mediterranean sea, connecting Italy and Malta to the Northern Africa coasts is, in turn, ramified into three different trajectories; the Tunis, the Algerian and the Libyan route. The shortest path among the three is with no doubt the Tunisian one, being about 115km away from the southernmost island of Italy, Lampedusa (D'Emilio, 2020). Nevertheless, following the restrictive measures adopted by the Tunisian and Algerian governments which have strongly criminalized the transit of irregular migrants from their shores, most of the flows moved towards the unstable Libyan route, now estimated to be the deadliest migrants' crossing worldwide (UN, 2016); as a matter of fact, only during 2020 an average of ten people every week drowned or got missing during their journey (MSF, 2021). Notably, most of the people undertaking this path do not only come from Northern Africa states, rather from the sub-Saharan and the Sahel regions, where established networks of human traffickers and smugglers across Mali, Niger, Chad and Mauritania manage the flux

of people towards North Africa (UNSC, 2017). Specific concerns in this regard have also been placed on the inhuman and degrading conditions to which migrants are subjected to during their permanence in Libya, as they are often held for months in crowded detention facilities with the absence of any sort of international monitoring. A report from the OHCHR (2018) on the conditions of refugees and migrants in Libya asserts the overwhelming majority of migrant women passing through the country have been subject to gang rape by their traffickers. Finally, a relevant feature within this route is the presence of NGO vessels for rescuing operations; a role of vital importance for migrants in distress at sea, which has however been highly criticized — and sometimes criminalized, as in the case of the Italian Decree S. 840/2018, also known as ‘Decreto Salvini’ — by European governments (Mainwaring et al., 2021).

- The Western route, crossing the Straits of Gibraltar, has long been the main route used by Maghreb nationals seeking to access Spanish lands, distancing only 14km from one end to another (IOM, 2017a). For two reasons the management of the migrants flow in this specific path has been particularly challenging for Moncloa's government; firstly the presence of two Spanish exclaves in Northern Morocco — namely Ceuta and Melilla — facilitating the access of irregular migrants into European territories; secondly, the Moroccan government has long been reluctant to accept deported foreigners from Spain. After a long and ongoing process of cooperation between the two governments aiming to increase border security, the flow of migrants leaving from the Moroccan northern shores finally decreased by 50% between 2018 and 2019 (Atalayar, 2020). However, the counter-effect of such an abrupt curb reopened the longer and more perilous Atlantic route in West Africa, through which people from Mauritania, Sierra Leone, Guinea, Senegal and Gambia try to reach the canary islands on board shipwrecks. According to the data provided by the European Parliament (2021), in 2020 the number of irregular arrivals to the archipelago unprecedentedly reached 23.023, compared to 2.687 in 2019.
- The Eastern route going from Turkey to Greece has been the emblem of the so-called ‘refugee crisis’ of 2015, with over a million migrants reaching the close greek island of Lesbos (IOM, 2017a). Given the presence of land boundaries dividing the two countries, in the past migrants preferred to opt for the safer crossing path mainland; however, similarly to what happened in the western route, following the erection of a 130km-long fence crossing the land borders between Turkey and Greece in 2012, the migratory flow shifted to the

Aegean Sea (Baird, 2017). Among the most common nationalities undertaking this route there are Syrians, Afghan, Iraqi, Somali and Congolese asylum-seekers escaping from war and/or persecution (UNHCR Operational Portal, 2021). A landmark moment of change happened in 2016, when the European Union signed a highly-debated agreement with Turkey establishing that all irregular migrants caught in the attempt to access Greece will be resent to Turkey, with Erdogan's administration taking all necessary measures to limit migratory flows towards Europe. In turn, the EU would fasten the process of inclusion of Turkey within the Union and fund the Facility for Refugees in Turkey with 6 billion euros by the end of 2018 (Council of the EU, 2016).

### *1.1.2. A challenging Scenario for Estimations and Categorisations*

Besides this brief outline regarding the transit through Mediterranean routes, it must be well understood that data regarding migrants' mobility — especially in the context of irregular or undocumented arrivals — is always an approximate estimation that can hardly be precise. Only migrants intercepted by the border police or those who voluntarily submit to identity check can be registered and added to the overall count. But, particularly in the case of undocumented migrants, it is often in their interest not to be identified by national forces for fear of deportation and/or temporary detention (IOM, 2017a). Moreover, every state within European Union has its own Coast Guard and security forces, with more or less efficient operational practices to patrol and register migrants' transit within their shores. Indeed, higher numbers of arrivals recorded in a given country can often be the result of an improvement in the national monitoring system, rather than an actual increase of migrants' transit (IOM, 2017a). Similarly, any figure provided on deaths or disappearances on the Mediterranean Sea is a mere underestimation of the actual numbers; firstly, because migrants are never formally counted or registered in the departure ports, hence it would be impossible to calculate those missing at the arrival; secondly, unique logistical problems arise when it comes to counting victims who sank before the rescuing organization even approached them.

The same applies to any accurate 'categorization' of the people traveling across these paths, as particularly the Central Mediterranean is characterized by mixed migration flows (IOM, 2017b) — defined as "people with different backgrounds and motivations traveling together along the same routes". In this respect, a structural factor of EU policy that risks undermining migrants' integrity and equal treatment in front of the law, is the reliance on a narrow differentiation of third-country nationals travelling across irregular routes of mobility between refugees — entitled to international

protection — and ‘economic migrants’ who are instead not entitled to receive asylum nor subsidiary or temporary protection. Staying at the Convention Relating to the Status of Refugees (Geneva Convention) of 1951, a refugee is a person unable to return to his/her country of origin for a substantiated fear of persecution based on nationality, religion, race, political affiliation and/or social group; whereas, an economic migrant is profiled by the European Commission as “a person who leaves their country of origin purely for economic reasons that are not in any way related to the refugee definition, in order to seek material improvements in their livelihood” (EMN Glossary). From this perspective, the profiles and interests of those two categories of migrants are completely distinct and never overlap, although, particularly in the Mediterranean context, such distinction is often blurred. To provide an example, many Syrian asylum-seekers that entered irregularly to Greece — that staying at the Dublin Regulations would have had to apply for asylum in the country of first entry — continued their journey through the Balkans to reach wealthier states in Northern and Central Europe, where apart from protection they could also seek employment opportunities (IOM, 2017a). Simultaneously, ‘economic migrants’ from Nigeria, Ghana and Sierra Leone approaching Europe via the Central Mediterranean route are not merely coming with lucrative purposes, rather to enjoy the fundamental rights to which they are entitled and that may not be fulfilled within the unstable political and socio-economic situation of their home countries. Indeed, most of the sub-Saharan migrants interviewed by IOM (2017a) once in Europe, motivated their departure with reasons that would better link them to asylum or temporary protection.

### *1.1.3. EU Immigration Policy & Human Rights*

As established by Article 79 of the Treaty on the Functioning of the European Union (TFEU), the EU is responsible for the establishment of a common immigration policy looking at both the management of regular and irregular migration flows. In this direction, the Parliament and the Council as co-legislators establish the conditions under which third-country nationals can enter and legally reside in a country member, even though it is up to national governments to determine the capacity of admissions of migrants seeking employment (Art.79[5], TFEU). Regarding the countering of irregular migration, the Union shall build strong ties with the country of origin of migrants who do not fulfill the requirements of entry to enact return procedures (Art.79[3], TFEU). Article 80 moves a step forward, noting that any decision on matters relating to migration policy shall be driven by “the principle of solidarity and fair sharing of responsibility” between EU member states (Art. 80, TFEU).

Moving to the protection of refugees, under Article 78 (TFEU) the Union shall develop a common policy on asylum, temporary and subsidiary protection. In this direction, the Common European Asylum System (CEAS) was established in 1999 to create a model of cooperation guaranteeing dignified treatment and impartial examination of asylum applications across all European member states, in line with the international principles already drawn by the Geneva Convention of 1951. In the aftermath of the migratory pressure of 2015 — which revealed several shortcomings within the existing legal framework, particularly regarding the division of responsibility among EU member state — seven new legal instrument were proposed by the Commission in 2016; however, the Parliament and the Council found an agreement only to five of them, so the overall amendment temporarily paralysed. Once again in 2020, a new revision as part of the New Pact on Asylum and Migration was proposed by the Commission and it is currently under scrutiny.

Among the five legislative mechanisms that constitute CEAS — and particularly relevant in the context of this thesis — the EURODAC (EU No 603/2013) is a database of asylum seeker's fingerprints allowing national authorities to determine whether an applicant has already applied for asylum in another EU member states or entered irregularly in Europe. Operational since 2003, the database is also accessible by police forces aiming to investigate and prosecute grave criminal offenses and threats to national security. Following the 2016 and 2020's revised proposal, Eurodac has notably expanded its scope of application to the general management of migration flows, including irregular/undocumented migration. Staying at Vavoula (2020), such pervasive and opaque approaches to the storing and exploitation of personal data are likely to impact negatively on migrants' rights and future opportunities, as it will be further assessed in Chapter 3's case study.

Besides those specific policies in relation to refugees and asylum-seekers, backing away from the traditional differentiation between regular and irregular migrants, it must not be forgotten that both the Universal Declaration of Human Rights (1948) and the Charter of Fundamental Rights of the European Union (2000) oblige all member states to respect, protect and fulfill the fundamental principles to which every individual is entitled. Human rights are, in fact, universal and inalienable; therefore, any categorization which may jeopardize the possibility for third-country nationals to claim their fundamental rights in the receiving state directly amounts to a breach of Art.1 of the UDHR. Such entitlement within the migratory context is further enshrined by the New York Declaration for Refugees and Migrants, adopted unanimously by the UN General Assembly in 2016, which reaffirm that all migrants are entitled to the same rights independently from their status

(ph.5), particularly regarding the access to education, health care, social services and employment (ph.39).

Furthermore, under international human rights law states are bound to respect the principle of non-refoulement not only for refugees and asylum seekers — as proclaimed in Art. 33 of the Geneva Convention — but to any person, regardless of their status, “where there are substantial grounds for believing that the returnee would be at risk of irreparable harm upon return on account of torture, ill-treatment or other serious breaches of human rights obligations” (OHCHR, n.d.). Notably, the scope of application of the provision goes beyond the national territory, to extend wherever a government exercises its jurisdiction — thus, including territorial waters. An aspect that has been largely overlooked by southern European member states such as Italy and Malta, has it is calculated that since the beginning of the pandemic Europe has illegally pushed back, with the assistance of other third countries like Libya, over 40.000 migrants from its external frontiers, resulting in more than 2000 victims (Tondo, 2021).

Another aspect to consider, crucial for the scope of this thesis, concerns the balance between a ‘digitalized’ management of migration flows and the obligation to respect migrants’ privacy and data protection. At the global level, Article 17 of the International Covenant on Civil and Political Rights — adopted by the United Nations General Assembly Resolution 2200A (XXI) — establishes the right for everyone to be protected by law against any “arbitrary or unlawful interference with his privacy”. In the subsequent General Comment No.16 (1988) dedicated to the right to privacy, the Committee forwardly mentions the relevance of personal data on this matter, asserting that everyone shall know how his/her information is being stored and utilized by the private and public sector. Moving to the regional dimension, the Charter of Fundamental Rights of the European Union (2000/C 364/01) makes a further advancement by dedicating a specific provision to the protection of personal data (Art. 8), where it is specified that such information must be processed fairly and with ‘specified’ ends. Hence, it is crucially important to assess if the revised proposal of Eurodac — assessed in Chapter 3 — successfully provides such information and whether the entitled authorities have the knowledge and digital literacy required to employ such mechanisms sustainably.



## 1.2 DIGITAL TECHNOLOGIES AND HUMAN RIGHTS

The advent of the fourth industrial revolution has invested humankind at an unprecedented scale, remodelling in a few decades the traditional patterns of behaviour and social interaction across every aspect of life. The transboundary and decentralized nature of Information and Communication Technology (ICT) revolutionized the way people express and relate to each other, offering wide spaces for virtual aggregation that trespass any physical and logistical barrier previously imposed by traditional media. In this respect, the blooming of online sharing platforms disrupted the linear model of communication in which users were merely consumers of media sources, allowing the emergence of a diverse and horizontal medium through which everyone can actively participate in the production and diffusion of contents. The webspace empowered individuals with new tools to select their preferred sources of information; gather among peers to discuss trending topics; and, all in all, being able “to escape from traditional bottlenecks of cultural information thanks to disintermediation” (Colombo, 2013). Such virtual empowerment eventually translated into the offline sphere, with several studies (Gil de Zuniga, 2012; Adegbola, 2019) associating the spread of social media platforms to a rise of civic engagement and political participation among citizens.

### *1.2.1. Digital Achievements: From ICTs to Artificial Intelligence and Big Data*

Technological advancements in the digital sector brought incredible benefits within the human rights field, both at the individual and institutional level. Particularly sharing platforms became a fundamental space for the diffusion of censored news and the growth of online activism; through Facebook, Twitter and Instagrams, citizens and civil society organizations (CSO) with scarcity of resources can now instantaneously share information about human rights violations and abuse worldwide, promoting advocacy events aiming at increasing media pressure and fasten public institutional responses (Barisone et al., 2017). Notably, and contrary to the limits of the traditional press, such an empowering feature of digital technologies is not geographically constrained within the developed countries, rather it has further proliferated across repressive and dictatorial states. The most iconic examples in this context are the revolutionary movements happening in North Africa between 2010 and 2012 — widely known as the ‘Arab Spring’ uprisings — where ICTs played a crucial role in mobilizing the civilians against their authoritarian regimes. In a study conducted by Tim Eaton (2013) over the implications of the internet in the outbreak of Egypt’s demonstrations, the author remarks on the pivotal role of digital technologies not only to organize



and motivate people to participate in the protests, but also to guarantee continuous monitoring of the events beyond the regime's attempt to limit and manipulate the flow of information — hence, providing international media outlets with trustworthy depiction of reality distant from the narrative proposed by the Mubarak's propaganda. In this regard, the immediate and affordable nature of social media communication allowed activist organizations and common citizens to raise awareness over human rights deficits that were overlooked by mainstream media coverage, enhancing global support and accountability for the perpetrators (Galvin, 2019).

ICT's and social media thus constitute a new medium to overcome the material and logistical shortfalls of a given country; citizens in developing areas use mobile phone devices for economic transaction, purchase goods unavailable within their territory, communicate with family bypassing the weak postal networks and, above all, gather an understanding of the surrounding world. All these everyday online activities generate a steady flow of data that — if appropriately mined and securitized — can provide national and transnational institutions with large-scale welfare indicators among the population, with a specificity that might not be imaginable some decades ago (Hartelius, 2018). The dramatic population growth across the globe alongside the imponderable nature of nowadays financial markets make, in fact, increasingly difficult to detect in advance sudden shortages of goods and foodstuffs relying on traditional monitoring mechanisms such as fact-finding missions and surveys (SaS, n.d). The analysis of real-time information generated by Big Data has instead proved to be greatly efficient in providing not only realistic predictions of future crises, but also coincident feedback over the impact of recent socio-economic policies among the population (SaS, n.d). Under such auspices, already in 2009, the Secretary-General of United Nations specifically launched the Global Pulse, an initiative promoting the use of Artificial Intelligence (AI) and Big Data to support policy-makers in the “development, planning, monitoring and evaluation” of human well-being (UN Global Pulse, 2013). Thus far, successful applications of Big Data analysis by the Global Pulse have included, among others, the assessment of unemployment level through digital data collected via social media and the monitoring of food security issues based on the shift of media coverage (SaS, n.d).

### *1.2.2. Digital technology's Implications on Human Rights and Fundamental Freedoms*

Nevertheless, apart from the tremendous benefits achieved by the application of ICTs and Big Data in the human rights context, the fast-spreading diffusion of digital technologies across

every aspect of life has also brought to life a set of new challenges affecting not merely the digital environment, but also the offline sphere of human's life.

As briefly discussed in the migratory context above, a primary concern for policy-makers pertains to the respect for private life (Art. 7, CFR) and the protection of personal data (Art. 8, CFR). For instance, apart from the benevolent usages of Artificial Intelligence described earlier, much of today's data mining activities are carried out by the private sector for lucrative purposes that in many cases go beyond the basic understanding of common users (Malgieri et al., 2018). Sensitive information regarding people's tastes, opinions and desires are a tradable commodity in the hands of tech companies and advertising agencies, monetized to improve audience targeting and raise revenues. The underestimation and under-regulation of those activities have further enhanced the possibility of malevolent abuses not only by the private sector, but also by public and governmental institutions for disturbing purposes. In this direction, the Cambridge Analytica scandal shed some lights on the mining of personal data to influence and manipulate the electoral results of both Brexit and Trump's presidency of 2016 (Scott, 2018); whereas the revelations of Edward Snowden (2019) revealed the potential of Artificial Intelligence by national security forces to surveil and illicitly control people interactions and communications for 'national security' ends. If not appropriately regulated, the employment of Big Data and Artificial Intelligence to make predictions and assumptions over humans' behavior is likely to undermine the overall concept of civic participation within the democratic processes.

Another aspect under scrutiny focuses on the conflicting relation between freedom of expression and exposure to harmful/violent online material; despite the diversity of sources available in the webspace, the polarisation of contents, in fact, truly endanger the guaranteeing of fundamental rights and freedoms (Fletcher et al., 2019). Issues related to the proliferation of fake news, sexting, cyber-bullying and incitement to hatred have sparked since the launch of the World Wide Web in 1989, bearing substantial damages particularly to younger generations' integrity and mental well-being (Cannatacci, 2021). Recent studies have reported an unprecedented rise of 151% in depression and anxiety among American female youngsters over the last decade (Centre for Disease Control and Prevention, 2017). Besides the parental and/or institutional attempts to tackle such deviating phenomenons, they have often escalated to much more serious breaches within the offline sphere (Bachelet, 2019) — namely sexual harassment and rape, murder and suicide, the revival of racial and non-tolerant ideologies (Behr, 2013) and, at last, attempts of ethnic cleansing as in the case of the Rohingya community in Myanmar (Mozur, 2018).

Moving forward, a worrisome feature of the fourth industrial revolution particularly relevant to migrants and displaced people, is what has been commonly referred to as the 'digital divide' (Ragnedda, 2017; Livingstone et al., 2007) - delineating in a traditional sense the problematic gap between people having access to digital technologies and those lacking the necessary resources to benefit from its usage. While ICTs have somehow opened the door of knowledge to the most, offering diverse spaces for aggregation and social interaction, the exclusion of certain categories of people in disadvantaged situations — namely those living in rural areas and/or with scarce economic resources, migrants, persons deprived of liberty and older generations — continue to be a major obstacle in the struggle for equality and universal access to information. In addition, as pointed out by Ragnedda (2017), even for those vulnerable communities who have access to digital devices such as mobile phones and wireless broadband services, the lack of adequate digital literacy to browse efficiently prevents them to enjoy to the fullest the resources available in the webspace. Such a situation further escalated following the outbreak of Covid-19 and subsequent global lockdowns, as new technologies have forcefully incorporated into many aspects of our lives (OECD, 2020). Basic needs such as communication and social interaction, delivery of social and sanitary services, labor integration and educational development closely depend on access to digital technologies. Thus, in this scenario, the patterns of social inequalities present in nowadays society are eventually reflected within the digital environment, further impacting the aspirations and future opportunities of vulnerable categories within the offline sphere.

For migrants, women and minority groups, such digital divide — which translates into social exclusion outside the desktop — is additionally propelled by the racial and sexist biases behind Artificial Intelligence systems. Such sophisticated tools rely on the constant flow of Big Data from online users to inform their decision-making tasks; however, recent studies (Zou et al., 2018; Yapo et al., 2018) have demonstrated how most of the personal data employed actually reflects the traditional patterns of ethnic and gender inequalities common across society. ImageNet, for example, is a face-tracking database employed by many AI programs; 45% of its face-images comes from the United States, which constitute only 4% of the world population, whilst images coming from India and China — hosting 36% of the world population — only contributes to 3% of the database (Schiebinger, 2021). Machine-learning programs are extremely precise in carrying out their assigned duties, but if the data that we provide to them contains uneven or distorted representation of reality, the program will continue to reflect that biases across all of its operational

activities, hence impacting the possibility to access social and sanitary services, find an employment and so on.

### *1.2.3. European Standing on Digital Technology*

During her State of the Union speech in September 2020, the President of the European Commission Ursula von der Leyen clearly expressed her will to make the forthcoming years Europe's digital decade (Stolton, 2020). The European Union, in fact, recognizes the pivotal role of digital technologies in broadening the opportunities of citizens, businesses and governments, while it also acknowledges the necessity to strengthen an EU sovereignty and digital single market, aiming to guarantee human-centered approaches towards the employment of those tools by the private and public sector (Shaping Europe's digital future, s.d.).

With this in mind, since 2016 the European Commission took a series of strides to enhance the development of a sustainable digital economy — namely, the Regulation on the free flow of non-personal data (2018/1807); the Cybersecurity Act (2019/881); the Open Data Directive (2019/1024); and, more importantly for the protection of privacy of individuals within the digital environment, the GDPR — General Data Protection Regulation (2016/679) — which impose to business and data controller a series of measure to ensure the anonymisation and/or pseudonymisation (ph. 26) of users' sensitive information as well as laying down the instruments. GDPR can somehow be considered a human rights charter applied within the digital environment, as it basically specifies and enriches those particular provisions of the European Charter that are relevant within cyberspace.

To give further specificity to the threats posed by Artificial Intelligence to the protection of human rights, in October 2020 the Council published presidency conclusions of the Charter of Fundamental Rights of the European Union in relation to AI and the Digital change (11481/20). Throughout all documents, the Council stresses the obligation of member states to ensure their national regulatory frameworks can appropriately guarantee maximisation of the benefits derived by digital technologies albeit minimising the possible threats arising from their misuse. Particular attention in this regard is paid to the correlation between AI and human freedoms (Ch. II, a); while such tools are increasingly employed by public services and law enforcement authorities, specific measures must be put in place to ensure a sustainable application that goes in conformity with the principles enshrined by the GDPR. In addition, regarding the role of AI in supporting structural social inequalities, the Council affirms that deep-learning computing machines should be constantly

accessible and investigable by researchers, to further enhance an impartial and unbiased development of those systems (Ch. II, c).

More recently, the Commission has brought to the attention of the Council and the Parliament a game-changer proposal under the name of ‘Digital Compass’ (COM/2021/118), with the purpose of establishing a clear path to follow for the digital transformation of the community. In the specific, the strategy will be constructed around four main pillars to be achieved by 2030: (1) training of at least the 80% of common citizens to the basic concepts of digital literacy, while employing 20 million digital professionals within the EU; (2) enacting the process of digitalization among businesses and the private sector; (3) ensure that at least 80% of Europeans use a digital ID, alongside guaranteeing the availability of all governmental public services online; and finally, (4) improve the development of cutting-edge digital infrastructure to grant all citizens with internet access and extend 5G to populated areas. To achieve these aims, the Digital Compass seeks to establish a series of “multi-country projects” in the field of technological research and advancement, funded by joint investments from the national governments, private investors and the EU budget itself — along these lines, States are bound to earmark one-fifth of the Recovery and Resilience Plans to digital projects. Those internal developments will eventually allow greater partnership with external actors and international organisations to build solid frameworks and objectives in relation to the digital environment; the proposal of an EU-US Council for Trade and Technology is already under discussion (JOIN 2020/22).

Above all, it is worth noting that across all these pieces of legislative material there is not any particular mention to migrants and their specific vulnerabilities within the digital environment — an important point of reflection that will be further investigated in the following chapters.

### 1.3 DIGITAL MIGRATION STUDIES

From the interrelation between the two different fields of research analysed above — (Mediterranean) migration and digital technology — a brand new discipline started to move its first steps over the last half-decade, under the title of ‘Digital Migration Studies’.

Such interdisciplinary subject draws its understanding from several foci of analysis which, in the past, have been disaggregated despite sharing common concerns — namely, migration

studies, digital technology and human rights, border and security studies, media and communication, anthropology, development, geopolitics, post-colonial studies, diaspora and mobility studies and computer (Leurs et al., 2018). The cohesion among these different bodies of research is increasingly shedding light over the predominant incorporation of digital technologies in all stages of migrants mobility, reception and integration; thus, having an impact not only on the chances to plan and complete successfully the journey from their home country to the destination state — something that will be specifically assessed in the following chapters of this research — but also to the overall instruments offered to vulnerable categories of people on the move in their struggle for inclusion and equality across foreign lands.

Scholars investigating the employment of new technologies by-migrants and on-migrants have approached the issue using different lenses of investigation, depending on the intrinsic value given to digital technologies. In order to schematise those different methodologies — which are however not exclusive, rather constantly overlapping — Leurs and Smets (2018) provide three paradigms through which Digital Migration Studies is currently evolving. Firstly, (1) digital-media-centric approaches to the digital environment, focus on the emancipatory practices of digital citizenship and diaspora through which migrants can now reunite on the web and raise their collective voice. Besides having a pioneering role in the assessment of migrants' digital empowerment, such estimation can often result in unrealistic and celebratory rather than objective analysis. In the second place, (2) digital-media-centric analysis of personal data, concentrate on what Diminescu (2008) has defined as the 'culture of surveillance' — which is to say the increasing reliance on digital tools and data by state actors and law-enforcement authorities to manage and regulate migration flows. Although relying on quantitative data which can offer a wider perspective of the issue, those kinds of approaches bring substantial concerns particularly regarding the privacy of individuals under scrutiny. Finally, (3) a non-media-centric research investigates how digital technology has changed migrant's daily habits, mobility practices and life experiences; yet, without separating the online and offline spheres, rather considering the overall socio-cultural conditions, material affordances and political contexts surrounding the migrant. This final approach, placing the migrant offline sphere at the core of the study, ultimately ensures a social purpose behind the mere result.

All those diverse — and, once again, interlinked — perspectives are crucially relevant to assess the digital development of migration within the Mediterranean context, as the so-called 'refugee crisis' represents the very first of its kind happening in a fully digitalised environment

(Ponzanesi, 2016). Here, new technologies play a pivotal role both in migrants and institutional practices, further extended to news media's wide-ranging coverage and its power to shape the perception of migratory movements across the European population. Such an interdisciplinary approach will, hence, grant the necessary theoretical and analytical tools to realistically determine both the empowering and constraining usages of digital technologies on migrants. Nevertheless, by pushing for a more 'non-media-centric' overall vision, as anticipated in the introductory Chapter, the work at hand will also guarantee a human rights focus throughout all the interpretation of the findings.

To date, the study of mobility through the digital lens has focused on "elite" categories of migrants (Leurs et al., 2018) — such as those moving internally via channels of legal access — disregarding the perceptions of forced migrants crossing international borders throughout unregulated pathways. Indeed, Digital Migration Studies "have yet to consider the increasingly important role of the digital in transforming refugee experiences and mobilities" (Gillespie et al., 2018). With the aim of offering a more sustainable approach to the discipline, this research will move away from the "categorical fetishism" (Crawley & Skleparis, 2018) around regular and irregular migrants. Indeed, as previously discussed, considering the mixed flows of migrants reaching European lands and the problems arising when it comes to classifying them, any differentiation on the usefulness of technologies might limit, rather than enhance, the guaranteeing of equal opportunities to all migrants as human beings.

In this vein, the study embraces the path proposed by Leurs and Smets (2018b), suggesting that "by highlighting common humanity, we can avoid further spectacularization, othering, neutralising and naturalising of migrant research participants, while emphasising they are fellow human beings with aspirations".

#### 1.4 CONCLUDING NOTES

Chapter 1 briefly exposed the intrinsic characteristics of both Mediterranean migration and the expansion of digital technologies within the human rights field, thus providing the necessary analytical tools and conceptual frameworks to guide the reader through the specificities further analyzed within the following chapters of the work in hand.



Already ongoing since the 70s, mass-movement of people from the Middle East and Northern Africa have gradually broadened and multiplied as a response to the increased destabilization of the region, shaped by two simultaneous events; the long-standing Syrian civil war eastward and the outbreak of anti-governmental uprisings, better known as Arab Springs, in the northern shores of Africa. Since then, different maritime routes of irregular mobility have progressively ramified — namely the Central Mediterranean, the Western and the Eastern route. Mediterranean crossings are characterized by mixed migratory flows (IOM, 2017b), with extremely diverse socio-economic and cultural conditions affecting each area of origin, even within the same country. Building upon such diversity, for the purpose of this thesis which deals strictly with mobility practices across irregular routes, displaced individuals will be assessed for their precariousness along the journey, rather than on their legal status once approached Europe.

Created as one of CEAS legal instruments, EURODAC was initially designed in 2013 to collect fingerprints of applicants of international protection, but it is currently amplifying its scope to “wider migration purposes” that include the management of irregular migrants (Vavoula, 2020). Moving beyond the normative differentiation between regular and irregular immigration, member states are bound to respect and fulfill certain universal principles regardless of the legal status of newcomers. Along with these obligations, particularly relevant for the purpose of this study are the principle of non-refoulement — largely overlooked by southern European governments since 2015 (Tondo, 2021), as Chapter 2 will analyze — and the right to privacy, which will be further scrutinized in relation to Eurodac and the overall digitalization of European external borders in Chapter 3.

The fast and democratic expansion of digital technologies has reshaped the conventional models of communication and civic participation, offering cheap and immediate tools to bypass socio-cultural barriers. Within the human rights context, social media allowed the diffusion of advocating movements and ideals beyond the reach of mainstream media coverage, enhancing awareness-raising and self-legitimization even across undemocratic lands. Furthermore, the huge amount of data generated by common users during their online browsing can be further exploited by humanitarian and/or advocacy organizations to inform about specific welfare standards and effectively plan their action plans. Yet, the benefits arising from ICTs and Big Data did not come without negative implications attached to them. Specific concerns have been raised in relation to the protection of the right to privacy in front of the exploitation of personal data by the private sector; the uncontrolled exposure to violent/harmful online contents and its implication in the well-being



and mental integrity of young users; and lastly the persistent ‘digital divide’ both in terms of access and technical know-how which obstacle the efforts towards equal and universal access to information. To tackle these challenges, the EU designed a series of legal instruments in the attempt of drawing an organic and sustainable path towards a ‘human-centered’ development of digital technology; nevertheless, none of them refer to migratory populations and their specific weaknesses in an increasingly digitized environment.

Finally, from the convergence of the two topics arise the interdisciplinary field of research identified as ‘Digital Migration Studies’, offering the perfect analytical lens to move forward the investigation to the specific implications of digital technologies in mobility practices along irregular routes. By using a non-media-centric focus as suggested by Leurs and Smets (2018), the study at hand guarantees a non-elitist and socially-driven purpose beyond the mere analysis of the digital practices.

## **CHAPTER 2: DIGITAL EMPOWERMENT: MIGRANTS AND CIVIL SOCIETY APPROACHES**

Through a proactive employment of mobile and digital technologies, migrants and their helpers can obtain essential travel information, raise a collective voice and, ultimately, increase the chances to make a safe crossing to Europe. From this starting point, Chapter 2 investigates to what extent conscious digital practices can enable mobility across irregular Mediterranean routes of migration. In this direction, *section 2.1* dives into the anthropological evolution of the migrant within the cyberspace, assessing how the democratic expansion of such devices has gradually moulded an ideal-type of transnational actor able to establish virtual social ties that trespass geographical and logistical boundaries (Nedelcu, 2016). *Section 2.2* focuses on the vital importance of specific digital practices carried out by people on the move — namely localisation, access to information, contact with smugglers and family members — whereas also determines the intrinsic threats and limitations deriving from a complete reliance on such apparatus. *Section 2.3* analyses, through various examples, the digital potential of NGOs, civil society organisation and activists to raise global awareness and political pressure about the migratory movements across the Mediterranean; provide rescue and assistance when it is denied by the responsible national authorities; and, overall, serve as a mouthpiece of unheard voices across irregular path of mobility. Finally, *section 2.4* provides a brief case study of WatchTheMed Alarm Phone, a non-governmental

alarm number to support rescue operations of people in distress at sea; here, both the migrant and civil society digital practice merge and interlinks, as one may not be impeded without the action from the other.

## 2.1 THE ANTHROPOLOGY OF THE DIGITAL MIGRANT

Means of communication have always been an essential feature of displaced communities. For migrants and third country nationals, the possibility of exchanging letters, sending money or goods, and access to public information have historically represented the only way to keep in contact with those persons left behind and integrate themselves within the new environment (Leurs et al., 2018b). Notwithstanding, the borderless and fast-spreading circulation of new technologies — both in forms of sophisticated mass media and ICTs — disrupted the traditional modus through which people used to migrate, re-settle and adapt by offering an outstanding number of sophisticated, yet straightforward mediums through which migrants can imagine, plan and exercise their forthcoming new life. With this in mind, Diminescu (2008) set the basis for the evolution of a new, empowered, concept of migrant — defined as a person who, far from being “uprooted” from his/her origins and previous relationships, via digital mediation is now able to establish several networks, virtual ties and costumes which trespass the material boundaries and connects the country of destination to the motherland. According to the author, modern migrants are “the actors of a *culture of bonds*, which they themselves have founded and which they maintain even as they move about” (p.567).

An empirical materialisation of such bonds lies in the improved connectivity of transnational families. The migrant of the digital age can rely on a wide variety of interactive communication tools — like social media, messaging platforms, video-calls and vocal recordings — to communicate instantaneously and real-time with distant family members and/or other fellow migrants; sharing moments of their daily routine and creating a feeling of togetherness which goes beyond the material barriers of territoriality (Nedelcu et al., 2016). The establishment (or enhancement) of these long-distance relations — in no way inferior to the cohesion of closer family units, as it involves the same degree of affection, sentiments and guardianship — creates a novel virtual ground where family and friendship can be nurtured in the absence of proximity and physical contact. Similar to traditional kinships, these mediated-bonds can be extremely important in supporting migrants to deal with loneliness in the hosting environment, providing a sense of security outside the webspace as well as an online medium to share and express frustrations with fellow migrants and intimate persons. Simultaneously, tight long-distance relationships might also

jeopardise the psychological integrity of the individual; this is especially true in situations of conflict and/or harsh economic crisis back home, as migrants may feel guilty and powerless in front of the suffering endured by those left behind; or when the financial contribution provided by the migrant to his/her family members put an unbearable burden which prevents the economical emancipation within the hosting environment. Overall, the diversification of new media sources has done nothing more than replicating online the ambiguity and shared emotions that typically constitute ‘traditional’ parental relationships (Nedelcu et al., 2016).

Alongside the strengthening of transnational family networks, the democratic diffusion of digital technologies created a space for migrants to stand jointly and raise their collective voice over matters affecting them. People from the same home-countries, or merely with similar migrating trajectories, can reunite on Facebook or other dedicated blogs to share experiences, suggestions and thoughts about the travel undertaken and their current situation. These new gathering places have proven to be extraordinarily helpful in alleviating migrants' traumas accumulated since the initial displacement, by listening to similar stories from fellow expatriates. In addition, they can also provide to younger or ‘less-knowledgeable’ categories of people on the move with crucial information on how to access educational and sanitary services, reunite with their family and, above all, make the most of the possibilities available in the hosting environment. Those developments brought some scholars of digital migration studies to narrow their investigative lens into novel processes of “digital diaspora” (Ponzanesi, 2020; Andersoon et al., 2019); through which “dispersed, migrant and non-migrant populations share interests and values and come together around common public issues in new spaces of collective action” (Nedelcu, 2016; p.6).

Finally, before moving into the specificity of these approaches in migrants’ mobility practices, it is worth to pause briefly on how digital media reshaped the reciprocal perception that migrants and the hosting population have of one another. Already more than two decades ago, Arjun Appadurai (1996) forwardly argued that “electronic mediation and mass migration mark the world of the present not as technically new forces but as ones that seems to impel (and sometimes compel) the work of the imagination”. The mainstream circulation and consumption of internationally-produced multimedia products — from images and radio programs to films, documentaries and music videos — have, in fact, gradually extended to all those individuals living in remote or poorer locations of the globe. This occurrence boosted the ‘work of imagination’ of potential migrants, generating attractiveness and virtual proximity towards far-away culture and

locations, embedded with idealised lifestyles and wealthier socio-economic standards (Iordanova, 2009).

Concurrently, as particularly relevant within the Mediterranean context, the spreading of news and visual contents about young migrants with mobile phones — sometimes taking selfies as they reach European soils — brought the public to reshape the imaginary of migratory movements across Europe and elsewhere (Leurs et al., 2018). The usage of social media, charging stations, and messaging platforms by people on the move has been “projected in populist, right-wing and anti-immigrant discourse as symbols of threat, exclusion, and the supposed failure of integration and multiculturalism”, as pointed out by the same author. In other words, phone devices and digital tools are depicted as a privilege, rather than a basic commodity, to which only restricted categories of people could be economically entitled to.

On the contrary, aiming to take the distances from such elitist approaches, this paper draws from the studies carried out by Gillespie (2018), which demonstrated that mobile phones are as important as food and water for third-country nationals trying to reach Europe. Therefore, usage of digital technologies en route will not be considered as an exceptional factor of being migrants, rather as an indispensable catalyst which allows them to fulfill and exercise their fundamental rights. As a matter of fact, despite the persistent digital divide among the Global South in terms of internet access and technical know-how, nowadays it is estimated that almost the totality of Middle East and North Africa’s population use a mobile phone, with more than 80% having an internet connection (Jamo, 2016) — numbers that go far beyond the paradigm of exceptionality in migrants digital practice.

## 2.2 DIGITAL PRACTICES BY MIGRANTS EN ROUTE

In the digital era, smartphones indeed constitute the virtual door through which people on the move can access a wide variety of services necessary to inform their crossing. From simpler messaging platforms, live-stream video calls and social media to positioning maps, weather forecast services, translating apps and money transfer platforms — all these online services embody what has become the digital infrastructure (Latonero et al., 2018) of nowadays migration flows; allowing to plan, undertake and survive the hazardous path towards European shores and beyond.

Accessing essential information prior, during and after the journey is possibly the most common and straightforward service employed by migrants within cyberspace. As other common users, people on the move select different sources depending on the specific information needed — both concerning the situations in their homeland and possible future destinations. In situations of harsh conflicts, unstable governments, or oppressive regimes, smartphones can be the alternative instrument to bypass the often censored traditional media such as radio and television. In Syria and Iraq, for example, where around 2016 ISIS had shut down any outsider voice from the mainstream narrative of the conflict, people tend to rely on international media outlets online such as BBC News, Al-Jazeera and France24 to get reliable and realistic analysis (Gillespie et al., 2016) — in this regard, the authors note that Middle Eastern migrants are among the most knowledgeable users in the selection of media sources, being able to “read between the line” of partial news articles. Nonetheless, when it comes the time to obtain specific and practical information about the migratory routes to undertake, as well as the admission criteria and visa procedures in the possible countries of destination, reliance on official media sources tend to lower as the danger of being surveilled or misinformed increase (Dekker, 2018). Contents retrieved from official websites of European national governments and semi-institutional media sources are, in fact, often too vague and incompressible for standard users, failing to provide migrants with the practical information needed to make it safely to Europe (Gillespie et al., 2018). National governments of southern Europe hold specific responsibilities on the matter, as they fear that the disclosure such details may be condemned by fellow member states as “facilitating attempts to seek asylum in Europe” (Gillespie et al., 2016: p.5) - a position that has become highly controversial ever since the outbreak of the “refugee crisis” in 2015. As a result, migrants on the move tend to prefer more confidential and verified channels of information coming from existing social ties such as family members, friends, or, in general, people being involved in the migratory context of their interest.

Specifically in situations of irregular and forced migrations, where individuals are in constant fear of being intercepted both by home country’s governments and law-enforcement authorities in the transit zones, access to digital technology allows migrants to retrieve information from less-legitimate sources coming from smugglers’ networks. Trust in such figures appears to be higher, as the perception of a monetary interest behind the services leads to considering such networks more reliable (Ennaji et al., 2019). Smugglers can offer first-hand indications on the intensity of border patrols in specific departure and arrival points, indicating the organizations to contact in case of distress at sea and, ultimately, providing empirical tips on how to evade the interception and registration by border police forces once approached European shores. WhatsApp

and Messenger represent the “illicit travel agencies” (Kozłowska, 2015) through which migrants can directly contact these networks to seek detailed information. In addition, new smuggling groups are created every day on Facebook to advertise different options and routes to access irregularly into Europe as well as indicating offers and means of transport available. For instance, as disclosed by Adamson et al. (2015), in a post dated 21 of April 2015, Abdul Aziz, one of the many smugglers located in northern Libya, disclosed publicly the following information on his Facebook’s profile:

With the beginning of the new season we have a range of journeys on offer. Turkey Libya Italy, \$3,800. Algeria Libya Italy, \$2,500. Sudan Libya Italy, \$2,500... The boats are all wood... If you have questions, contact me on Viber or WhatsApp.

Interviewed by the BBC, Aziz will later declare that an average of 15 people a day was contacting him through social media to book their spot for the next crossing; “until 2012 we didn't use social media at all, now it accounts for between 30% and 40% of my business” (Adamson et al., 2015). Choosing one smuggler or another is often an act of trust; people on the move rely on recommendations by previous migrants who have undertaken the same route and completed the travel successfully — in some Facebook groups it is also possible to check different reviews left by users assessing the reliability of the information provided by that specific network. Notably, such organizations do not merely operate across Northern Africa and the Middle East, rather, they extend their services across the Sahel region and sub-Saharan Africa, from where many of the ‘clients’ of the Central Mediterranean route belong to. So that if a migrant is not able to reach the Libyan shores on his/her own, a tight network of smugglers will bring him/her through at additional costs, as reported by the same authors. Nonetheless, lacking adequate supervision by relevant authorities or external observers, these illicit networks often risk undermining migrants’ chances to conclude their journey; unreliable smugglers across the Mediterranean might provide false or inaccurate information, placing the economic interest at the core of their services (Ennaji et al., 2019). Even more worryingly, some networks advertise the possibility to pay for the travel once the migrant has already reached Europe, but the precise conditions under which such payment will happen are undefined or omitted, often leading the debtor to exploitative situations in the hosting environment (UNHCR, 2018). Here, the boundaries between smuggling and human trafficking become worryingly blurred.

Conscious of these hazards, people on the move with adequate digital know-hows often rely on free apps — such as Google Maps and Google Translate — to ensure they are not being misled by the smugglers or, alternatively, bypass their services and organize the travel independently (Ennaji et al., 2019). Here, the possibility to remain in contact with family during the journey

assumes a crucial role, as relatives and close persons in the country of origin can support remotely the migrant to find suitable contacts and shelters in different locations across the path towards Europe, establishing what Schaub (2012) defined as “hybrid networks” — intended as the fragmentary services provided to irregular migrants at different stages of their journey by various figures, such as smugglers, experienced migrants and professionals. The possibility to establish these vital ties, thus depends on the access to mobile phone services both by the migrants and their informants/helpers across the route. Digital contact with family members can also provide financial security to the person on the move, as particularly younger generations are in many circumstances sustained by money transactions from close relatives, generally sent via free of charge and immediate online services accessible from their smartphones such as Western Union (Ennaji et al., 2019).

Alongside all the path, and especially during the Mediterranean crossing onboard, migrants communicate their location to family members — sharing coordinates, photos and weather conditions, yet depending on the availability of internet coverage in the area — so that if the relatives back home do not receive any news from the migrant in question, they can alert the relevant authorities providing the last available location. As narrated by one Syrian refugee on the aftermath of his crossing from Turkey to Greece:

Quickly the boat became full of water and started to sink. I rang the Greek coastguard and started shouting ‘help us, help us’ but they couldn’t really hear me because my phone was wrapped in a plastic bag to protect it from the water. So I sent a WhatsApp message giving my GPS and asking them to help us. I also sent my family a message with my GPS and explained the situation but said ‘don’t worry, even though the weather is bad, we’ll make it across. (Kozłowska, 2015)

Aware of the importance of smartphone devices onboard, migrants lean on diverse material assets — such as watertight bags — in order to guarantee their functioning throughout the journey. Those who can afford it, buy more than one SIM card and additional phone batteries to extend the possibility of having power and broadband services; in this regard, those owning an iPhone are evidently disadvantaged as their phone batteries are not interchangeable, therefore, will have to rely on charging stations available throughout the path (Gillespie, 2018). However, accessing information and localization often remain a “group effort” (Dekker, 2018) among migrants, hence, even just by having one single phone device the destiny of all passengers may change. Death rates across Mediterranean routes appear to be higher in situations where mobile phones are missing, while successful rescuing operations from NGO vessels or national coast guards are often impeded

by direct phone calls from migrants in distress at sea (Gillespie, 2016). As one refugee declared during the interviews carried out in Gillespie's study: "Someone had the number of coastguards, he called them. His group was saved because of one contact number. It made the difference between life and death" (2018: p.7).

Once again, such testimonies underline the vast efficiency of technological devices in increasing the chances to survive and complete successfully the crossing towards southern European coasts and beyond. Nevertheless, the benefits obtained through smartphone usages are not to be considered as self-powering; on the contrary, as previously mentioned, in order to be continuously and efficiently deployed, they are dependent on both economical and material infrastructures along the path, such as SIM cards' top-ups, broadband networks, charging station and wifi's hotspots (Gillespie, 2016). Thus, whenever planning to count on smartphones to inform their journey, one cannot avoid considering such inherent constraints — a dead cell phone, even just for a couple of hours, may result in the failure to meet with the smugglers and/or the impossibility to ask for rescue once in distress at sea. Migrants lacking access to the internet are also unable to receive economic support from the family — as a consequence, without the necessary amount to cover the expenses requested for the crossing towards Europe, people on the move may remain stuck in war-torn transit zones such as the Libyan northern shores of Tripoli, Benghazi, Misrata; where particularly undocumented migrants are reportedly being "sold as mere commodities" by smugglers and rebel forces until they are not able to pay for their freedom (MSF, 2019).

Furthermore, the enjoyment of such services is not universally distributed across all persons on the move, as access to online services requires at least a basic understanding of the functioning of digital technologies. As a consequence, field researches (Dekker, 2014) showed the presence of a digital divide among migrants, with younger generations of users being usually capable to take advantage of internet sources, whilst older or less-digitally-educated migrants must depend on traditional mediums — a condition that, at last, eventually impact the choice of the route and final destination. These disparities do not merely depend on the capacity of the individual to develop the necessary technical skills, but also on inherent constraints present in each specific migratory context. Syrian and Iraqi asylum migrants, for example, can experience several challenges when trying to contact their family back home, due to the repetitive shutdowns which impede relatives to maintain a stable connection — for instance, in 2018 the use of internet services and satellite broadcasting was forbidden after 2 am across all ISIS-controlled areas (Gillespie, 2018).



Furthermore, as reported by the same author, Assad's forces have systematically hacked into citizens' Facebook profiles, harvesting their personal data to surveil movements and political activities. Such unequal distribution of the 'network capital' generates what Gillespie (2016) has defined as 'mobility regime', a status under which some people enjoy enhanced mobility granted by the access and exploiting of digital resources, while others remain anchored, immobilized, by the inability to interact proactively in an increasing digitalized environment.

## 2.3 'A DISOBEDIENT GAZE': NGOs AND CSOs DIGITAL PRACTICES

The migratory 'crisis' of 2015 was among the first irregular mass-mobilization of people to be fully televised and politicized (Ponzenesi, 2016). While European leaders argued on matters of burden-sharing with regarding to refugees — yet missing to find equitable solutions, thus proving the abstraction of the 'shared solidarity' principle enshrined in its founding treaties — citizens were constantly exposed to the dramatic events happening in the Mediterranean Sea, where more than 4.000 people would die during that year only in the attempt to make a safe crossing towards southern Europe (IOM, MissingMigrants). Such hype in media coverage reached its peak at the beginning of September 2015, when the photos of Alan Kurdi's lifeless body lying on a beach in southwest Turkey went literally viral, occupying the headlines of newspapers and the homepages of social media alike. Those pictures provided a harsh chronicle of the risks incurred by people on the move across irregular paths of mobility and, at last, generated unprecedented public support towards them (Hall, 2019). It is at this triggering point — identified by Hall (2019) as the 'Alan Kurdi moment' — that digital advocacy and online activist movements mushroomed among cyberspace upholding migrants' rights. Around the same time, increasingly more newborn and existing NGOs turned their technological resources to the Mediterranean Sea (Noori, 2020) whether to rescue, witness or support remotely those in distress. Despite both the nature and scope of digital practices carried out by CSOs and NGOs can substantially diverge, their outcomes altogether benefit precarious migrants and their safety/visibility along these deadly routes.

### 2.3.1. *Hactivism and Norm Contestation*

The democratic diffusion of social media marked the beginning of a new era in terms of civic participation and public debate. Today's advocacy organizations count on novel and straightforward mediums to promote their campaigns, call for collective action and counter the

mainstream narratives on global issues of public interest. Drawing upon such radical changes, Baristone (2017) elaborated an umbrella concept under which such shift in the virtual space can be understood and analytically assessed, namely Digital Movement of Opinion (DMO) — intended as the phenomenon of collective and self-driven gathering of users, at a specific moment of general discontent, to actively challenge governmental arguments/policies over matters of public concern — such as, precisely, migration discourse.

The period going from September 2015 can be understood as an archetype of Baristone's definition, coming across an unprecedented mobilisation of users online around a shared feeling of solidarity towards people on the move and harsh critical standings upon EU management of immigration and external frontiers. In the week following the young Alan Kurdi's death, the number of solidarity comments and content-sharing online quintupled compared to the past, with over a million comments in the United Kingdom, 300.000 in Italy and 200.000 in France going in favor of migrants (VoiceFromTheBlog, 2015). The UK, in particular, was the nerve center of this shift, experiencing the emergence of various activist movements and online petitions — which exceeded by far the threshold of 100.000 signatures necessary to be considered by the Parliament (BBC, 2015) — in which common citizens called to the central government to update immigration and burden-sharing policies. Staying at Hall (2019) these practices of “digital advocacy engagement in norm contestation” are among the determining factors that pushed David Cameron to announce a few days later the extension in the number of refugees that the United Kingdom was willing to accept.

Besides the digitalization of traditional forms of advocacy like petitions, the webspace also offered state-of-the-art methods to proactively impact and shape the public imagery on sensitive topics, challenging stereotypes and anti-migration discourse by using their same mediums of communication. For instance, the German activist group Refugee Welcome — already known for creating a platform where displaced Syrians can find people across Europe willing to host them (Toor, 2015) — started in 2016 an online advertising campaign to counter far-right online propaganda. By selecting specific keywords on Google and Youtube advertisement system, the activist could target specific far-right videos where the ad would appear. Thus, when someone went on Youtube in Germany around 2016 and searched for anti-migrant content, he/she would before be screened to a compulsory ad that through “facts, personal anecdotes, surprising revelations and even humor” talked about migration in a human and socially oriented manner (Griffin, 2016). Even beyond the ideological value of the action, those initiatives can also serve as effective radical tools to hit anti-migrant movements at a grassroots level. Indeed, the only way for such extremist groups

to avoid targeted advertising from Refugee Welcome in their videos was to deactivate ads and consequently lose the revenues arising from their appearance (Griffin, 2016).

Interestingly, e-practices of norm contestation have been exploited not only by country-based or local civil society movements with limited monetary budgets — such may have been the case with Refugee Welcome in Germany and 38 Degrees in the UK — but also by other non-state actors directly involved in Mediterranean migration. Twitter, for example, has been extensively used by NGOs engaging in rescue missions, to report publicly the situation onboard and denounce the immobilization of state authorities in situations of non-assistance or denied clearance of docking in national harbors (Noori, 2020).

### *2.3.2. Digital Witnessing and Humanitarian Assistance*

Researches in the field of digital migration studies have extensively covered the increasing exploitation of smartphone services to enhance the integration of third-country nationals within the hosting environment (Kaufmann, 2018). Yet, little consideration is paid to the multiple ways NGOs and civil society organizations employ free mobile apps — and new technologies in general — to render support and humanitarian assistance to precarious migrants en route towards Europe; which is to say how such tools are employed in the very process of mobilization. Various socially driven hackathons have been specifically constituted for such purposes (Madianau, 2019), somehow offering a legitimate and trustable alternative to the smuggling services previously described.

Among the most commonly employed apps born from such initiatives, SignPost is a global platform co-founded by Google, Mercy Corps and the International Rescue Committee, established to provide a network where humanitarian actors can connect with migrants in distress and deliver unbiased multi-language information (SignPost, n.d). The initiative was launched in 2015, at the peak of arrivals to the Greek islands, as the two NGOs involved understood the compelling necessity to assist all those migrants on the move “arriving in Greece with nothing but their cell phones” (SignPost, n.d). Thus far, the informational branch of the platform has assisted over 600.000 users according to the site, offering precise details concerning legal standards in the hosting or transit country; access to medical facilities; means of transport and shelters available across the route as well as precise mappings and up-dated information on border controls (Yuksel, 2020). Besides specific tips related to mobility, other sections of the website guide through visa procedures applications, residence permits available in the country, the requirement to fulfill for

family reunification and so on (SignPost, n.d). Apart from these customized sites/platforms purposefully built for people on the move, more general social media can also function as a channel where migrants' needs and queries can be indirectly answered by activists, civil society organizations and NGOs alike. In her study of the digital practices by migrants in the Eastern Mediterranean route, Yuksel (2020) observed the wide-spread employment of Twitter and Instagram in transit zones; in particular, the use of specific hashtags — namely *#lesbos*, *#refugeecrisis* and *#boats* — allowed both migrants and their multiple 'helpers' to cross-reference information about precise subjects and/or location; a time-saving resource which avoids endless searches through all the contents available on the matter.

Other activist groups across Europe have opted for more unorthodox approaches to digital technology to enhance migrants' mobility, by interpreting the webspace as a medium to facilitate transnational humanitarian assistance and challenge both European migration policies and the operational activities of terrestrial border police forces. Around the same time SignPost was launched, a group of activists in Germany founded *Fluchthelfer.in*, a volunteering-based internet forum established to help people on the move to cross clandestinely into and across European countries (Parameswaran, 2015). Several anonymous members — such as the founder, known under the pseudonym of Max Thalbach — post periodically practical advice on how to evade police controls at various checkpoints, particularly in the eastern Mediterranean route that across the Balkans leads into Northern Europe and, in fact, to Germany. Some tips are more general and can be employed throughout the journey, others apply to specific locations depending on the density of border patrols. These include: switching off mobile phones once approached the border to avoid satellite tracking from state authorities, do not travel with an excessive amount of cash, wear discreet clothing and talk in code with fellow migrants across the path (Toor, 2015). Notably, the platform does not only provide remote support to people on the move but also physically via a net of volunteers that with their own vehicles take the risk of picking up unregistered migrants in sensitive zones — such as Hungary, Serbia and Greece, where they often risk deportation if intercepted by national authorities — and sneak them into Germany and/or Denmark, generally considered to have more tolerant policies on migration. Similar suggestions to the ones offered to migrants are also available for their helpers; use only brand-new SIM cards to avoid surveillance, know-hows to hide the passenger and drive across alternative routes, and steps to follow if stopped by police authorities (Parameswaran, 2015). Nonetheless, despite proving once again the effectiveness of digital technology in enhancing and facilitating mobility across irregular migratory routes, these socially driven acts do not come without heavy legal consequences. By helping people

on the move to avoid being fingerprinted in a given country and travel towards northern member states, these networks bypass the standard procedures of EU laws which would instead foresee the registration of both irregular migrants and asylum seekers in the first country of entry. As conveyed by Thalbach, people caught in the attempt of helping migrants to cross illegally EU's frontiers may be held with smuggling charges and be sentenced to up to ten years in prison (Parameswaran, 2015). To tackle these juridical implications, simultaneously with the launch of the initiative the collective has also established a crowdfunding campaign to cover all the legal costs.

Moving beyond the more or less conventional usages of ICTs and digital platforms to deliver humanitarian assistance, other highly sophisticated surveillance technologies systematically employed by coastguards and law-enforcement authorities can also be counter-used by non-state actors to monitor, document and challenge EU's migration management (Leurs et al., 2018a). Such subversive uses within the Mediterranean context were first introduced by the well-known 'left-to-die boat' investigation, carried out by the Forensic Architecture (FA) in 2012, which revealed through digital data how 72 migrants reportedly drifting in the Central Mediterranean route on March 2011 had been ignored by the responsible authorities for over 14 days, resulting in the death of 63 passengers. By means of an expert combination of survivals testimonies, satellite imagery, sea/wind current data and wire tapings, the researchers reconstructed both the trajectory taken by the shipwreck and the numerous neglected distress calls to coastguards made by migrants on board since the very first day of departure from the Libyan shore. As disclosed by the investigation, sensing technologies such as the ones described above — alongside drones, thermal cameras and appropriate radars — offer new possibilities to shed light on the shadowed practice of refoulement and/or non-assistance carried out by European and third countries' authorities in the Mediterranean Sea, as well as the overall deficiency of nowadays Maritime SAR zone's repartitions. Indeed, the responsibility for search and rescue in particularly trafficked routes are often — deliberately or not — misinterpreted by the states involved, resulting in prolonged stand-offs and preventable casualties (FA, 2012), as will be further assessed in *Section 2.4*. Following the publication of the Forensic Architecture's report, several legal claims have been presented by a coalition of NGOs on behalf of the victims affected by analogous accidents, claiming the responsibility of Frontex (EU Border and Coastguard Agency) and other national authorities behind the death of many unassisted migrants in the Mediterranean Sea (FA, 2012). As noted in the 'left-to-die boat's report:

Using these media to document the crime of non-assistance of people in distress at sea involved a strategic repurposing of images and surveillance technologies. In this, we

exercised a ‘disobedient gaze’, one that refuses to disclose clandestine migration but seeks to expose instead the violence of Europe’s border regime. (FA, 2012)

Similar uses of digital technology to document governmental inaction are merging every day, making the Mediterranean no less deadly, but surely more supervised. A recent collaboration between the New York Times and the Forensic Architecture mixed investigative journalism, 3-D modeling and forensic analysis to unmask migrants’ rights breaches across Mediterranean waters. They started by revealing the details of fatal accidents in November 2017, where 20 migrants lost their life during rescue operations by the German NGO Sea-Watch as a result of the interference by the Libyan Coast Guards (Adams et al., 2019). According to the investigation, 47 other passengers were later forcefully brought back to detention camps in Libya, where some were tortured. Those findings publicly demonstrated the dangers of European immigration policies based on non-assistance and outsourcing of border patrol to foreign — unethical — authorities. The situation, however, has barely improved; analogous accidents are often reported by NGOs, media outlets and civil society organizations. The UN chief Michelle Bachelet has recently called upon Europe to urgently reframe their SAR policies through which too many migrants have been left on the mercy of Mediterranean waters — as she said: “the real tragedy is that much of the suffering and death at sea is preventable” (UN News, 2021).

## 2.4 WATCHTHEMED ALARM PHONE: A CASE STUDY OF INSUBORDINATE INTERVENTION

In the aftermath of the left-to-die investigation, many activists and volunteers in the field began wondering how those tragic events might have changed by the presence of a non-state agency across the area, able to trespass governmental control by providing remote support to migrants in distress (Stierl, 2015). Under such auspices, Alarm Phone was established at the end of 2014 as a volunteer-based emergency hotline designed to assist migrants’ vessels in distress across all three different Mediterranean routes.

The project was impulsed by a network of more than 100 activists operating in Europe, Northern Africa and the Middle East that through a self-organized initiative decided — with ICTs and digital technologies — to mark a remote, yet vivid, presence within the Mediterranean context, until then monitored exclusively by state actors (Stierl, 2015). Migrants wishing to be assisted and/or rescued contact the 24 hours emergency hotline forwarding their location — usually shared through free-coasts mobile apps analyzed in previous sections, e.g Messenger and WhatsApp. After



having geo-localized them through a personalized interactive map and determined the physical conditions of both the vessel and passengers on board, the staff delivers precise indications on how to react under the specific circumstances encountered. Practical tips can be logistic (e.g. cooling/fixing the vessel's engine) and first aid, necessary in cases of pregnancy and/or illness onboard. Meanwhile, the staff immediately contact the coastal authorities of the responsible country (depending on the SAR zone's competencies) pressuring them to afford urgent rescue. In the eventuality of prolonged stand-off by national Coast Guards leading to non-compliance — as it is often the case among Mediterranean waters — Alarm Phone extends the call for rescue to other non-state actors in the proximities such as NGOs rescue vessel or cargo ships operating in the area (AlarmPhone, 2014).

The initiative lies in a grassroots dialogue not only with migrants en route but also with all those already-existing transnational networks involved in the support of people on the move across irregular paths of mobility. The projects build upon the participation of several civil society actors related to the Mediterranean context — including advocating organizations, journalists and researchers, but also individuals directly entangled in mobility practices such as shipwrecks survivals, family members and 'helpers' within departure and transit zones — in order to extend its radius of action further beyond the reach of official state-monitoring. Among the main contributors for the initial layout of the project, there is, in fact, the Eritrean priest Mussie Zera who from Switzerland had for a long time offered informal remote assistance to Eritreans during their crossing from North Africa (Stierl, 2016). Such ties with self-organized civil society collectives operating via cyberspace continue nowadays. Noori (2020), who has personally volunteered for Alarm Phone in the Aegean Sea since the very first operations, reported the ample exchange of information between the staff and well-established Syrian activist groups assisting displaced co-nationals seeking to reach Europe. As she narrates: "as soon as these 'travel assistants' were informed about problems on board, they forwarded migrants' phone numbers and GPS positions to the Alarm Phone via Facebook or WhatsApp" (p.8). Those triangular networked activities involving individuals in distress, their 'facilitators' and Alarm Phone operators enhanced an effective interlocution that bypassed border management by state authorities and somehow redefined the digital crossing of precarious migrants across the Mediterranean. Instant messaging apps indeed allowed novel methods of monitoring and tracking migrants onboard even without directly communicating with them; just by assessing if the passengers in distress had visualized a certain message or determining whether the smartphone was on/off, Alarm Phone volunteers could

estimate their conditions, possible capsizing and, ultimately, if or not passengers were still alive (Noori, 2020).

These established connections with ‘helpers’ across transit zones in direct contact with people on the move have besides enabled the vast diffusion of AlarmPhone number via face-to-face distribution, a factor that certainly boosts migrants’ trust in networked services. Alongside the telephone number, volunteers located in the proximity of departure points — namely in Northern Libya and Morocco and in the SouthWestern coast of Turkey — would also give to would-be travelers printed leaflets different for each route, containing vital bits of advice for their forthcoming crossing (AlarmPhone, 2014). Indications may include: which medicines and emergency equipment might come in handy along the journey and where to retrieve them; guidelines on how to use naval and satellite instruments onboard (if any); conditions of the engine and structural status of the vessel to be examined before departure; how to behave if the boat starts sinking and/or passengers fall into the water; and even practical techniques to become visible in case of cut communication: “by launching a distress rocket, by waving clothes, by shouting, whistling, by flashing your mobile phones or any other electronic device” (AlarmPhone, 2014). Once more, smartphones are attested as indispensable tools en route not only for their ability to interconnect with others but also by merely being a luminous, visible object which stands out and makes the individuals holding it visible themselves.

Visibility, however, remains one of the main concerns when it comes to assisting migrants in distress. As previously discussed in the analysis of irregular routes of mobility, particularly precarious migrants during their crossing make every possible effort to remain unseen by the border patrol authorities and disclose their locations only in cases of emergency or indispensable assistance (Pezzani et al., 2013). Under such a paradigm of desired invisibility overlapping with the required visibility necessary to deliver effectively and in time rescue, migrants on board had to make crucial decisions on when to alert the state’s authorities about their location. Here, the precise localization and timing of the distress call were crucially important: in Central Mediterranean, for example, to contact the authorities while still being into Libya SAR zone would most likely imply rescue from the Libyan Coast Guard, which will then return migrants to the departure point — where they are often subject to rape, torture and arbitrary detention (UN, 2021; OHCHR, 2018). On the contrary, waiting till the vessel has reached Italian or Maltese waters grants entitlement of rescue and assistance from EU authorities and the right to disembark in European soils. In this regard Alarm Phone debuted in the Mediterranean Sea as a game-changer: by real-time interviews with people en



route, the team could track the exact location of the vessel and determine their conditions onboard — both in terms of health and vessel capacity to keep sailing. Holding this data, they could therefore realistically determine if the dinghy could continue to move towards waters under European jurisdiction or whether there was a compelling need to alert third countries forces, though, resulting in the refoulement of passengers (Noori, 2020). In dealing with these time factors, Noori has epistemologically conceived Alarm Phone functionality as a matter of ‘tempo-politics’, in which certain actions — undertaken by migrants onboard or via remote assistance — in a specific moment in time might completely change the conditions and success of migrants’ crossings. The same is true in relation to the delivery of assistance by state authorities, as a prompt relief or a lengthy stand-off might carry heavy consequences on the destiny and well-being of migrants in distress.

It is under such circumstances that the relationship between Alarm Phone and the media comes into play. The ability to expose the events at the right time, and in particular, the commitment of some dedicated journalists close to the initiative to publicly reveal unattended situations of distress at sea, forwarded by the organization as they happen, represent new pressuring methods aiming at shortening decision-making procedures from the relevant authorities. Since its establishment, the organization has openly declared the exploitation of media sources to push state authorities to render rescue and assistance (AlarmPhone, 2014).

Moreover, besides the monitoring and support provided to people on the move along the perilous route towards Europe, Alarm Phone has also played a major function in reporting the specific circumstances under which such crossings often result in tragic odysseys. Before they arrived in the area, Mediterranean waters had generally been understood as an open space with little humanitarian intervention; to put it in the words of Pezzani and Heller (2013, p. 292), “because migrants cross a vast maritime space that is mostly out of reach of a civilian gaze, the knowledge and aesthetic products of the border are mostly in the hands of state agencies”. Alarm Phone, however, overthrew such perception by forcefully establishing a socially-oriented narrative of the fatal accidents happening on a daily basis across irregular paths of mobility, offering precise accounts of the event as narrated by the real victims. Thanks to the continuous exchange of text, vocal messages and pictures via digital media platforms, direct contact with migrants in distress afforded new tactics to witness and “politicize” human rights’ breaches committed by state’s authorities within the management of external borders (Noori, 2020: p.9). The 2020’s spring in the Central Mediterranean route has been characterized by analogous events; seizing the opportunity created by the pandemic pressure on national healthcare facilities, Italy and Malta declared their

ports ‘unsafe’ and consequently closed to all foreign-flagged vessels carrying shipwreck survivors (Incorvaia, 2020). On 8 April the staff on shift received various distress calls from a boat with 66 passengers drifting in the Maltese SAR zone and soon alerted Maltese Coast Guard authorities. After refusing to render assistance for over 20 hours, the Armed Forces of Malta finally approached the shipwreck but not to rescue passengers, rather sabotage the engine of the vessel, leaving migrants unattended and preventing them from moving. The testimony was given by one of the passengers onboard via Alarm Phone’s hotline — soon thereafter forwarded to the international press — gives an idea of the dramatic situation:

We need your help, we need your help [...] The Malta military came and cut the cable of electricity for the motor. They know that the water is in the boat right now. And when he moved, he said I leave you, I leave you to die in the water but nobody come to Malta. I will give you the location, my location, the location by GPS. [...]. Please please someone call help us.” (Alarm Phone, 2020)

Finally, after repeated calls for action launched by Alarm Phone’s staff to the Maltese RCC, 41 hours after the first notification the authorities in La Valletta communicated that 66 people had been safely rescued by their national Coast Guard. No mention whatsoever to the illicit procedures and terrifying conditions under which those migrants were exposed prior to the long-denied rescue. These practices will become systematic during the whole period during which European harbors remained closed due to the outbreak of coronavirus, with Maltese authorities having reportedly supervised continuous illegal pushback to Libya by private vessels as well as denials of assistance and sabotages of migrants boats like the infamous one reported above (Tondo, 2020). Nevertheless, thanks to the disobedient yet persistent reporting of Alarm Phone, these actions did not go unpunished or unseen by the wider public, rather echoed across the media and eventually costed to the Maltese PM Abela and eleven members of the Army Forces an allegation of murder upon which the Maltese police is currently investigating (Incorvaia, 2020).

Such legitimate allegations — forwarded to the police by a civil society organization named Republika — reveal the potential of an insubordinate intervention via digital technology to counteract the biased chronicles offered by state actors on matters of migration and border management. By fairly supporting migrants in distress and surveilling the way border police forces act in such circumstances, Alarm Phone ultimately introduced civil society to the possibility of holding states’ authorities accountable for their violations of migrant’s rights and the deliberate misuse of their resources.

## 2.5 CONCLUDING NOTES

Chapter 2 delved into the empowering effects of new technologies on people on the move, by investigating how both people the migratory population and their transnational networks of ‘helpers’ can creatively employ digital technology to bypass governmental control whilst gaining the necessary visibility — both in physical and advocating terms — to make a safe crossing towards Europe.

The expansion of digitally-mediated activities amplified the possibilities for migrants to play a proactive role in nowadays society. By establishing virtual ties with distant family members and friends, displaced individuals overcome the need for proximity and transform the web space into a novel dimension to gather and reunite. Such emancipatory practices eventually granted to diaspora movements civil representation and a renewed feeling of community by which they can raise a collective voice and legitimately exercise political action.

Getting closer to the use of digital technologies to enhance mobility across the Mediterranean Sea, smartphone access is today as important as food and water for people on the move (Gillespie et al., 2018; Leurs et al., 2018). It can afford precious information about the forthcoming journey as well as forewarns over the incurring dangers across the path. In the meantime, new smuggling services are formed every day on social media platforms, providing migrants with different prices, routes and means of transport available depending on their budget. Whether or not the migrant decides to rely upon such illicit networks, mobile devices remain essential to connect with them or to organize the journey independently. Moving onboard, internet access and broadband signal can literally mark the difference between life and death, being able to afford the required visibility to be rescued in cases of distress.

Such advantages have been further exploited by civil society organisations and NGOs involved in advocating or humanitarian action towards people on the move. On the one hand, by taking advantage of the cheap and fast-spreading nature of social media, self-organised activist movements with lack of resources were able to disseminate various online petitions and campaigns aimed at raising awareness over the risks incurred by precarious migrants en route, countering anti-migration discourse and pressuring the relevant authorities to update their policy on the matter. On the other hand, ICTs have been extensively employed by NGOs as a catalyst to deliver humanitarian assistance to migrants in need, by creating customised apps or online networks where migrant's demands can meet with humanitarian workers/volunteers willing to provide assistance.

Moreover, cutting-edge technologies such as thermo-radars, GPS tracking systems, 3D modelling and forensic analysis can function as instruments to counter-surveillance and report states' authorities practice of non-assistance and pushbacks, as past and present investigations demonstrates (FA, 2012; Adams et al., 2019).

At their most ordinary scope, mobile phones serve to communicate, something that can turn vital when in need of urgent help. Drawing from such elementary assumptions, Alarm Phone is an 24h emergency hotline designed to help people on the move along the Mediterranean. It does so by tracking the vessels in distress and then forwarding the location to Coast Guards authorities, extending the call for rescue to any ship in the proximity (AlarmPhone, 2014). By establishing a simple, yet persistent and effective communication with migrants in distress, this volunteer-based initiative has been a game changer in the Mediterranean. Not only it has launched, demanded and supported remotely life saving rescue operations across the three different routes, but it also documented and reported publicly the incessant violations of migrants' rights committed at sea by state authorities in charge of the management of migration and border control (Noori, 2020), which has too often led to preventable casualties (UN News, 2021).

As a result of the joint effort of migrants and non-state actors to increase safety and visibility across the Mediterranean routes via digital interaction among each other, the overall material space along which these crossings take place is reconstituted. Virtual bonds altogether permeate the actions and outcomes of these journeys; thus, digital technologies come into play as a new determining factor in migrants destinies, as crucial as a calm sea and the fluid functioning of the engine.

### **CHAPTER 3: DIGITAL CONSTRAINTS: STATES AND SUPRANATIONAL ACTORS**

Besides being extensively used by people on the move and their transnational networks of helpers to facilitate and secure mobility across the Mediterranean Sea, ICTs and digital technologies have also been at the heart of European state agencies' operations involved in border control and management of both regular and irregular migration. Chapter 3 will, therefore, investigate those activities through a critical lens, pointing at their constraining role within migrants' mobility and overall opportunities. Along those lines, *section 3.1* looks at the gradual fortification of EU external frontiers via the inclusion of digital technologies, which shifted the 'fight against irregular migration' from the mere geographical frontiers to internal and external monitoring. *Section 3.2* digs into the enlarged funding and employment of military and surveillance technology in the

Mediterranean Sea — paired with a consistent reduction in humanitarian assistance — and its implications in migrants' rights. Moving forward, *section 3.3* moves to biometric technologies for the identification and monitoring of third-country nationals among the EU, providing an insight into the development of six European information systems — namely VIS, SIS, EES, EURODAC , ECRIS-TCN and ETIAS — and the risks behind their forthcoming interoperability. Lastly, *section 3.4* provides a more specific case study of Eurodac; examining the recent and forthcoming expansions of its mandate and overall purpose while also assessing the human rights implication of an increased reliance on biometric technologies to determine the legal status of a person.

### 3.1 THE FORTIFICATION OF EU EXTERNAL BORDERS THROUGH A DIGITAL LENS

The period starting in the aftermath of the 9/11 terrorist attacks and the consequent 'War on Terror' "marked the beginning of a new era of reinforced commitment and interest in border security and cutting-edge technology" (Nedelcu et al., 2020). Internal security concerns raised among 'big powers' — with several governments deemed to be losing the grip on the flow of irregular migrants and third-country nationals — soon materialized into a joint effort to strengthen external frontiers through the exploitation of physical and digital resources (Longo, 2017). Ultimately, "policy on irregular migration became the 'fight against illegal immigration' " (Broeders, 2007). From this breaking point, an unprecedented number of walls and barriers to external mobility began arising across the world; the United States being at the lead of such shift, with the fortification of the Mexican border with high-tech fences, thermo-scanner and cameras as well as increased deployment of security forces to monitor and prevent irregular entries (Longo, 2017).

Drawing from the U.S technological enhancement, also the European Union implemented a steady process of reinforcement of its own borders, leading to the erection of 13 walls over a period of 30 years, from the 90s to 2019 (Kieran et al., 2019). The erosion of internal frontiers due to the establishment of the Schengen Area from the 90s onwards, generated in fact a common willingness among EU member states to fortify external boundaries and oversee the access and permanence of third-country nationals (Dijstelboem et al., 2011). Under such auspices, during the drafting of the Treaty of Amsterdam (1999) legislators introduced the idea of a common policy for internal security, according to which the EU shall:

maintain and develop the Union as an area of freedom, security and justice, in which the free movement of persons is assured in conjunction with appropriate measures with respect to external border controls, asylum, immigration and the prevention and combating of crime. (Treaty of Amsterdam, Art 1(5))

Such conception will eventually come to fruition with the establishment of the Area of Freedom, Security and Justice (AFSJ) — a corpus of relevant authorities, offices and legal instruments aimed at affording freedom of movement across the Schengen Area while guaranteeing equal security and judicial standards for each and every European citizen. Among the flagship ‘ventures’ arising from the area, it is worth identifying the European Arrest Warrant (EAW) — which ensures cooperation among law-enforcement authorities of different member states in matters related to criminal prosecution and detention — and the European Border and Coast Guard Agency (Frontex), responsible for maritime, terrestrial and sea patrols of in collaboration with national police forces, as it will be further analyzed below.

This ‘culture of bordering’ became particularly pertinent within the Mediterranean context following the destabilization of the MENA region and consequent migratory pressure of 2015. The proliferation of populist movements around Europe and beyond — depicting migration as a social threat and the increased number of arrivals as a ‘crisis’ — sparked feelings of public insecurity among the European population, which soon translated into a widespread discontent as regards irregular migration (Kieran et al., 2019). Among European governors, it was clear that the numbers of people seeking international protection and irregular migrants arriving in 2015 had to be significantly reduced, yet with the absence of an effective European common policy on migration, it was still uncertain how to operate (Queiroz, 2019). With the publication of the European Migration Agenda (2015), the Commission indeed attempted to lay down a common *modus operandi* on immigration for all member states that had previously managed their borders by their own methods and resources. It is around this time that, while migrants and NGOs were engaging in novel usages of ICTs and digital technologies to facilitate the journey along the perilous routes heading to southern Europe, the EU Commission worked on improving the functionality of its external borders, check-points and registration offices through the employment of sophisticated digital technologies, generally considered among western leaders as a more reasonable, and less pervasive, solution to the erection of physical barriers (Kieran et al., 2019). Today, right at the climax of such process of digitalization, the outcome of these changes are anything but balanced:

Europe’s technologized digital migration regime includes mass deportation, surveillance, deterrence, predictive analytics of social media activity, offshore sensing, and

dronification at the Mediterranean to return ships back to sea and renouncing the right to claim asylum. (Leurs et al., 2018a; p.5)

Yet, in spite of the joint political effort to combat human smuggling, trafficking and irregular mobility across the southern European border through more or less legitimate means, irregular migration continues to be a well-established presence in most European member states. Indeed, despite border management remaining an indispensable component of immigration containment policies, the strengthening of external borders alone cannot stop or prevent irregular ‘overstayers’ if those who succeed in the crossing are then able to reside undetected within EU member states (Broeders, 2007). With this in mind, the ‘digitalized’ approach towards immigration has gradually moved from the mere patrolling of the physical boundaries to the monitoring of migratory flows across the Mediterranean and the identification of all third-country nationals accessing or attempting to do so, into EU countries. Such evolution in surveillance activities somehow blurred the straightforward conception of a border management limited to the geographical space, leading to a new conception of the border being ‘everywhere’, thus, both inland and outland (Broeders, 2011).

### 3.2 MILITARY AND SURVEILLANCE TECHNOLOGY AT THE COST OF HUMANITARIAN ASSISTANCE

At the core of nowadays’ fortification of European borders, Frontex was initially created in 2004 to coordinate joint operations with national law-enforcement authorities. The agency supports search and rescue operations by monitoring the Mediterranean Sea by means of aerial and/or maritime surveillance technologies and provides physical and technical support to local police for the registration of asylum-seekers and the return of rejected applicants of international protection. In addition, the staff is also responsible for combating crimes happening across EU’s external boundaries (e.g drug and human trafficking, human smuggling, irregular entries) and in order to do so, it extends its collaborations with non-EU member states such as Turkey, Libya and the Balkans’ states.

Particularly since 2015, the agency started a process of gradual expansion — in terms of budget, technical and physical capacity and overall scope — which has reached today its highest peak. According to a recent report (Douo et al., 2021) published by the Corporate Europe Observatory, its budget has increased exponentially from €98 million in 2014 to €544 million

granted by the Commission in 2021; more recently, the agency was afforded a budget of €5.6 billion for the period going from 2021 to 2027, which would practically amount to €800 million per year. Through such economic affordance, the overall aim is to establish by 2027 a new European border police force composed of 10.000 agents, that will operate independently in and outside EU territory, thus, without the previously required green light by national authorities (Monroy, 2020). For this purpose, 16 patrol cars and several mobile offices for the registration of irregular migrants have been purchased, which adds to the already existent boats, drones, planes and aircraft employed at the external frontiers (Frontex News, 2019). Furthermore, over €2 billion of the new multi-annual budget will be spent to buy additional technologically equipped vehicles (Monroy, 2020). Several meetings were, in fact, recently disclosed by the public media between Frontex and various representatives of the arms and surveillance industry and from the Artificial Intelligence sector, some of whom raised particular concerns for not being included within the EU Transparency Register (Collis, 2021).

The new enlargement project implies the deployments of sophisticated unmanned drones across the most trafficked Mediterranean's paths; namely the central and eastern routes. According to a report published by the non-profit organization StateWatch (Monroy, 2020), the agency is looking for specific types of drones named MALE (Medium Altitude Long Endurance) category. Such sophisticated apparatus — normally employed for military purposes — are capable of flying for a minimum of 20 hours and can guarantee high-quality surveillance standards in all meteorological circumstances, both day and night. The drones are provided with onboard low-light cameras, thermo-scanner and tracking sensors to assure the continuous focus of the subjects identified; as well as being able to detect long-distance mobile phones signals, satellite and online activities by irregular crossing migrants. In order to achieve the most efficient result, a long selection process was undertaken for the appointment of the private companies that could carry out such operations, which ended up last year with the contracting of a joint partnership between the European multinational aerospace corporation Airbus and the Israel Aerospace Industry, for the operation of the Heron 1 drone (Monroy, 2020). Such remote-controlling aircrafts had been already tested over the last two years along the Aegean routes, assisting patrolling and monitoring activities by the national coast guard and border police forces (IAI, 2018).

Further collaborations between the European Union and the private sector for the digital surveillance of irregular mobility include the one with the US energy and defense corporation General Atomics. Its unmanned drone, Predator, has been extensively used along the central



Mediterranean route in the context of the EUNAVFOR MED Operation Sophia (Monroy, 2020), now renamed Operation Irini. Indeed, following the pressure by the former Italian ministry of the interior, Salvini, to limit the EU mission across the Mediterranean to aerial monitoring, Predator drones have been operative both for ad-hoc calls and fixed-term operations (Monroy, 2020). Their formal task is supposedly limited to the supervision of SAR operations carried out by the Libyan Coast Guard, but practically “the Predators are primarily pursuing the mission’s goal to ‘combat human smuggling’ by spying on the Libyan coast” (Monroy, 2020). Such reactionary usages are the outcome of a recent informal consensus among EU member states to reduce humanitarian assistance across the Mediterranean — considered by many populist and far-right governments as a ‘pull factors’ encouraging migrants to leave from North Africa — whilst increasing surveillance and military action by EU and non-EU authorities, as admitted by the Austrian foreign minister Alexander Schallenberg (Rankin, 2020).

The expansion in digital activities is somehow upgrading the activities already undertaken by EU agencies over the last years. Indeed, airplanes vehicles mounted with cameras have already been extensively deployed in the Mediterranean Sea to monitor the traffic in the proximity of departing and arrival shores. The images collected by the aerial ‘sentinels’ are systematically stored into an ad-hoc ‘European Border Surveillance System’ (EUROSUR), implemented in 2013, which then shares the data with national Coast guards and border police forces. However, several concerns have been raised by NGOs as regards the overall purpose of Frontex operation, blamed for having put aside the coordination of rescue operations, while concentrating on the repression of undesired migration through military action (Monroy, 2020). The enlarged presence of surveillance technologies paired with a considerable reduction of ships to provide humanitarian assistance is indeed not a fortuitous decision. According to Article 98 of the UN Convention on the Law of the Sea — namely the ‘Duty to render assistance’ — all ships are obliged to provide rescue and assistance to any person/vessel found in distress, whereas the same does not apply to planes or drones operating from the air. Thus, through such aerial monitoring Frontex has been able to surveill the Mediterranean without directly getting involved in rescuing activities.

Other concerns have been raised in relation to the sharing of data with non-EU authorities. According to the new Frontex regulations, images uploaded into EUROSUR may be facilitated not only to EU member states but also to neighboring authorities that collaborate with the Union in the management of irregular crossing along the Mediterranean route (Monroy, 2020), by now a standard procedure. Such systematic, yet unsupervised, exchange of sensitive information about

migrants in distress with foreign authorities of dubious transparency eventually resulted in what has been defined as “one of the biggest mass expulsion in decades, being supported by EU’s border agency Frontex ” (Tondo, 2021). Since the beginning of the Covid-19 pandemic, more than 40.000 migrants have been intercepted in the Mediterranean by Turkish/Libyan coastal authorities and illegally returned to their departure point, thanks to the coordination and data-sharing from Frontex aerial vehicles, according to an investigation published last February by The Guardian (Tondo, 2021). These procedures infringe not only the international law’s obligation to disembark people in distress within the closest safe port — Libya has been repeatedly declared unsafe by IOM and the UNHCR for the return of migrants and asylum-seekers, due to the outbreak of internal conflict since 2011 (IOM, 2021) — but also the right for third-country nationals to claim international protection within the European Union, a fundamental human right and a principle at the core of EU’s establishment.

### 3.3 DATABASE AND BIOMETRICS TECHNOLOGY FOR REMOTE CONTROL

Among the most pertinent technological devices employed in the management of migration — particularly in the procedures leading to categorization and identification of third-country nationals accessing into Europe — EU specialized information systems have been a central part of the ‘digital renovation’ of European external borders (Broeders, 2011). Created within the broader framework of AFJS, the tasks of these biometrical information systems have progressively expanded far beyond the mere storing of personal data for authentication, as new amended proposals are enlarging their overall duties and aims, while also granting access to an increased number of state’s authorities and governmental agencies (Queroiz, 2019).

The first appearance within the European Union of a specialized information system trace back to the 1985’s ratification of the Schengen Agreement, which laid down the main objective to be achieved for an improvement of border management, in particular, through the registration and monitoring of third-country nationals accessing EU external borders and/or living within its territories (Broeders, 2007). As the main instrument to oversee the correct implementation of the Agreements, the Schengen Information System (SIS) is a database through which member states can send/receive information about border checks and movements of third-country nationals across the Union. For instance, European national authorities can communicate among each other data on people “who have an arrest warrant, are linked to police investigations or criminal proceedings or

are denied access to the Schengen area” (Casagran, 2021; p.437). In line with the expansion of biometric technologies in Europe and elsewhere, the database went through a renovation in 2013 which led to the establishment of SIS II, allowing the storage of additional types of personal data such as fingerprints and face ID. To this date, it represents the broader dataset within the European Union, containing information about returns’ mandates on irregular migrants, controls and criminal investigation carried out by law-enforcement authorities and genetic material from convicted individuals.

Aiming to create a joint policy among EU members as regarded to immigration and visa procedures, the Visa Information System (VIS) was instead implemented in 2004 to assist external border authorities in verifying the validity and rightfulness of short-term visa holders, identifying those staying in EU soils without regular documentation and detect frauds related to the circulation of fake documents. A recent amendment proposal (EU 2017/2226) in 2018 is attempting to broaden its original mandate, extending the collection of biometrical data also to long-term visa holders. More recently, as part of a larger amendment of the Smart Border Package, the European Commission presented in 2016 a proposal for the establishment of the Entry-Exit System (EES) — finally adopted in 2017 but expected to be functioning from the first half of 2022 — which somehow complement VIS’ functions. EES basically serves as an automatized passport stamp, calculating through the entry and exit dates of a visa holder his/her right to remain lawfully within European territories. The database will overall register within its central system the personal information, dates and whereabouts of all third-country nationals accessing into Europe during all their permanence, to identify overstayers with the Union and eventually “contributing to preventing irregular migration while helping protect the security of European citizens” (Entry/Exit System, n.d). On the other side, ETIAS (European Travel Information and Authorization System), approved in 2018 but still under construction, will collect data from all people accessing Europe without a visa — calculated to be an average of almost 40 million individuals per year (Casagran, 2021). As in the case of EES, the overall aim is to contrast irregular migration and facilitate the travel experience of regular stayers, as stated by Casagran.

As regarded with ‘criminal based’ datasets, the European Criminal Records Information System (ECRIS) was launched in 2012 to provide a platform where law-enforcement authorities could share real-time information on criminal records and prosecution. Its data is, in fact, accessible by most national and European entities related to judicial procedures and criminal prosecutions. Within the migratory context, it became particularly important following a recast in 2019 (EU

2019/816) — from thereon ECRIS-TCN — which allowed the registration of third-country nationals previously condemned of a crime.

Lastly, to support the Dublin Regulation II and the overall implementation of the EU's asylum policy, Eurodac was developed in 2013 as a main European database (initially) serving to assist member states in determining the competencies regarding the asylum applications. Today, however, this powerful information system has increased enormously its original scope, enlarging its competencies towards the management and profiling of irregular migrants (Vavoula, 2020), as it will be assessed in-depth in the following case study (*section 3.4*).

Even though each of these six specialised databases has been designed with its specific features, functionalities and objectives — some concerning cooperation on criminal and judicial activities, others visa procedures, irregular migration and/or asylum — they ultimately share a common goal, which is to monitor and identify third-country nationals accessing/residing irregularly within the European Union (Casagran, 2021). By linking biometrics technologies with a network of datasets of multiple functions, EU member states have incredibly expanded their ability to monitor and govern migration 'remotely' (Nedelcu et al., 2020). Automatised analysis of biometrical information indeed offers the opportunity to separate what is physically perceived as a 'mixed flow of people' accessing in Europe — with different rights and entitlements — into specific 'groups' of data divided following preset characteristics, which can then be scrutinized by state's authorities in an ordinate and targeted fashion. The issues however arise when considering the AI and Biometrics 'false neutrality' previously analyzed in Chapter I, which risks generating a differential treatment among the various 'categories' of third-country nationals registered.

These potential threats are further magnified by the two Interoperability Regulations entered into force in 2019 (EU 2019/817; EU 2019/818), which will soon merge the databases analyzed above into the same information system; somehow attempting to create a cohesive instrument for the management of irregular migration, police/judicial prosecution, asylum, visa and border management (Casagran, 2021). This is an aspect that, while guaranteeing a continuity as well as the possibility for national authorities to cross-check data from different databases, also represents a considerable threat to third-country nationals integrity, "as centralizing databases could increase the risk of abusing the system for purposes beyond the original intent" (Casagran, 2021). Furthermore, by amalgamating the biometrical instruments serving for two different scopes — on the one hand, those related to the management of migration, asylum and border management, and on the other

those aimed at police/judicial cooperation and law-enforcement purpose — and providing immigration data to criminal/judicial entities, there is a high chance to further prejudice the conception of third-country nationals both among the public opinion and in front of the law (Casagran, 2021).

### 3.4 EURODAC: A CASE STUDY OF INTRUSIVE IDENTIFICATION

The European Dactyloscopy (EURODAC) is the very first biometric database within the Union, collecting fingerprints from applicants of international protection and third-country nationals accessing/staying irregularly into Europe. Created in 2003 as one of the five legal instruments governing the CEAS, it was primarily designed to assist member states in determining the responsibility for the asylum-seekers procedures, under the conditions enshrined within the Dublin Regulation. In 2013, as part of a larger recast of the Dublin Regulations, the Council and Parliament approved the amended Regulation No. 603/2013, eventually implemented in 2015, which extended fingerprints access to national law-enforcement authorities and the European Police Office (Europol) to investigate violations related to domestic security and other grave criminal offenses. Although two other ground-breaking amendments have been proposed since then — as further analyzed below — to this date, this remains the legislative act regulating Eurodac scope and functioning.

#### 3.4.1. *Standard Scope Within CEAS' Framework*

As a way to improve traceability of asylum-seekers mobilizing across the Union, Eurodac's ordinary functioning requires each member state the immediate collection of fingerprints from applicants of international protection aged 14 and over, as soon as possible and no later than 72 hours (603/2013, Art.3). The data is then transmitted to the database's Central System where it is automatically compared with the previously uploaded (603/2013, Art.3); thus, the system will realize a positive or negative outcome — hit/no-hit — depending on whether the fingerprints matched with an existing record. In case of a positive 'hit', the two states involved might start the procedures for returning the asylum-seeker into the first country of entry where, according to the Dublin Regulation, its application should be examined. In addition, national authorities are also obliged to collect fingerprints of two more 'categories' of people: third-country national caught by the relevant authorities in circumstances of irregular crossing by sea, land, or air across EU external frontiers (603/2013, Art.14) and those who have been found illegally staying within a European Union member state (603/2013, Art.17). The data from irregular crossings will be also inserted into

the system and compared solely with forthcoming records concerning applicants of international protection, not with fingerprints from other irregular migrants (603/2013, Art.14). On the contrary, fingerprints from ‘illegal stayers’ within the EU shall also be compared with existing applicants, to verify whether the subject in question has already applied for international protection (603/2013, Art.17).

The biometrical information of asylum-seekers is stored for a maximum period of 10 years before being permanently deleted from the database (603/2013, Art.12). Meanwhile, if the applicant is granted international protection before the actual expiry, the data will be temporarily ‘frozen’ and accessible only by law-enforcement authorities until its final removal. In case the applicant acquires European citizenship during the process, the information is immediately erased (603/2013, Art.13). Irregular migrants’ fingerprints, instead, are kept inside the database for future cross-checking for a year and a half, in line with the one-year limit afforded by the Dublin system to member states dealing with asylum procedures (Queiroz, 2019). Information stored into Eurodac is not limited to fingerprints, rather includes sex and country of origin; place and date of the asylum application; a unique identification number; as well as the exact date in which fingerprints have been taken and transmitted to the central system (603/2013, Art.11). In the eventuality of a positive match, national authorities of both the receiving and sending states where the applicant is being returned should also put into the database the day in which such return took place (603/2013, Art.10). Notably, under circumstances of a foreseen return caused by a positive hit, the domestic authorities from both the receiving and sending member states can legitimately extend the sharing of personal data regarding the applicant to other domestic digital information systems (database) available, as a way to complement the profiling of the person involved, hence, allowing his/her identification. It is at this stage that the profiling nature of Eurodac emerges to its fullest. Although not being within its inherent scopes (e.g Eurodac does not contain any name or personal documents from the applicants), the possibility to cross-reference its biometrical information with several domestic datasets across the Union eventually turn Eurodac into what Vavoula (2020, p.6) defined as a “de facto quasi-identification tool” — one of extended capacity and blurred traceability.

### *3.4.2. An Instrument for the Management of Both Regular and Irregular Migration*

Such expanding scopes are further reflected in the two subsequent recast proposals, the last of which is currently under revision. Shortly after the entry into force of Eurodac amended regulation in 2015, the high numbers of irregular arrivals across European southern shores soon

highlighted various deficits within the management of both asylum seekers and irregular migration. First, national authorities at the forefront faced tremendous challenges with regard to fingerprinting all asylum-seekers and irregular crossers within their borders, due to shortages of qualified personnel, the reluctance of some governments to take the burden of all applicants of international protection and the rejection to provide fingerprints by the person involved (Vavoula, 2020). Moreover, the increased numbers of irregular migrants living across EU territories without having applied for international protection — alongside the difficulties to implement return procedures — generated a willingness among member states to control the movements of such collective to enhance their repatriation. It is under such circumstances that in 2016 a game-changing proposal was put under the scrutiny of the Parliament, but finally halted for lack of general agreement on the overall CEAS reform. More recently, in light of the New Pact of Migration and Asylum (2020), the Commission published a new amended proposal on Eurodac that, drawing on the previous one, further pushes for the enlargement of data collections both in terms of quantity and types of biometrics stored, as well as to the employment of such sensitive information. The proposal also laid down the basis for future cooperation and data-sharing among other European datasets that compose AFSJ (Vavoula, 2020), drawing from the previously mentioned Interoperability Regulation of 2019.

As one of the main changes brought by the two proposed recasts, the digital data collected by Eurodac shall serve not merely for the determination of asylum-seekers procedures and burden-sharing among EU's member states upon CEAS legal instruments, but also for broader objectives related to the management of migration, such as the tracking and profiling of irregular migrants as a way to facilitate their return and expulsion from the Union (Eurodac Proposal 2016). Prior to such proposals, return procedures to non-EU member states had to be agreed upon bilateral agreements among the specific governments involved, often resulting in lengthy processes in which third countries refused to accept the return into their territories of migrants whose documents and previous movements were unrecorded. In order to improve transnational collaboration and develop an “effective EU return policy” (Eurodac Proposal 2016, p. 5), the proposals foresaw the possibility to share Eurodac's data with authorities outside the EU as a means to enhance identification. Nevertheless, even though expulsion of irregular migrants may be accelerated via such interchange of information between EU and non-EU governments, lacking appropriate regulations and safeguards those practices are likely to result in the mass violation of migrants' right to privacy and personal data, as enshrined within the GDPR. The overwhelming majority of non-EU countries with whom such data would be shared, in fact, do not possess the same standards of protection as regards

to personal data and digital technologies; added to this is the absence of informed consent from the interested person as well as the lack of any previous assessment on the risks incurred by migrants through such digital exposure once they have been expelled and returned to the point of departure (Vavoula, 2020).

The expansion in scope is further reflected in the quantity and types of information stored within the database. According to the new proposals Eurodac will store, apart from fingerprints, a full set of facial images, names and birth, travel documents and identity certificates that complement the profiling of the subject and fasten his/her identification. This additional information will be inserted into the database and compared with previous records, to improve the accuracy of the “hit/no-hit” system in those cases in which fingerprints are imprecise or insufficient. In the past, it was noted how many applicants for international protection and irregular migrants alike were refusing to provide fingerprints, sometimes even burning/cutting them to bypass identification by the responsible authorities at the first country of entry (Grant et al., 2011). To counteract these practices of abstention, the revised proposals bestow the possibility for member states to punish those migrants/asylum-seekers rejecting to have their biometrical information collected, through administrative sanctions or, if deemed as necessary, with temporary detention (Art. 2[3]). Moreover, in line with the willingness to monitor and surveil the secondary movements of irregular migrants via digital technologies, the time limit for the retention of personal data from irregular migrants accessing and/or living in Europe without having applied for international protection or those whose application has been rejected is extended from 18 months to five years, to guarantee long-lasting tracking of their movements (Eurodac Proposal 2016, p. 4).

#### *3.4.3. The Erosion of the Limitation Principle and its Human Rights Implications*

The employment of this sophisticated digital tool — embodied by the forth-coming use of the database for the management of irregular migration — go far beyond the original purpose upon which Eurodac was initially established, that is merely in support of CEAS implementation. Thus, these changes risk undermining not only the fulfilment of both migrants and refugees' entitlements as regard to human rights, but the overall principle of limitation (Art 5[1], GDPR) which must be at the core of any procedures involving the storing and treatment of personal data. As enshrined within the GDPR, data shall be:



(b) collected for specified, explicit and legitimate purposes and not further processed in a manner that is incompatible with those purposes; (e) kept in a form which permits identification of data subjects for no longer than is necessary for the purposes for which the personal data are processed; (f) processed in a manner that ensures appropriate security of the personal data. (Art 5[1], GDPR)

Starting from point (b), none of the provisions contained within the first Eurodac regulations (No. 603/2013) did mention the purpose of facilitating the return of irregular migrants nor to identify and monitor ‘illegal’ residents within the Union; and although such usages are foreseen in the subsequent recast proposals, they are not backed by any justified and/or proportionate aim. The same is true in relation to the retention of data (e), which has been broadly extended without being supported by any strictly necessary outcome. Finally, as regarded to point (f), the preventive measures aimed at ensuring people's security and privacy have been largely overlooked by the European willingness to share sensitive data with non-EU member states with serious weaknesses in terms of digital standards of protection.

The "erosion of the purpose limitation principle" (Queiroz, 2019) was already detectable in 2015, with the entry into force of the 2013's amendment, which granted access to the database to national law-enforcement authorities (603/2013, Art.5) and Europol (603/2013, Art.7) for the investigation of terrorist' crimes and other grave threats to national security. By interlinking the management of crimes and immigration, Eurodac has hazardously given birth to a new phenomenon of "crimmigration" (Van Der Woude et al., 2017) that downgrade the figure of the migrant without appropriate/proportionate benefits as regards to national security. In fact, the sharing of asylum-seekers biometric information with police forces does not appear to be necessary at all considering that, as admitted by the same Commission, the number of applicants of international protection involved in such crimes is "not significant in numbers" (Queiroz, 2019). In addition, past ECtHR' cases (see *S & Marper v. The United Kingdom*) have already clarified that access to personal data by law-enforcement authorities can only be granted in those cases where the interested subject has already been accused of a specific crime. Instead, within Eurodac's functioning, data is collected, stored and made available to police forces before any accusation, transforming third-country nationals — which is to say, a common human being — into a suspects a priori (Vavoula, 2020).

All the above-mentioned problematics assume greater importance when applied to children and their specific vulnerabilities within the digital environment. The recast proposals drastically

lowered the age limits for the collection of third-country nationals' data from 14 to 6 years old, justifying such a decision under the necessity to protect unaccompanied children from smuggling activities and facilitate their reunification with family members living across the Union (Eurodac Proposal 2016). In doing so, the proposal rightly suggests member states ensure that such procedures are carried out in a child-friendly manner, providing to the interested minor all the relevant information related to the purpose and employment of such data (Vavoula, 2020)). Nevertheless, it remains dubious how such measures may be justified or even efficient at all. A report from the European Data Protection Supervisor (EDPS) published right after the 2016's proposal had already highlighted how the inclusion of children's biometrical information into a database of "extended scopes" which go beyond the implementation of Dublin Regulations is likely to undermine the provisions enlisted within the CRC (Opinion 07/2016); nevertheless, the measure was maintained in the subsequent recast of 2020. In line with the international obligation regarding the best interest of the child (Art.3, CRC), the proposals acknowledge that no minor can be forced to provide his/her biometrical information nor can be punished for refusing to do so, although it is later granted the possibility for the relevant national authorities to retry the collection of their biometrics in case the refusal is not justified by damaged fingerprints or other health issues; thus, staying at the commentaries realized by various international organizations, it remains uncertain how such retrials may not result in a form or another of coercion for the vulnerable child (UNICEF, 2018). A report recently published by ECRE (Vavoula, 2020) moved even a step forward, laid down the possibility that the purpose of protection and family reunification — deemed as the only reason behind the lowered age limit — is merely a guise to increase surveillance of irregular migrants accessing into Europe from their very early age; an objective which is further made possible by the extension of data retention. As a matter of fact, no indications are given on how such links between the unaccompanied child and their relatives shall be assessed, nor on how family reunifications might take place under the forthcoming Eurodac amendment.

To conclude, the ongoing Eurodac expanding scope — alongside the overall interoperability among the different AFJS' information systems — speaks loudly on the European willingness to merge the management of both regular and irregular migration through the use of biometrics, big data and digital technologies. By blurring the line between applicants of international protection and irregular migrants, this databases and the related information systems previously analysed risk— through their biases, limitations and expanded affordance — to jeopardize the protection that shall be afforded to asylum-seekers and refugees, weather purposefully or not, whilst criminalising irregular overstayers disregarding their unique vulnerabilities (Queroiz, 2019).

### 3.5 CONCLUDING NOTES

Chapter 3 investigated the constraining impact of digital technologies on migrants' and asylum seekers' rights and mobility, by gauging the strengthening of EU external frontiers via the deployment of sophisticated surveillance and biometric technologies for border and immigration management.

Since the removal of its internal borders along the Schengen Area and the security concerns arising globally in the aftermath of the 9/11 terrorist attacks, the European Union has undertaken a steady process of digital transformation of its external borders. The inefficiency of border management alone to contrast irregular overstayers within EU territories, led immigration policies to extend far beyond its geographical frontiers, both outland — via dronified surveillance across the Mediterranean Sea — and inland, through the development of biometrical information systems for the identification and monitoring of third-country nationals accessing/residing within the Union.

As regards to outwards policies, European humanitarian actions in the Mediterranean to assist migrants in distress have been replaced by an increased engagement in military and surveillance technologies deployed by national and supranational actors to monitor migratory flows in the different routes. For instance, Frontex is under an ongoing enlargement process — in terms of budget, functions and overall scope — which includes the use of unmanned drones for aerial surveillance to monitor departures from the MENA region without necessarily getting involved in SAR operations. Such practice of non-assistance, alongside the sharing of drones' images with non-EU authorities of dubious legitimacy — namely the Turkish and Libyan coast guard forces —, led to over 40.000 migrants being illegally pushed back to unsafe territories under the guidance of Frontex digital equipment, since the outbreak of Covid-19 only. An aspect that violates both the international principle of disembarking people in distress in the closest safe port, as well as the basic rights of claiming International protection within the European Union.

Moving to inwards policies, biometrical databases are among the most relevant European instruments for the management of both regular and irregular migration, specifically utilized for the identification and monitoring of third-country nationals accessing, residing or attempting to cross irregularly European borders. Gradually arising since the establishment of the AFJS, these six main information systems — namely SIS II, VIS, EES, ETIAS, ECRIS-TCN and EURODAC — afforded EU national authorities the possibility of controlling migration 'remotely' (Nedelcu et al., 2020). Each one of them has its own mandate and characteristic — some regarding cooperation on

criminal and judicial activities, others visa procedures, irregular migration and/or asylum — yet they all share the common goal of combating irregular migration across the Union (Casagran, 2021). Two recently adopted Interoperability Regulations (EU 2019/817; EU 2019/818) are about to merge these datasets into a single information system, facilitating cross-checking of information and affording access to a broader number of pertinent entities. Several risks, however, arise from such interoperability. Firstly, extending access to national authorities also increases the chances of misusing data, endangering the interested subjects' integrity across EU territory. In the second place, by including migratory data within the same information system containing criminal records, the new Regulations risk to further downgrade and depersonalise third-country nationals in front of the law and among the public imagery (Casagran, 2021).

Particularly relevant within the process of identification and categorization of people on the move, EURODAC embodies the current trend in European policy of fusing the management of both regular and irregular migration and asylum. Initially established to assist member states in the implementation of CEAS, the database in fact is increasingly expanding its overall scope from mere asylum-related functions to “wider migration purposes”; an aspect that will likely blur the distinction among the different ‘categories’, thus undermining the right to which both migrants and asylum seekers are entitled to (Vavoula, 2020). Further concerns arise in relation to the limitation principle (Art 5(1), GDPR), as the quantity and types of biometrical information stored are expected to be enlarged from fingerprints only to facial recognition and personal documents, as well as the categories of third-country nationals (and age-limit) from whom personal data shall be collected.

## CONCLUSION

This paper sought to shed light on the intersections between digitalization and migration towards southern Europe, determining the ambivalent nature of ICTs and more sophisticated types of new technologies — i.e biometrics, surveillance technologies, information databases, forensic analysis — upon mobility practices, border management and control along the Mediterranean routes.

The digitalization of traditional means of communication disrupted the way human beings used to migrate, settle and integrate within the hosting environment. In this context, the webspace embodies a novel dimension for virtual interactions via which diaspora populations can gather,

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share common experiences and overcome the physical distances between one another. Such emancipating usages of digital technologies eventually granted an invigorated feeling of civic representation which materialized into legitimate political action. Yet, despite the increased interdependence on ICTs to sustain their own identity and well-being, migrants' digital practices among western narratives are still surrounded by 'techno-exceptionalism' and stereotyping, fomented by a dominant populist and anti-immigrant rhetoric pervasive among the European Union.

Mobile devices and internet access proved to be the cornerstone to inform, secure and sustain maritime crossings along the Mediterranean Sea. Whenever browsing for specific information about the forthcoming journey, trust in official media sources lowers as the possibility of being surveilled — particularly among oppressive regimes — increases; migrants tend therefore to rely on confidential channels of information coming from local migratory networks and/or 'verified' smugglers. Notably, migrants reportedly consider unreliable and often unintelligible the online material provided by official EU agencies as regard to the different routes and visa procedures; a consideration that suggests the compelling need to provide trustable and clear data to migrants as a way to reduce reliance on the illicit smuggling services mushrooming across the webspace.

Onboard, internet and broadband signals are vital to afford the necessary (in)visibility throughout the crossings; by sharing coordinates, photos and texts migrants can, in fact, contact in real-time with family members and/or transnational 'helpers', who would alert national authorities just in cases of imminent distress and/or once entered into EU's SAR zones, affording to remain undetected in waters where they risk being pushed-back, as emerged in AlarmPhone case-study. Here, the new relations of power brought by the infiltration of new technologies within migratory dynamics come to the surface; thanks to digital mediation, migrants can rely on new actors which, according to their interests, afford the necessary services to accomplish their journey successfully while bypassing governmental control.

Alongside migrants' digital practices, particularly since 'the long summer of migration' in 2015, a dense network of NGOs and CSOs have been concentrating on digital activities in favor of migrants' mobility, both in humanitarian and advocating terms. Self-organized sympathizers and movements with lack of resources found in social media and hacktivism an affordable dimension to engage in norm contestation, pressuring EU authorities to update immigration policies and matters of burden-sharing among member states as regards to refugees and asylum-seekers. Meanwhile,

NGOs and CSOs involved in the Mediterranean migratory context engaged in remote humanitarian assistance by creating a number of apps and platforms — some more legitimate than others — to instantaneously connect migrants' demands with professionals/volunteers willing to help.

Not only have digital technologies reconstituted the way humanitarian assistance is offered and operated by non-governmental actors, but also forged new ways to counter-surveil and report migrants' rights breaches committed by national and supranational authorities involved in systematic practices of non-assistance, illegal refoulement and push-backs. By reconstructing the digital traces left by migrants en route, thermo-radars, GPS tracking systems, 3D modeling and forensic analysis allow to shed light upon an area that was, until a few decades ago, limited to state's narratives.

Alarm Phone embodies the empirical materialization of how a standard use of mobile phones in an increasingly digitized maritime space can drastically reshape previous migratory dynamics. Operated as a standard hotline service, once received the call from a boat in distress, the staff forwards its location to the pertinent Coast Guard authorities and extends the rescue's call to any ship in the proximity. Through continuous and detailed communication with passengers in distress, Alarm Phone has been capable of coordinating — without a physical presence across the Mediterranean — an outstanding number of rescue operations while also contributing to the reporting of state's agencies breaches committed along the Mediterranean Sea.

Moving to national and supranational employment of new technologies, the digital fortification of EU external boundaries started in the aftermath of the Schengen Agreement is today at the apex, both in technical and budgetary terms. Drawing from the inefficiency of border management alone to contrast irregular entries and overstayers across the Union, as particularly emerged in the 2015's migratory pressure, immigration policies are indeed extending monitoring operations beyond the physical shores of southern Europe, both externally — employing dronified surveillance technologies — and internally, via the deployment of biometric databases aimed at monitoring the movements of third-country nationals alongshore and inside EU member states.

Outward policies have been characterized by a steady decline of humanitarian presence from official EU agencies across the Mediterranean, paralleled by an increased reliance on military and surveillance technologies to curb irregular entries along southern European shores. Proof of this is the unparalleled expansion of Frontex personnel, digital arsenal, and overall scopes. The multi-billion enlargement project recently afforded by the European Commission aims, indeed, to

multiply the deployment of military unmanned drones across the Central and Eastern Mediterranean routes, to control the migratory flows departing from Libya and Turkey without necessarily getting involved in SAR operations. Notably, such remote-controlled vehicles are able to detect long-distance mobile signals and online activities, thus interfering directly with migrants' use of ICTs to bypass national and supranational control. Further concerns arise in relation to the sharing of drones' images within non-EU authorities such as the Libyan and Turkish Coast Guards, both highly criticized for the repeated violations of human rights at sea reported by NGOs operating in the field, including Alarm Phone. Such collaboration has, in fact, resulted in the largest expulsion of third-country nationals in decades, with over 40.000 migrants being illegally pushed back since the beginning of the Covid-19 pandemic by the above-mentioned foreign authorities with the coordination of Frontex aerial vehicles.

Similar to the EU external border agency, biometric technologies have been at the core of European operations involved in the management of both regular and irregular migration. The existing AFJS' databases are increasingly expanding in capacity and scope; originally established with their own mandate and limited purpose — some concerning cooperation on criminal and judicial activities, others visa procedures, irregular migration and/or asylum — two already adopted Interoperability Regulations (EU 2019/817; EU 2019/818) will, in fact, soon merge into the same information system, with the aim of facilitating cross-checking operations and enlarge data-access to a wider number of pertinent authorities. Such expansion will eventually afford EU member states a new toolkit to manage immigration remotely, yet, several concerns raise in relation to migrants' rights and integrity. For instance, affording access to a wider number of domestic and supranational authorities without a strictly necessary and proportionate aim, eventually increases the possibility of misuse, thus undermining migrants' privacy and protection of personal data. In addition, by fusing criminal and judicial records with migratory data, such interoperability is likely to stir up 'crimmigration' imaginaries not only among the public but even more worryingly in front of the law.

An emblematic case study of the EU's tendency to intersect the management of regular and irregular migration through the expansion of biometric technologies is embodied by EURODAC; a core AFJS' fingerprint dataset serving for the identification and 'categorization' of irregular migrants, refugees, and applicants of international protection. Designed in 2003 with the limited scope of assisting member states in determining the burden of asylum applications, it is now extending its capacities to broader objectives, such as the tracking and profiling of irregular

migrants as a way to facilitate their return and expulsion from the Union. Two new amendment proposals further plan to increase the amount of data stored into the system, from fingerprints only to facial ID and personal documents, while also extending the categories, age limits and retention period of the subjects recorded. An attempt, according to ECRE (Vavoula, 2020), to increase surveillance of migrants accessing Europe from a very early age.



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