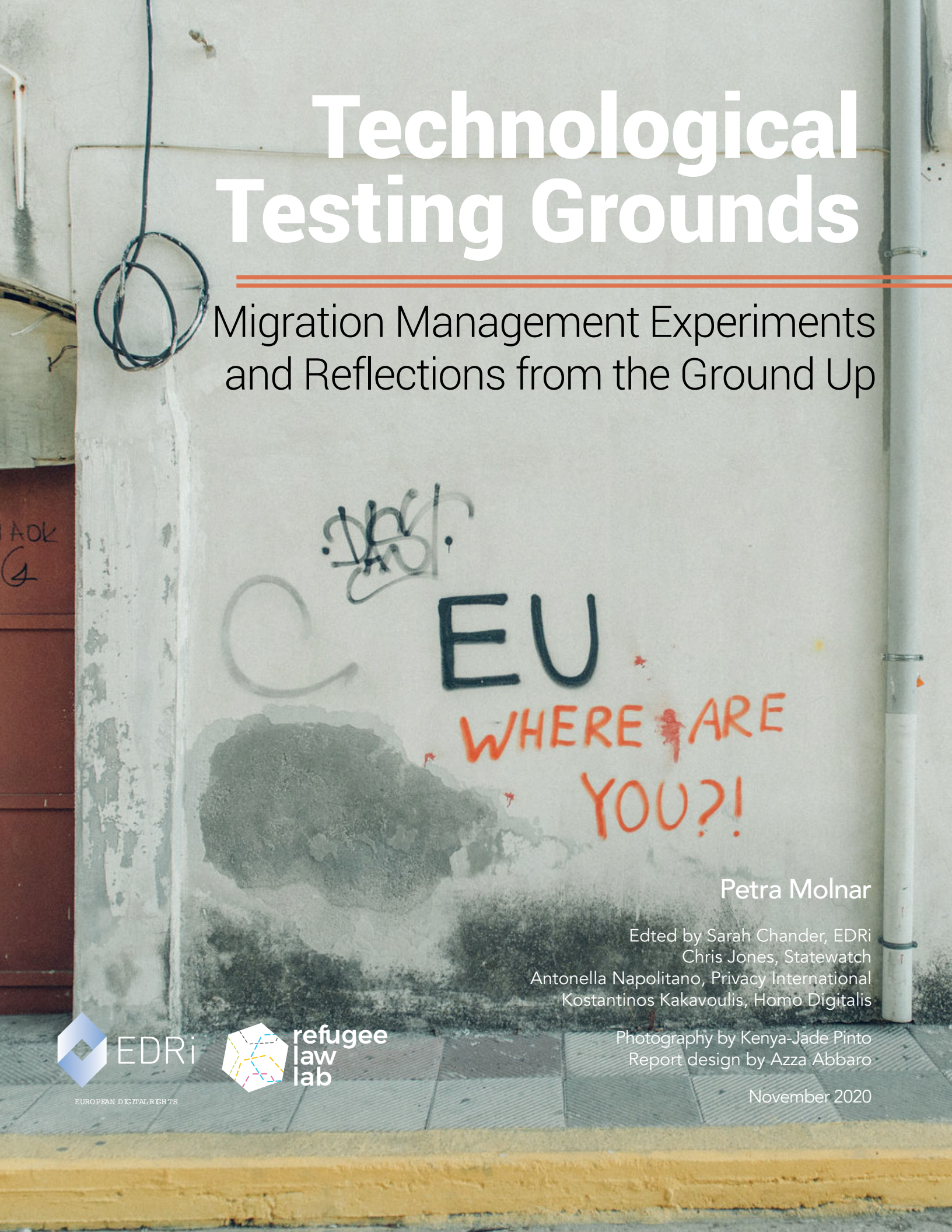
# Technological Testing Grounds

## Migration Management Experiments and Reflections from the Ground Up

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refugee law lab

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About EDRi (European Digital Rights): The EDRi network is a dynamic and resilient collective of NGOs, experts, advocates and academics working to defend and advance digital rights across the continent. For almost two decades, it has served as the backbone of the digital rights movement in Europe.

About Refugee Law Lab: The Refugee Law Laboratory, which is a joint project between the Centre for Refugee Studies and Osgoode Hall Law School, undertakes research and advocacy related to new legal technologies and their impact on refugees, other displaced communities, and people on the move.

# Technological Testing Grounds

Migration Management Experiments and Reflections from the Ground Up

## Table of Contents

# Introduction


*Police patrol the windy coastal shore inside new Kara Tepe camp, Lesvos*
*(Photo by Kenya-Jade Pinto, September 2020)*

# 1.Introduction

*"We are Black and border guards hate us. Their computers hate us too."*
*– Adissu, living without immigration status in Brussels, Belgium*[1]

States are increasingly turning to novel techniques to 'manage' migration.[2] Across the globe, an unprecedented number of people are on the move due to conflict, instability, environmental factors, and economic reasons. As a response to increased migration into the European Union over the last few years, many states and international organizations involved in migration management are exploring technological experiments in various domains such as border enforcement, decision-making, and data mining. These experiments range from Big Data predictions about population movements[3] in the Mediterranean and Aegean seas to automated decision-making[4] in immigration applications to Artificial Intelligence (AI) lie detectors and risk-scoring at European borders.[5] These innovations are often justified under the guise of needing new tools to 'manage' migration in novel ways. However, often these technological experiments do not consider the profound human rights ramifications and real impacts on human lives.

Now, as governments move toward biosurveillance[6] to contain the spread of the COVID-19 pandemic, we are seeing an increase in tracking projects and automated drones.[7] If previous use of technology is any indication, refugees and people crossing borders will be disproportionately targeted and negatively affected. Proposed tools such as virus-targeting robots,[8] cellphone tracking,[9] and AI-based thermal cameras[10] can all be used against people crossing borders, with far-reaching human rights impacts. In addition to violating the rights of the people subject to these technological experiments, the interventions themselves do not live up to the promises and arguments used to justify these innovations. This use of technology to manage and control migration is also shielded from scrutiny because of its emergency nature. In addition, the basic protections that exist for more politically powerful groups that have access to mechanisms of redress and oversight are often not available to people crossing borders. The current global digital rights space also does not sufficiently engage with migration issues, at best only tokenizing the involvement from both migrants and groups working with this community.

This report offers the beginning of a systemic analysis of migration management technologies, foregrounding the experiences of people on the move who are interacting with and thinking about surveillance, biometrics, and automated decision-making during the course of their migration journeys. Our reflections highlight the need to recognise how uses of migration management technology perpetuate harms, exacerbate systemic discrimination and render certain communities as technological testing grounds.

Technology and migration are at the forefront of European policy development.[11] For example, on September 23rd 2020, the European Commission published its long-awaited "Pact on Migration and Asylum," along with a host of legislative proposals, guidance and other texts. This Pact explicitly mentions a study "on the technical feasibility of adding a facial recognition software...for the purposes of comparing facial images, including of minors"[12] to eu-LISA (or The European Union Agency for the Operational Management of Large-Scale IT Systems in the Area of Freedom, Security and Justice). The pact also broadens border screening and increases immigration detention capabilities;[13] includes a proposed "pre-entry" screening process with biometric data, security, health, and vulnerability checks; expands the EURODAC database for the comparison of biometric data; and strengthens the mandate of FRONTEX, the European Border and Coast Guard Agency.[14] More broadly, this year's EU White Paper on Artificial Intelligence and accompanying documents[15] insufficiently engaged with the specific context of migration management technologies, relying on overly broad categories of "high risk" applications without analysis of how AI-type technologies impinge on people's human rights in the migration context.

Ultimately, the primary purpose of the technologies used in migration management is to track, identify, and control those crossing borders. The issues around emerging technologies in the management of migration are not just about the inherent use of technology but rather about how it is used and by whom, with states and private actors setting the stage for what is possible and which priorities matter. The data gathering inherent in the development of these technologies also includes the expansion of existing mass-scale databases that underpin these practices to sensitive data, especially biometrics. The implementation of an EU-wide overarching interoperable smart border management system is also imminent in the coming years.[A] Such data and technology systems provide an enabling infrastructure for many automated decision-making projects with potentially harmful implications. The development and deployment of migration management is ultimately about decision-making by powerful actors on communities with few resources and mechanisms of redress.

Politics also cannot be discounted, as migration management is inherently a political exercise. Migration data has long being politicised by states to justify greater interventions in support of threatened national sovereignty and to bolster xenophobic and anti-migrant narratives.[16] The state's ultimate power to decide who is allowed to enter and under what conditions[17] is strengthened by ongoing beliefs in technological impartiality.

The unequal distribution of benefits from technological development privileges the private sector as the primary actor in charge of development, with states and governments wishing to control the flows of migrant populations benefiting from these technological experiments. Governments and large organizations are the primary agents who benefit from data collection[18] and affected groups remain the subject, relegated to the margins. It is therefore not surprising that the regulatory and legal space around the use of these technologies remains murky and underdeveloped, full of discretionary decision-making, privatized development, and uncertain legal ramifications.


Graffiti in Mytilene, Lesvos
(Photo by Kenya-Jade Pinto, September 2020)

These power and knowledge monopolies are allowed to exist because there is no unified global regulatory regime governing the use of new technologies, creating laboratories for high risk experiments with profound impacts on people's lives. **This type of experimentation also foregrounds certain framings over others that prioritize certain types of interventions (ie 'catching liars at the border' vs 'catching racist border guards').** Why is it a more urgent priority to deport people faster rather than use technological interventions to catch mistakes that are made in improperly refused immigration and refugee applications?

The so-called AI divide—or the gap between those who are able to design AI and those who are subject to it—is broadening and highlights problematic power dynamics in participation and agency when it comes to the roll out of new technologies.[19] Who gets to participate in conversations around proposed interventions? Which communities become guineapigs for testing new initiatives? Why does so little oversight and accountability exist in this opaque space of high stakes and high risk decision-making?

The human rights impacts of these state and private sector practices is a useful lens through which to examine these technological experiments, particularly in times of greater border control security and screening measures, complex systems of global migration management, the increasingly widespread criminalization of migration, and rising xenophobia. States have clear domestic and international legal obligations to respect and protect human rights when it comes to the use

of these technologies and it is incumbent upon policy makers, government officials, technologists, engineers, lawyers, civil society, and academia to take a broad and critical look at the very real impacts of these technologies on human lives.

Unfortunately, the viewpoints of those most affected are routinely excluded from the discussion, particularly around areas of no-go-zones or ethically fraught usages of technology. There is a lack of contextual analysis when thinking through the impact of new technologies resulting in great ethical, social, political, and personal harm.

> The hubris of Big Tech and the allure of quick fixes do not address the systemic reasons why communities are marginalized and why people are forced to migrate in the first place.

This report first presents recommendations for policy makers, governments, and the private sector on the use of migration management technologies, foregrounding the need to focus on the harmful impacts of these interventions and abolish the use of high risk applications. We then provide a brief snapshot of the ecosystem of migration management technologies, highlighting various uses before, at, and beyond the border and analysing their impacts on people's fundamental human rights. The report concludes with reflections on why and how states are able to justify these problematic uses of technologies, exacerbating and creating new barriers to access to justice through the allure of technosolutionism, the criminalization of migration, and border externalization—all occuring in an environment of dangerous narratives stoking anti-migrant sentiments.  Technology replicates power relations in society that render certain communities as testing grounds for innovation. These experiments have very real impacts on people's rights and lives.

# Recommendations

*Community mural bordering the remnants of Moria Camp, Lesvos*
*(Photo by Kenya-Jade Pinto, September 2020)*

# 2.Recommendations

**What We Need: Systemic Harms At the Centre of Discussions Around Migration Management Technologies**

No appropriate regulatory framework currently exists to oversee the use of new technologies in the management of migration. Much of this technological development occurs in so-called 'black boxes,'[20] where intellectual property laws and proprietary considerations shield the public fully understanding how the technology operates and how it is procured and deployed in these sensitive contexts.

While conversations around the ethics of AI are rightfully taking place, ethics do not go far enough. We need a sharper focus on oversight and governance mechanisms grounded in fundamental human rights that recognize the high risk nature of developing and deploying technologies of migration control.

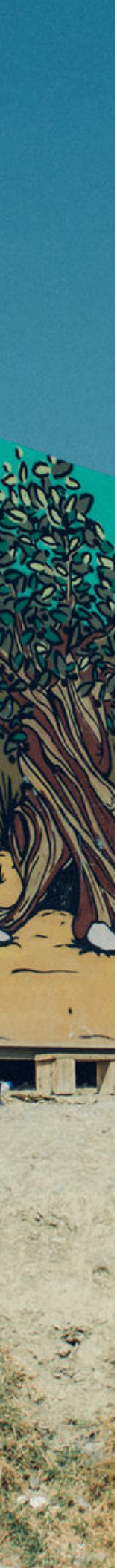
**These governance conversations must include a focus on the real harms experienced by communities that are turned into testing grounds for technological experiments.**

Affected communities must be involved in these conversations, including having a direct say in the technological development that affects them. Rather than developing more technology 'for' or 'about' communities on the move and collecting vast amounts of data to be fed into opaque processes, people who have themselves experienced displacement and movement should be steering discussions on when and how emerging technologies should be integrated into refugee camps, border security, or refugee hearings – if at all.

Conversations around oversight and accountability mechanisms of migration management technologies must also begin to grapple with drawing red lines around certain uses of technology that are simply too harmful and high-risk.

**States and international organizations developing and deploying migration management technologies must, at a minimum:**

- Commit to the abolition of automated migration management technologies unless and until thorough independent, independent, and impartial human rights impact assessments (HRIAs) are undertaken, legality, proportionately and fundamental rights standards are strictly upheld, and affected communities and civil society are adequately consulted. This approach will ensure that the burden of proof lies squarely with states and developers to prove deployments are justified and necessary and that are not harmful to marginalised communities, not the other way around;
- Recognize that systemic and inherent power imbalances animate the development and deployment of automated migration management

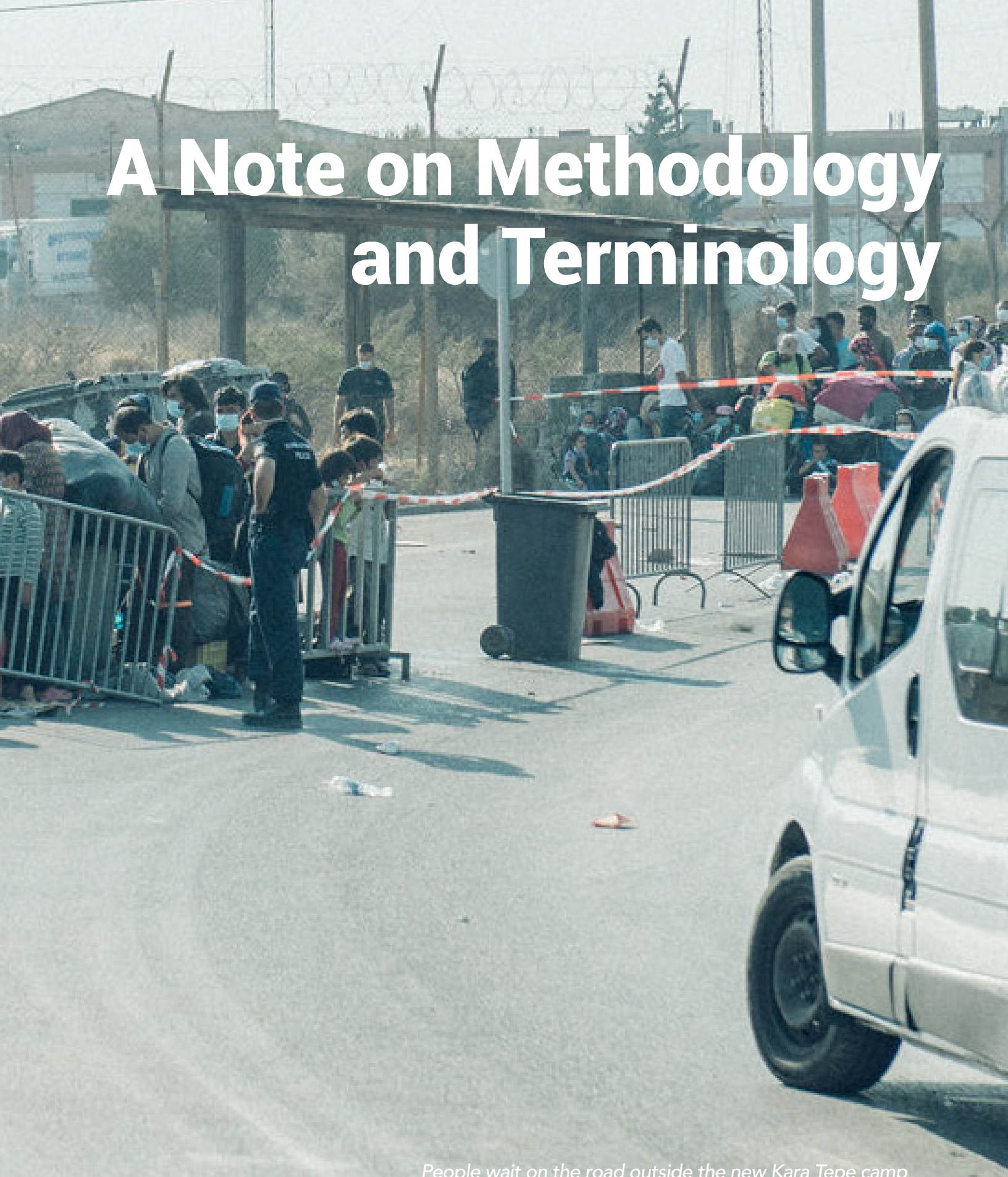


technologies and commit to addressing consequent racism and discrimination in comprehensive dedicated action plans as well as in any upcoming proposed AI-specific legislation;

- Commit to transparency and report publicly what technology is being developed and used and why, such as in the form of public registers;
- Freeze all further efforts to procure, develop, or adopt any new automated decision-making system technology until existing systems fully comply with internationally protected fundamental human rights frameworks. Commit to a thorough review of procurement practices, including the ongoing support of monopolies for the involvement of international private corporations with dubious human rights records;
- Recognize the high risk nature of migration control technologies and mitigate that risk by regulating these technologies inbinding directives, regulations, and laws that comply with internationally protected fundamental human rights obligations enshrined in and protected by the European Convention on Human Rights, the European Charter of Fundamental Rights, the International Covenant on Economic, Social and Cultural Rights (ICESCR), the International Covenant on Civil and Political Rights (ICCPR), and International Convention on the Elimination of All Forms of Racial Discrimination (CERD), among others. We strongly encourage member states to sign and ratify Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data (Convention 108+) of the Council of Europe;
- Establish an independent body to oversee and review all use of existing and proposed automated technologies in migration management, including by EU-funded entities such as FRONTEX and EUROPOL;
- Scrutinize the use of automated migration management technologies by international organizations such as UNHCR and IOM; adopt mandatory human rights impacts assessments; and establish independent monitoring mechanisms particularly around procurement and partnerships with private sector actors;
- Examine state and public institutional-level funding and mandate that any funding proposal must clearly demonstrate how technological developments publicly funded do not violate fundamental rights, provide transparency for all funded projects, and provide avenues to challenge funding choices which include fundamental rights experts at the decision-making table.
- Foster conversations and meaningful knowledge-exchange mechanisms between policymakers, academics, technologists, civil society, and affected communities on the risks and promises of using new technologies that prioritise fundamental rights protections over profit and innovation.
- Foreground the perspectives of affected communities and people on the move in discussions around the development and deployment of migration control technologies.

**Civil society organizations, NGOs, and international organizations working with people on the move must also examine their use of and participation in the development and deployment of migration management technology and must ensure that human rights, dignity, and freedom from harms as a result of technological experimentation remain at the centre of discussion.**

# A Note on Methodology and Terminology



*People wait on the road outside the new Kara Tepe camp before being processed for entry in Lesvos, Greece. (Photo by Kenya-Jade Pinto, September 2020)*

# 3. A Note on Methodology and Terminology

This project is the culmination of a year-long study since October 2019 to interrogate the effects of migration management technologies on the lives and rights of people on the move and to foregrounds the lived experiences of these communities. However, because to the COVID pandemic, the mode of engagement shifted due to the difficulty of safely engaging in on-the-ground research and interviews with affected groups during a global pandemic. As such, in addition to in-person research which only became possible in the summer of 2020, this report provides initial analysis and reflections on the need to employ a human rights oriented harm-focused approach to the development, deployment, and regulation of migration management technologies and forms the starting point of a broader multi-year project on these issues.

This report reflects interviews with over 40 refugees, asylum seekers, migrants without status, and people on the move which were conducted in Brussels, Belgium, and various locations in Greece over the summer and early fall of 2020. 35 meetings and interviews with civil society organizations, government and private sector representatives, and academics were also conducted, alongside extensive desk research.

This report highlights two snapshots:

- one showing the individual impacts and people's feelings surrounding the increasing presence of technology used in migration management (Brussels, Belgium); and
- and the other reflecting on the systemic drivers that create a forced migration hot spot that functions as a testing ground for technological interventions (Lesvos, Greece).

All interviews adhered to strict COVID-19 social distancing protocols and negative testing as necessary before entering Lesvos and other areas in Greece.

All names and identifying features have been changed to protect the identities of the people who generously shared their stories with us.

## PHOTOGRAPHY AND VISUAL REPRESENTATION

As part of our interdisciplinary project design, this report also highlights several photographs taken by Kenya-Jade Pinto during our visit to Greece. These photographs provide a visual representation of the increasingly securitized and politicized context of migration management and deliberately do not show faces of individuals as it is our project policy not to feature any photographs without informed consent and ongoing participation of the subjects.

A crowd of photographers from local and international media congregate outside the new Kara Tepe camp, Lesvos (Photo by Kenya Jade Pinto, September 2020)

Unfortunately, visual representations in the migration arena often fall victim to damaging tropes that rely on racist and one sided depictions of people in crisis. In this project, we remain resolute about not perpetuating certain kinds of damaging images of refugees, asylum seekers, or migrants, reducing people's complex stories to click-bait or stereotypical portrayals of bodies from particular ethnic backgrounds that do not respect people's individual stories.[B]
Our report also uses the term 'racialised' to refer to racial, ethnic and religious minorities, emphasising that racialisation is a structural process inflicted on people, groups and communities.[C]

## WORD CHOICES MATTER – WHAT ARE WE TALKING ABOUT?

*PEOPLE* ON THE MOVE

The choice of terminology throughout this report and broader project are deliberate. While in law and policy, rigid categories of "refugee," "asylum seeker," and "migrant" are used to create particular narratives, in reality, these categories often elide. As such, wherever possible, this report uses the term '**people on the move**' or '**people crossing borders**' to try and expand the terminology that is commonly used when discussing the many complexities inherent in human migration and how migration management technologies are experienced. However, this deliberate characterization does not mean to undermine the fact that refugees face particular vulnerabilities and often experience higher risks and harms as a result of migration management technologies.

This more inclusive terminology also highlight that we may all be in one way or another affected by migration management technologies as we cross borders and move across the world. While high risk applications have the greatest ramifications on communities traditionally marginalized such as refugees and asylum seekers, the ecosystem of migration management technologies affects us all.

## TECHNOLOGIES OF MIGRATION MANAGEMENT: AI, ALGORITHMS, OR AUTOMATED DECISION-MAKING?

Conceptual clarity in defining new technologies can be difficult. **Artificial Intelligence, machine learning, automated decision-making systems, and predictive analytics** are a series of overlapping terms and refer to a class of technologies that assist or replace the judgment of human decision-makers. Different disciplines or regulatory mechanisms also use different definitions.[21] As such, delineating the limits of what constitutes AI can be difficult. Our report refers to technologies that all rely on some aspect of automated decision-making. This can include technologies that automate the mining of vast stores of data as well as processes that mimic human cognition and come up with novel decisions about outcomes.

The term automated decision-making systems is used to refer to a particular class of technologies that either assist or replace the judgment of human decision-makers. These systems draw from fields like statistics, linguistics, and computer science, and use techniques such as regression, rules-based systems, predictive analytics, machine learning, deep learning, and neural networks, often in combination with one another.

Automated decision systems may be used for any number of diverse applications—by both government and the private sector—depending on the ultimate "decision" at issue. Automated decision systems process information in the form of input data using an algorithm to generate an output. An algorithm can be thought of as a set of instructions, like 'a recipe composed in programmable steps...organizing and acting on a body of data to quickly achieve a desired outcome.'[22] Certain algorithms are 'trained' using a large, existing corpus of data, which allows the algorithm to classify and 'generalize beyond the examples in the training set.'[23] Training data can be body of case law, a collection of photographs, or a database of statistics, some or all of which have been pre-categorized or labelled based on the designer's criteria.

Algorithms and their uses have been criticized for being 'black boxes.'[24] This is because an algorithm's source code, its training data, or other inputs may be proprietary, and can be shielded from public scrutiny on the bases of intellectual property legislation or as confidential business assets. Moreover, when algorithms are used in immigration and refugee matters and form a nexus with issues of national security, both input data and source code may also be classified.[25] However, without being able to scrutinize input data to understand how the algorithm starts to make decisions, iterate, and improve upon itself in unpredictable or unintelligible ways, their logic becomes less and less intuitive to human oversight. One of the main concerns with not being able to scrutinize and critique automated decision-making is the introduction of bias. Algorithms are vulnerable to the same decision-making concerns that plague human decision-makers: transparency, accountability, discrimination, bias, and error.[26] All of these concerns are relevant to automating migration, which is already permeated by biased decision making by human officers.

All technological choices—choices about what to count, who counts, and why—have an inherently political dimension and replicate biases that render certain communities at risk of being harmed.

# SNAPSHOT
## INDIVIDUAL IMPACTS OF MIGRATION MANAGEMENT TECHNOLOGIES


L'Autre Caserne, a community collective in an occupied building in Brussels, Belgium
(Photos by Petra Molnar, March and July, 2020)

*"We are Black and the border guards hate us.
Their computers hate us too."*

***All names and identifying features have been changed to protect people who shared their stories with us. Sadly, by this report's release in the fall of 2020, L'Autre Caserne community has been evicted.***

Tucked away on a quiet street minutes from a major train station in Brussels, a house is at first indistinguishable from its nondescript neighbours. However, inside this 'squat' lives a bustling community. Made up of climate justice organizers, self-described anarchists, and social justice advocates, L'Autre Caserne provides shelter, food, and support to undocumented people who find themselves living in the Belgian capital. With a massive cardboard clock that says "Revolution Time" and "No One is Illegal" stickers everywhere, the bright three story building has skylight windows and even a salsa dance room, contrasting with the ever present threat of eviction and arrest. On a sunny Sunday afternoon, over thirty undocumented people gathered together to share snacks and stories of their migration journeys. Most people that were present were from Eritrea or Ethiopia, as the previous group of Syrians vacated their rooms a few weeks back, moving on and trying their luck with the elusive passage to the UK – a Promise Land that seems simultaneously full of opportunity yet unattainable except for a lucky few. The UK remains difficult to reach during the coronavirus pandemic, where irregular passage on a boat across the

English channel or on the back of a lorry all come with the risk of increased surveillance and potential indefinite detention, if you are found out.

Since the coronavirus lockdown started, this community in central Brussels has been sheltering in place together for nearly three months but many said they were itching to try their luck elsewhere, no matter the cost.

"*I am tired*," says Negasi, a young man in his twenties from Ethiopia. "*I am tired and I want to go to the UK.*" Negasi has been in Belgium for two years without papers, and in Nuremberg, Germany for 5 years before that. But this is not Negasi's first time in Belgium: he was deported to Germany once before, after being apprehended by the Belgian police for sleeping in a park when he was homeless. His fingerprints set off a notification in the EURODAC system (the (European Asylum Dactyloscopy Database which records and matches people's fingerprints across the EU), since he previously filed for asylum in Germany. He said the biometric collection process was invasive but he did not know what do to: **"*How can I say no when the police handcuffed me, brought me to the station, and forced me to give them my finger prints?*" He knows of a few friends who even went as far as to burn their fingerprints off to avoid detection but Negasi thinks "*this don't solve the problem*," as lack of identification usually will mean longer detention.** As a young Black man, Negasi remembers his interactions with the Belgian police vividly during his 30 days in jail before being deported to Germany. "They hit and kicked me and said 'If you're not happy with this life, go back to your fucking country.' They really have no respect for us, not today and not ever."

Negasi, like many others in the community has had a complicated journey to Belgium. When he left Ethiopia, he made his way to Sudan, Chad, and Libya, before taking a boat over the Mediterranean in 2014. His journey echoes a similar path that brought Amari to Brussels. In his 40s and serving as the community's Amharic interpreter, Amari doesn't remember how long he has been in Belgium exactly. He entered Europe through Italy and tried to join his sister in Sweden but was returned and made his way to Belgium.

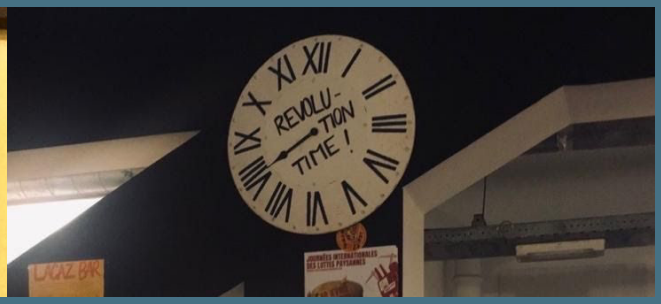
According to Amari, the general feeling is that "*people think they have better chances if they go upwards*," into Western and Northern Europe. Many try to forget the horrors they experienced on their way. Amari was jailed for 1.5 years in an underground Libyan bunker[28] because he did not have enough money to pay the smugglers to take him across the Mediterranean. He eventually escaped and joined a friend who was able to secure them both a passage to Italy. His face changed immediately when recalling his time in Libya and it was clear that the scars of that time remain: "*It's incredibly difficult to live in this world right now.*" To cope, he is helping the 'squat' organizers make a 3-D model of the detention facility from his memory, both to document what happened to him and to perhaps help with his asylum claim, if he ever has a chance to file one. For now, Amari remains stuck in Belgium but has his eye on the UK, or "*whatever country takes me*." He is

planning to try and catch a lorry to the UK sometime next week, aware of the risks but unwilling to remain in stasis any longer because of the coronavirus. **Amari has experienced torture in a Libyan jail but as he says "*living without papers in a racist country is another torture. I only need papers to live. I want to study now. I want to have a reason to live.*"**

At multiple points in their journey that landed them in Brussels, this community interacted with surveillance technology and biometrics. Kaleb, a married man in his thirties who "*misses [his] beloved wife Liya everyday*" reflected on how violent and impersonal the immigration and asylum system is. Twirling his wedding ring during the entire time we spoke, Kaleb **reflected on feeling "*like a piece of meat without a life, just fingerprints and eye scans.*"** As Kaleb spoke, the others in the circle nodded: ***"It is the human touch that keeps us warm – now all around us it's cold as fuck."*** Kaleb has not seen his wife in 4 years.

The group was disturbed by the coldness and dehumanization of technology. As Eshe, a young woman who did not stay long put it, ***"their computers are making decisions for us."*** The use of drones in the Mediterranean and the English Channel was met with many people shaking their heads, with Amari making others laugh: ***"now we have flying computers instead of more asylum."*** When discussing the use of tools like AI lie detectors at the border or drones patrolling the Mediterranean, the group discussion got heated: ***"We are Black and the police [border guards] hate us. Their computers hate us too."*** The threat of police presence and increased surveillance is ever present in an occupied building full of undocumented people – in fact, the police have been coming to the squat repeatedly over the last few weeks as the coronavirus lockdowns eased, once to investigate a death from an overdose of a young Moroccan man without papers and a few other times because the neighbours made a noise complaint.

Many in the community were not aware of what exact technologies they may have come in contact with over the course of the many months and in some cases years of travel. **But Kaleb reflected on how he found it "*weird*" that new tools were being used to control migration when instead "*the world government should work on the main problem, like fighting and wars*"— problems that force people to seek a better life in the first place.**


L'Autre Caserne, a community collective in an occupied building in Brussels, Belgium
(Photos by Petra Molnar, March and July, 2020)

# Ecosystem of Migration Management Technologies

*Barbed wire separates the 'COVID Area' in the new Kara Tepe camp, Lesvos, Greece (Photo by Kenya-Jade Pinto, September 2020)*

# 4. Ecosystem of Migration Management Technologies

*"Like a piece of meat without a life, just fingerprints and eye scans."*
*- Kaleb, living without immigration status in Brussels, Belgium*

Technologies such as automated decision-making, biometrics, and unpiloted drones are increasingly controlling migration and affecting millions of people on the move. This allure of using technological interventions at and around the border highlights the very real impacts on people's lives, exacerbated by a lack of meaningful governance and oversight mechanisms of these technological experiments.

Having a systemic understanding of **how** these technologies operate throughout a person's migration journey and **why** they are deployed, highlights the interconnectedness of the development and deployment of these interventions across the EU and globally.

The introduction of new technologies impacts both the processes and outcomes associated with decisions that would otherwise be made solely by administrative tribunals, immigration officers, border agents, legal analysts, and other officials responsible for the administration of immigration and refugee systems, border enforcement, and refugee response management. Border enforcement and immigration and refugee decision making sits at an uncomfortable legal nexus: the impact on the rights and interests of individuals is often very significant, even where the degree of deference towards the decisions of the immigration offer is high and the procedural safeguards are weak. Currently, there is also a serious lack of clarity surrounding how courts will interpret administrative law principles like natural justice, procedural fairness, and standard of review where an automated decision system is concerned or where an opaque use of technology operates.

## A HUMAN LABORATORY OF HIGH RISK EXPERIMENTS[29]

Technologies of migration management operate in a global context. They reinforce institutions, cultures, policies and laws, and exacerbate the gap between the public and the private sector, where the power to design and deploy innovation comes at the expense of oversight and accountability. Technologies have the power to shape democracy[30] and influence elections[31], through which they can reinforce the politics of exclusion. The development of technology also reinforces power asymmetries between countries and influence our thinking around which countries can push for innovation, while other spaces like conflict zones and refugee camps become sites of experimentation. The development of technology is not inherently democratic and issues of informed consent and right of refusal are particularly important to think about in humanitarian and forced migration contexts.

As such, are these appropriate tools to use, particularly without any governance or accountability mechanisms in place for if or when things go wrong? Immigration decisions are often opaque, discretionary, and hard to understand, even when human officers, not artificial intelligence, are the ones making decisions. **Many of us have had difficult experiences trying to get a work permit, reunite with our spouse, or adopt a baby across borders, not to mention seek refugee protection as a result of a conflict and a war.**These technological experiments to augment or replace human immigration officers can have drastic results: in the UK, 7000 students were wrongfully deported[32] because a faulty algorithm accused them of cheating on a language acquisition text. In the US, the Immigration and Customs Enforcement Agency (ICE) has worked with Palantir Technologies[33] and other private companies to track and separate families[34] and enforce deportations and detentions of people escaping violence in Central and Latin America.

When these drastic results occur, what if you wanted to challenge one of these automated decisions? Where does responsibility and liability lie – with the designer of the technology, itscoder, the immigration officer, or the algorithm itself? Should algorithms have legal personality? It is paramount that we begin to answer these questions, since much of the decision-making related to immigration and refugee decisions already sits at an uncomfortable legal nexus: the impact on the rights of individuals is very significant, even where procedural safeguards are weak.

What are some of the ways a person may interact with these technologies during various points in their migration journey?

## BEFORE THE BORDER: SURVEILLANCE ON THE SEAS

*Before you even cross a border, you will be interacting with various technologies. Unpiloted drones are surveilling[35] the Mediterranean and Aegean corridors under the guise of border control. Biometrics like iris scanning are increasingly being rolled out in humanitarian settings - where refugees, on top of their already difficult living conditions, are required to get their eyes scanned in order to eat.[36] And now not even your private information is safe – social media scraping and cellphone tracking[37] to screen your immigration applications is becoming common practice.*

What is happening with all this data? Various international organizations are using Big Data, or extremely large data sets, to predict population movements.[38] However, data collection is not an apolitical exercise, especially when powerful actors like states or international organizations like the UN collect information on vulnerable populations. In an increasingly anti-immigrant global landscape, migration data has also been misrepresented for political ends,[39] to affect the distribution of aid dollars and resources and support hardline anti-immigration policies.

What is also concerning is the growing role of the private sector in the collection, use, and storage of this data. In 2019, in became public that the World Food Program signed a $45 million (USD) deal with Palantir Technologies,[40] who recently joined the EU lobby register, the same company that has been widely criticized for


A tableau of police helmets outside the new Kara Tepe camp, Lesvos
(Photo by Kenya-Jade Pinto, September 2020)

providing technology that supports the detention and deportation programs[41] run by US Immigration and Customs Enforcement (ICE). It remains unclear what exactly will happen with the data of 92 million aid recipients shared with Palantir or what data accountability mechanisms are place during this partnership and whether the people affected can refuse to have their data shared.

Governments are also increasingly using people's electronic devices as verification tools to corroborate the information they provide to the authorities. This practice is enabled with the use of mobile extraction tools, which allow an individual to download key data from a smartphone, including contacts, call data, text messages, stored files, location information, and more.[42] In Austria, Germany, Denmark, Norway, the United Kingdom, and Belgium, laws allow for the seizure of mobile phones from asylum or migration applicants from which data is then extracted and used as part of asylum procedures.[43] Not only such kind of practices constitute a serious interference with their right to privacy that is neither necessary nor proportionate but also the assumption that data obtained from digital devices leads to reliable evidence is flawed. If a person claims certain information is true, and there exists information on their smartphone suggesting otherwise, it is not evidence that they are being disingenuous. There are a variety of legitimate reasons why the data extracted would differ from the information provided by an applicant. Governments across sectors including for immigration enforcement purposes have also resorted to social media intelligence, the techniques and technologies that allow companies or governments to monitor social media networking sites, such as Facebook or Twitter[44] Some of these activities are undertaken directly by government themselves but in some instances, governments are once again calling on companies to provide them with the tools or knowhow to undertake these sorts of activities.[45]

Autonomous technologies are also increasingly used in monitoring and securing border spaces. For example, FRONTEX has been testing various unpiloted military-grade drones in the Mediterranean and Aegean for the surveillance and interdiction of migrants vessels hoping to reach European shores to facilitate asylum applications.[46] The European Commission's Horizon 2020 funding scheme "Secure societies - Protecting freedom and security of Europe and its citizens"[47] has also introduced 38 projects that fall under this scheme, including the ROBORDER project, which aims to create a 'fully-functional autonomous border surveillance system with unmanned mobile robots including aerial, water surface, underwater and ground vehicles.'[48] The system consists of unmanned mobile robots including aerial, water surface, underwater and ground vehicles, capable of functioning both on a standalone basis and in swarms.

The increased use of drones to police Europe's borders has resulted in the decentralization of the border zone into various vertical and horizontal layers of surveillance, suspending state power from the skies,[49] and extending the border visually and virtually. This idea can be expanded to all technologies that manage migration, as their primary purpose is to collect data, make decisions, and report to the state the necessary information on a potentially unsafe or unknown migrant body, turning people into security objects and data points to be analysed, stored, collected, and rendered intelligible.[50]

The usage of military, or quasi-military, autonomous technology also bolsters the connection between immigration, national security, and the increasing push towards the criminalization of migration and using risk-based taxonomies to demarcate and flag cases.[51] Globally, states, particularly those on the frontiers of large numbers of migrant arrivals, have been using various ways to pre-empt and deter those seeking to legally apply for asylum. This type of deterrence policy is very evident in Greece, Italy, and Spain,[52] countries which are on the geographic frontiers of Europe and increasingly rely on violent deterrence and 'push back' policies to prevent people from reaching the shores of Europe. For example, on 23 October 2020, a consortium of journalists, investigators, and researchers revealed that FRONTEX has been actively complicit in illegal pushbacks in the Aegean, intercepting boats and forcing them into opposing territorial waters instead of facilitating maritime rescue.[53] The increasing reliance on surveillance technologies in these spaces exacerbates these extreme measures.

## AT THE BORDER: ARE YOU LYING? A BOT CAN TELL!

*When you arrive at the border, more and more machines have appeared to scan, surveil, and collect information about you. Increasingly, these machines rely on automated decision-making. However, instances of bias in automated decision-making are widely documented. Pilot projects have emerged to monitor your face for signs of lying,[54] and if the system becomes more 'skeptical' through a series of increasingly complicated questions, you will be selected for further screening by a human officer. However, can this system account for the cross-cultural differences in which we communicate? What about if you are traumatized and unable to recall details clearly? Discriminatory applications[55] of facial or emotion recognition technologies has far reaching consequences[56] on people's lives and rights, particularly in the realms of migration.*

Biases at the border have far-reaching results if they are embedded in the emerging technologies being used experimentally in migration. For example, in airports in Hungary, Latvia, and Greece, a new pilot project by a consortium called iBorderCtrl introduced AI-powered lie detectors and risk-scoring at border checkpoints.[57] The project claimed that passengers' faces would be monitored for signs of lying, and if the system became more 'sceptical' through a series of increasingly complicated questions, the person would be selected for further screening by a human officer. Canada and Romania[58] have also experimented with similar border-screening "emotion-recognition" project called AVATAR.[59] Various other pilot projects to introduce facial recognition at the border across the world have been explored in a recent report by CIPPIC (Samuelson-Glushko Canadian Internet Policy & Public Interest Clinic).[60]

However, it is unclear how these system will be able to handle cultural differences in communication, or account for trauma and its effects on memory, such as when dealing with a traumatized refugee claimant unable to answer questions clearly.[61] Refugee claims and immigration applications are filled with nuance and complexity, qualities that may be lost on automated technologies, leading to serious breaches of internationally and domestically protected human rights in the form of bias, discrimination, privacy breaches, and due process and procedural fairness issues, among others. It remains unclear how the right to a fair and impartial decision-maker and the right to appeal a decision will be upheld during the use of automated decision-making systems.[62]

## BEYOND THE BORDER: AUTOMATING DECISIONS ABOUT HUMAN LIVES

*When you are applying for a visa or want to sponsor your spouse to come join you, how do you feel about algorithms making decisions on your applications? A variety of countries have begun experimenting with automating decisions[63] in immigration and refugee applications, visas,[64] and even immigration detention.[65] This use of technology may seem like a good idea but many immigration applications are complicated and two human officers looking at the same set of evidence can make two completely different determinations. How will an automated system be able to deal with the nuances of people's applications? Or what if you want to challenge a decision you do not agree with in court? Right now it is not clear who is responsible for when things go wrong — is it the coder who creates the algorithm, the immigration officer using it, or even the algorithm itself?*

To deal with multiple complex migration crises, states are also experimenting with automating various facets of decision-making. For example, since at least 2014, Canada has been using some form of automated decision-making in its immigration and refugee system.[66] Similar visa algorithms were planned for use in the UK and were successfully challenged in court for their discriminatory potential.[67]

Another area where "technosolutionism" is layering ethical complications onto a contentious policy issue is in verifying the identity of a person talking on the phone and its use in carceral settings. The use of "phone reporting"is sometimes seen as a viable alternative to incarceration.[68] Yet, when is the line crossed from supporting an in-home phone call to verify respect for a curfew, to a coercive and non-consensual voiceprint collection practice? For example, the US has been contracting with the prison telecommunications firm, Securus Technologies, to extract "voiceprints" from its prison population under coercion, and the firm has now made inroads into immigration detention.[69] The use of portable carceral technologies such as ankle bracelets has also been criticized as highly coercive and exploitative.[70] While countries like Finland recently moved towards not implementing proposed programs for ankle monitoring of refused asylum seekers,[71] other voice-printing technologies for the purposes of figuring out where an asylum seeker comes from have been used in Germany.[72]

The use of new technologies raises issues of informed consent, particularly in the increasing reliance on biometric data and data sharing among various actors and jurisdictions. Besides issues of consent in situations of unequal power hierarchies, it is not clear how this sensitive data that is collected in these processes is safeguarded from unauthorized parties. Data collection and retention practices also need to be scrutinized. If collected information is shared with repressive governments from whom people are fleeing, the ramifications can be life-threatening. Or, if automated decision-making systems designed to predict a person's sexual orientation are procured and deployed by states targeting the LGBTQ community, discrimination and threats to life and liberty will likely occur. A facial recognition algorithm developed at Stanford University already tried to discern a person's sexual orientation from photos.[73] This use of technology has particular ramifications in the refugee and immigration context, where asylum applications based on sexual orientation grounds often rely on having to prove one's persecution based on outdated tropes around non-heteronormative behaviour.[74] These types of technological assessments could also be easily implemented into voiceprint extraction technologies, resulting in grave discrimination and serious human rights abuses.

## BORDERS AND PANDEMICS: HUMAN RIGHTS IMPACTS OF COVID-19 TECHNOLOGY ON MIGRATION

Refugees, immigrants, and people on the move have long been linked with bringing disease and illness.[75] People crossing borders whether by force or by choice are often talked about in apocalyptic terms[76] like 'flood' or 'wave,' underscored by growing xenophobia and racism.[77] Not only are these links factually incorrect,[78] they legitimize far-reaching state incursions and increasingly hardline policies of surveillance and techno-solutionism to manage migration.

These practices become all the more apparent in the current global fight against the COVID-19 pandemic.

Since the start of the pandemic in the spring of 2020, we have seen a variety of 'solutions'[79] presented for fighting the coronavirus. As more and more states move towards a model of bio-surveillance[80] to contain the spread of the pandemic, we are seeing an increase of tracking,[81] automated drones,[82] and other types of technologies developed by the private sector purporting to help manage migration and stop the spread of the virus. If previous use of technology[83] is any indication, refugees and people on the move will be disproportionately targeted. Once tools like virus-killing robots,[84] COVID contact-tracing cellphone tracking[85], and 'artificially intelligent thermal cameras'[86] are turned used against people crossing borders, the ramifications will be far reaching. Coupled with extraordinary state powers,[87] the incursion of the private sector leaves open the possibility of grave human rights abuses and far reaching effects on civil liberties, particularly for communities on the margins.

While technology can offer the promise of novel solutions for an unprecedented global crisis, we must ensure that COVID innovation does not unfairly target refugees, racialized communities, the Indigenous communities, and other marginalized groups, and make discriminatory inferences that can lead to detention, family separation, and other irreparable harms. **Technological tools become tools of oppression and surveillance, denying people agency and dignity and contributing to a global climate that is increasingly more hostile to people on the move.** The COVID pandemic is already being used to curtain access to people living informal settlements or securitized refugee camps, such as in islands camps in Greece. However, instead of increased tracking and surveillance, a redistribution of resources, dignified living conditions, and access to medical care are paramount to stopping the spread of the pandemic.

Pandemic responses are political.[88] Making people on the move more trackable and detectable justifies the use of more technology and data collection in the name of public health and national security. Most importantly, technological solutions do not address the root causes of displacement, forced migration, and economic inequality, all of which exacerbate the spread of global pandemics like COVID-19.


Covid area of the new Kara Tepe camp, Lesvos
(Photo by Kenya-Jade Pinto, September 2020)

# What About Human Rights?


*Graffiti inside burned down Moria camp, Lesvos*
*(Photo by Kenya-Jade Pinto, September 2020)*

# 5. What About Human Rights?

*"Burning off your fingerprints?*
*This don't solve your [EUROCAD] problem."*
*- Negasi, living without immigration status in Brussels, Belgium*

A number of internationally protected rights are impacted in the increasingly widespread use of new technologies that manage migration. These impacts can be extensive and can include equality rights and freedom from discrimination; life, liberty, and security of the person; freedom of expression; and privacy rights, among others.[89] When public entities are making administrative decisions, rights to due process are also affected, including a right to an impartial decision-maker, a right to appeal, and a right to know the case against you.

These rights are particularly important to think about in a high-risk contexts where the repercussions of incorrect decisions are separated families, discrimination or, in extreme circumstances, the loss of life and liberty.

Adopting emerging and complex tools at the bleeding edge of scientific development without looking at their necessity, proportionality, and impact on fundamental rights while lacking at the same time in-house talent capable of understanding, evaluating and managing these technologies is irresponsible from not only an engineering perspective, but also a legal and ethical one. However, currently there is no integrated regulatory global governance framework for the use of automated technologies, and no specific regulations in the context of migration management. Much of the global conversation centres on ethics without clear enforceability mechanisms and meaningful accountability.

How are these technologies of migration control impacting people's fundamental rights and what can we do about it?

## LIFE AND LIBERTY

We should not underestimate the far-reaching impacts of new technologies on the lives and security of people on the move. The right to life and the right liberty are two of the most fundamental internationally protected rights and highly relevant to migration and refugee contexts. Multiple technological experiments already impinge on the right to life and liberty. The starkest example is the denial of liberty when people are placed in detention. Immigration detention is highly discretionary. The justification of increased incarceration on the basis of algorithms[90] shows just how far we are willing to justify incursions on basic human rights under the guise of national security and border enforcement. Errors, miscalibrations, and deficiencies in training data can result in profound rights infringements on safety, security, and liberty when placed in unlawful detention. For example, aspects of training data which are mere coincidences in reality may be treated as relevant patterns by a machine-learning

system, leading to arbitrary, incorrect, or discriminatory outcomes. This is one reason why the EU's General Data Protection Regulation (GDPR) requires the ability to demonstrate that the correlations applied in algorithmic decision-making are 'legitimate justifications for the automated decisions.'[91]

In some cases, increased technology at the border has sadly already meant increased deaths. In late 2019, FRONTEX announced an expanded border strategy bolstered by a new regulation[92] which relies on increased staff and new technology. Another EU-funded project, ROBORDER,[93] 'aims to create a fully functional autonomous border surveillance system with unmanned mobile robots including aerial, water surface, underwater and ground vehicles.' The EU borders are not the only site of drone technology. In the U.S., politicians have presented similar 'smart-border' technologies as a more 'humane' alternative to the Trump Administration's calls for a physical wall. Most recently, this includes a partnership between the US Custom and Border Patrol, Google Cloud AI, and Anduril Industries to create a new "virtual" wall of surveillance towers and drones.[94] However, these technologies can have drastic results. For example, border control policies that use new surveillance technologies along the US–Mexico border have actually doubled migrant deaths[95] and pushed migration routes towards more dangerous terrain through the Arizona desert, creating what anthropologist Jason De Leon calls a 'land of open graves'[96] With similar surveillance technology on the rise at the shores of Europe that is increasingly used to facilitate interceptions and pushbacks of boats,[97] similar increase of watery graves will likely occur.[98] Given that the International Organization for Migration (IOM) has reported that due to recent shipwrecks, over 20,000 people have died[99] trying to cross the Mediterranean since 2014, we can only imagine how many more bodies will wash upon the shores of Europe as the situation worsens along the EU's borders.

This increased reliance on border securitization and surveillance through new technologies, as clearly underscored by the EU's New Migration Pact's focus on border enforcement and deterrence also works to send a clear message that human lives are expendable in order to protect Europe's borders.

## EQUALITY RIGHTS AND FREEDOM FROM DISCRIMINATION

Equality and freedom from discrimination are integral to human dignity, particularly in situations where negative inferences against marginalized groups are frequently made. As the November 2020 report from the UN Special Rapporteur on Contemporary Forms of Racism, Racial Discrimination, Xenophobia and Related Intolerance highlights, racism, discrimination, and inequality are embedded in migration management technologies.

The opaque nature of immigration and refugee decision-making creates an environment ripe for algorithmic discrimination. Decisions in this system – from whether a refugee's life story is 'truthful' to whether a prospective immigrant's marriage is 'genuine' – are highly discretionary, and often hinge on assesment of a person's credibility.[100] To the extent that these technologies will be used to assess 'red flags,' 'risk,' and 'fraud,' they also raise definitional issues, as it remains unclear what the parameters of these markers will be.

Convoy of vehicles as the new Kara Tepe camp is hastily constructed
(Photo by Kenya-Jade Pinto, September 2020)

In addition, the use of automated technologies in migration management reinforces structures of discrimination already inherent in much of immigration decision-making.[101] This type of structural racism and discrimination is insidious and already hard to prove even without opaque technologies. Once again, the burden of proof lies with the person on the move to prove that they are being discriminated against, yet oftentimes, marginalized communities may not even be aware that these discriminatory technologies are used against them in the first place.

Algorithms are susceptible to the same decision-making concerns that plague human decision-makers:  transparency, accountability, discrimination, bias, and error.[102] Yet the complexity of migration – and the human experience – is not easily reducible to an algorithm.

## PRIVACY RIGHTS

Privacy is not only a consumer or property interest: it is a human right, rooted in foundational democratic principles of dignity and autonomy.[103] We must consider the differential impacts of privacy infringements when looking at the experiences of people on the move. New technologies may also widen scope of privacy infringements. Migration management technologies, particularly automated decision-making can be used to identify patterns that human analysts would otherwise not recognize. Yet those patterns and correlations may reveal intimate information about individuals, networks, and communities—some of which may be proxies for grounds protected by law, such as race or gender.

As such, people's privacy rights should be protected not only with regards to the data or inputs used in automated decision-making but also regarding the judgements, findings, and outputs rendered as a result of automation. Any data

sharing, particularly between public entities and the private sector may also have profound ramifications on people's right to privacy, often without them even knowing what is happening to the data that was collected.[104] Again, contextual understanding of privacy rights is key: if a refugee is compelled to provide biometric or other data at the border or in a humanitarian emergency, will they be made aware of what privacy protections exist if private companies are working in partnership with states or international organizations managing migration? Will they be able to meaningfully opt-out of participating in this data gathering if access to services such as food rations depend on compliance to having their data collected?[105] Protecting people's privacy is paramount for their safety, security, and well-being and must be thought of holistically in relation to other human rights that are in play.

## PROCEDURAL JUSTICE AND ADMINISTRATIVE LEGAL PRINCIPLES

When we talk about human rights of people on the move, we must also consider procedural justice[106] principles that affect how a person's application is reviewed, assessed, and what due process looks like in an increasingly automated context. The degree of procedural fairness that the law requires for any given decision-making process increases or decreases with the significance of that decision and its impact on a person's rights and interests.

For example, in immigration and refugee decision-making, procedural justice dictates that the person affected by administrative processes has a right to be heard, the right to a fair, impartial and independent decision-maker, the right to reasons — also known as the right to an explanation — and the right to appeal an unfavourable decision. However, it is unclear how national administrative laws and international principles of procedural justice will handle the augmentation or even replacement of human decision-makers by algorithms.

While these technologies are often presented as tools to be used by human decision-makers, the line between machine-made and human-made decision-making is not often clear. Given the persistence of automation bias,[107] or the predisposition towards considering automated decisions as more accurate and fair,[108] what rubrics will human decision-makers use to determine how much weight to place on the algorithmic predictions, as opposed to any other information available to them, including their own judgment and intuition? When things go wrong and you wish to challenge an algorithmic decision, how will we decide what counts as a reasonable decision?

It is not clear how tribunals and courts will deal with automated decision-making, what standards of review will be used, and what redress or appeal will look like for people wishing to challenge incorrect or discriminatory decisions.

# SNAPSHOT

## Surveillance Sandboxes – Technological Testing Grounds in Greece

Remnants of Moria, Lesvos
(Photo by Kenya-Jade Pinto, September 2020)

*Certain places serve as testing grounds for new technologies, places where regulation is limited and where an 'anything goes' frontier attitude informs the development and deployment of surveillance at the expense of humanity.*

Moria, Europe's largest refugee camp burned to the ground on September 9th, 2020. We visited Lesvos in the aftermath to document the building on a new containment centre and to begin mapping out how this particular locale fits into broader narratives of technological experimentation.

After the fire, thousands of people were sequestered on a barren stretch of road[109] without food or water, tear-gassed,[110] and then herded into a new camp hastily built on the grounds of an old shooting range on a windswept peninsula.[111] This rocky outcropping is the newest site of containment on Europe's borders, one housing over 9,000 people displaced during a global pandemic, with no idea when or how they will be able to leave.

However, instead of opening the island camps and coming up with a meaningful plan for years of inaction, the EU's new Migration Pact explicitly doubles down on containment and border security, opening the door to increasingly more draconian tools of surveillance using new technologies including the use of facial recognition technologies, not just on adults but also on minors.[112] More and more, violent uses of technology work to push European borders farther afield,[113] contributing to policies of border externalization,[114] making Europe's migration issues someone else's problem. These policies have direct and dire consequences — drownings in the Mediterranean,[115] pushbacks to Libya[116] and Turkey, including using floating tents,[117] and years-long detention in decrepit camps like Moria, and other sites on islands like Samos, Chios, and Kos.

Frontier countries like Greece, 'Europe's Shield,'[118] act as testing grounds for new technologies and surveillance mechanisms. In October 2019, new legal rules were adopted as regards the deployment of drones by the Hellenic Police,[119] including the use of drones in order to monitor migration in border regions. Groups like Homo Digitalis in Greece claim that the new rules do not address the challenges arising from the applicable data protection legislation and have filed an open letter to the Ministry of Citizen Protection requesting more information about the deployment of drones by the Hellenic Police.[120] Drones, along with cameras are also being used along the Evros land border with Turkey, in an increasing push to militarize migration management.[121]

In September 2020, FRONTEX also announced that it was piloting a new aerostat maritime surveillance system,[122] using Greece as a testing ground. The current pandemic conditions must also not be discounted, as they will likely speed up and exacerbate the turn to technological solutions at the border. We are already seeing the border industry pushing for increased adoption of "contactless biometrics" for "regular" travellers as a way to stop the spread of the pandemic.[123] FRONTEX in particular has been clear in its messaging to position itself as an agency apt at

Police Officers in hazmat suits, Kara Tepe, Lesvos
(Photo by Kenya-Jade Pinto, September 2020)

The edge of the new Kara Tepe camp
(Photo by Kenya-Jade Pinto, September 2020)

both controlling migration as well as the spread of COVID-19. According to a press release from May 2020, "if we cannot control the external borders, we cannot control the spread of pandemics in Europe. FRONTEX plays a key role in ensuring effective protection of the external borders of the European Union not only against cross-border crime but also against health threats."[124]

The appetite for migration management technologies remains present in Greece, with the Hellenic Ministry of Migration and Asylum co-hosting and supporting the World Border Security Congress[125], a gathering of public and private actors eager to address 'threats' such as "ISIS threatens to send 500,000 migrants to Europe" and "Migrants and refugees streaming into Europe from Africa, the Middle East, and South Asia."[126]

Various people in our interviews on Lesvos were concerned about proposed screening and surveillance mechanisms to keep people contained, tracked, and managed and the normalization of surveillance in the aftermath of the Moria fire. Yet no one is clear on exactly how the next few months will shape up, particularly regarding increasingly technological incursions, data collection, and surveillance. Along with Big Tech, big money is also involved in the management of borders, with private security companies making major inroads[127] with lucrative contracts procured by governments for shiny new tech experiments presented as a way to strengthen border security.

These technological experiments also play up the 'us' vs 'them' mentality at the centre of migration management policy. Instead of long term viable redistribution of resources across the EU and timely processing of people's asylum, turning to techno-solutionism[128] and migration surveillance will only exacerbate deterrence mechanisms already so deeply embedded in the EU's migration strategy.

## HIGHLIGHTS OF EDRI MEMBER ORGANIZATIONS WORKING ON TECHNOLOGY AND MIGRATION

### HOMO DIGITALIS

Homo Digitalis focuses on the protection of digital rights in Greece. It promotes and protects the fundamental rights and freedoms in the digital world, when the latter are challenged or jeopardized.

Most recently, Homo Digitalis has been investigating how the Greek Police has been using new technologies in policing both in the Greek territory, but also at the borders of the country.[129] The Greek Police has signed a contract with a Greek technology company, Intracom Telecom, for the provision of a facial recognition software of at least 500 smart devices.[130] Through these smartphones, police officers will be able to check identity documents, fingerprints, and facial photos. With no legislation in place to regulate the use of such software, Homo Digitalis has requested the Greek Data Protection Authority[131] to issue an opinion on the contract. The Greek DPA informed Homo Digitalis that it is currently reviewing the contract, having requested clarifications from the Greek Police. Regarding ongoing border management projects, such as iBorderCtrl, FOOLDOUT, ROBORDER and TRESPASS, which have been implemented as pilot projects in Greece, Homo Digitalis requested from EU authorities in December 2019 to get access to relevant documents, including ethics reviews, technical specifications, and legal assessments. Most of the documentation remains confidential until today.

### PRIVACY INTERANTIONAL

Privacy International (PI) campaigns against government and corporate exploitation of people and their data.

PI has been investigating and exposing the use of data and technology in the migration context, building the knowledge and expertise of organisations and groups which advocate for the rights of migrants. PI's work includes investigating the systems that are planned and deployed, as well as the companies that enable them.[132] PI evaluates their methods and techniques, raising awareness about the implications for the human rights of citizens and foreigners. PI campaigns to bring greater transparency on exports of surveillance by governments,[133] and work to ensure legislation and practice complies with international human rights standards.[134] PI works with and support migrants rights organisations in advocating for policy change.

**STATEWATCH**

Statewatch undertakes and encourages the publication of investigative journalism and critical research in Europe in the fields of the state, justice and home affairs, civil liberties, accountability and secrecy.

Recent reports include Automated Suspicion[D], which examines how the EU is using 'interoperable' biometric databases, untested profiling tools and new 'pre-crime' watchlists to screen, profile and risk-assess travellers to the Schengen area; and Deportation Union[E], which looks in detail at the use of new and expanded databases and information systems to increase the number of people deported from the EU.

Remnants of Moria, Lesvos
(Photo by Kenya-Jade Pinto, September 2020)

# The Panopticon of Migration Control Technologies

*Police conduct a surveillance road check outside the new Kara Tepe camp, Lesvos (Photo by Kenya-Jade Pinto, September 2020)*

# 6. The Panopticon of Migration Control Technologies

*"Their computers are making decisions for us."*
*- Eshe, living without immigration status in Brussels, Belgium*

A whole host of actors and players operate in the panopticon of migration control technologies, obscuring responsibility and liability, exacerbating racism and discrimination, and obfuscating meaningful mechanisms of redress. Communities that are marginalized such as non-citizens, refugees, and people on the move often have access to less robust human rights protections and fewer resources with which to defend those rights as these technological interventions become increasingly normalized.

## WHY IS THIS TURN TO TECHNOSOLUTIONISM HAPPENING?

States are able to justify increasing technological experiments in migration because people on the move have been historically rendered as a population which is intelligible, trackable, and manageable.[135] Yet all this experimentation occurs in a space that is largely unregulated, with weak oversight and governance mechanisms, driven by the private sector innovation. While discussions around appropriate regulation are emerging, the technological experimentation in migration occurs in opaque spaces where state accountability is weak.

The creation of legal black holes in migration management technologies is very deliberate to allow for the creation of opaque zones of technological experimentation that would not be allowed to occur in other spaces.[136] While we are able to imagine mobilizing around extreme issues such as the banning of killer robots in armed conflict, the gray spaces of migration management technology remain largely uncontested.

## CRIMINALIZATION OF MIGRATION AND BORDER EXTERNALIZATION

Through technology, state control over the management of migration has broadened. People on the move are presupposed to be criminals unless proven otherwise.[137] The opacity of border zones and transnational surveillance transform migration into a site of potential criminality that must be surveilled and managed to root out the ever-present spectre terrorism and irregular migration.[138] For example, the increased use of drones to police Europe's borders has resulted in the decentralization of the border zone into various vertical and horizontal layers of surveillance, suspending state power from the skies,[139] and extending the border visually and virtually. These justifications can be expanded to all technologies that manage migration, whether retinal scans, or automated AI lie detectors at the airport, as their primary purpose is to collect data, make decisions, and report to the state the necessary information on a potentially unsafe or unknown migrant

body, rendering them into security objects and data points to be analysed, stored, collected, and rendered intelligible.[140] In addition, "border externalisation," or the transfer of border controls to foreign countries, has in the last few years become the main instrument through which the EU seeks to stop migratory flows to Europe.[141] This practice relies on utilising modern technology, training, and equipping authorities in third countries to export the border far beyond its shores.[142] Unfortunately, the majority of the 35 countries that the EU prioritises for border externalisation efforts are authoritarian, known for human rights abuses and with poor human development indicators.[143]

## DANGEROUS NARRATIVES STOKING ANTI-MIGRANT SENTIMENTS

The rise of anti-migrant xenophobic sentiments, justification of surveillance and online media monitoring, and the rise of extreme right and neo-fascist groups and political organizations globally also impacts how migration management technologies function. From the Proud Boys in the US to the autocratic administration of Victor Orban in Hungary to the Maduro regime in Venezuela, people on the move have been linked to threats to national sovereignty[144] that must be stopped at all costs (and most recently explicitly connected to the spread of the COVID-19 virus and characterized as 'vermin' and 'biological weapons'[145] ).
Far right groups have been engaged in violence again migrants around the world, including in the US, mainland Europe, and Canada. Most recently, ties have been discovered between far-right extremists and companies like Clearview AI and Palantir, which are responsible for the development and deployment of facial recognition technologies and algorithmic decision-making tools used for the detention and deportation of migrants.[146] These groups have also been blatantly calling for the establishment of so-called 'deportation squads' using algorithms to identify potential targets.[147]


Crowd celebrates the Golden Dawn Verdict on October 7th 2020 in Athens, Greece with Black Lives Matter and Refugee Lives Matter slogans (Photo by Petra Molnar, October 2020)

In border frontiers such as Greece, far-right extremism and anti-migrant sentiments have been reaching a boiling point, with the island of Lesbos becoming an epicentre for extreme right groups all across the EU.[148] For example, groups like the DisInfaux Collective have been tracking the links between anti-migrant violence and the rise of the far right in Greece.[149] However, in a repudiation of the extreme right, the Greek Supreme Court ruled on October 7th 2020 that Golden Dawn, a political party which previously held a minority position in parliament, acted as a criminal organization and found various of its members guilty of murder and assault.[150] These attacks included multiple assaults on migrants, stoking of xenophobia, inciting hatred, and attempted murder. This 'criminal organization' designation is the first time since the Nuremberg trials that a political party has been designated as such, hopefully sending a strong message globally.

## MAKING IT HAPPEN: PUBLIC PRIVATE PARTNERSHIPS

The lack of adequate technical capacity within government and the public sector can lead to potentially inappropriate over-reliance on the private sector. Adopting emerging and experimental tools without in-house talent capable of understanding, evaluating, and managing these technologies is irresponsible and downright dangerous, as the companies and corporations hold the balance of power when determining what technology is developed and deployed, and subsequently procured by governments. Private sector actors have an independent responsibility to make sure technologies that they develop do not violate international human rights and domestic legislation. Yet much of technological development occurs in so-called "black boxes," where intellectual property laws and proprietary considerations shield the public from fully understanding how the technology operates. Powerful actors can easily hide behind intellectual property legislation or various other corporate shields to "launder" their responsibility and create a vacuum of accountability.

These practices also give rise to the Border Industrial Complex,[151] or the confluence of border policing, militarisation and financial interest. States are seeking to leave people on the move, refugees and undocumented people in particular, beyond the duties and responsibilities enshrined in law through an overreliance on the private sector to ensure technological experimentation occurs outside of sovereign responsibility.[1 52] The growing role of the private sector in the governance of new technologies highlights the movement away from state responsibility to create governance structures in accordance with domestic and international principles under guise of proprietary technology, private interests, and discretion.

Increasingly, private companies are setting the migration control agenda. Whether through the automation of immigration and refugee applications, "lie detectors" powered by AI at borders or the drone surveillance of refugee boats, the private sector is an integral player in the management of migration. States and government departments over-rely on private actors to develop and deploy technologies used to control migration. As a result, government liability and accountability get watered down and shifted to the private sector, where the legally-enforceable rights that

allow individuals to challenge governments may not exist .[153] People on the move get caught in the middle, leading to grave human rights abuses and infringements on fundamental freedoms. The opaque, private technologies deployed at border zones to control migration need to be regulated.

While in Europe the GDPR is often touted as a robust rights-protecting mechanism, it is insufficiently broad to encapsulate the various human rights infringements inherent in migration management technologies, particularly when these technological experiments rely on automated decision-making, span multiple jurisdictions, and involve public-private partnerships.[154] We encourage states to enable data protection authorities (DPAs) with sufficient means to enforce the GDPR and the Law Enforcement Directive and to require DPAs to do so. When considering complementary context-specific legislation, such as the upcoming policy initiatives on Artificial Intelligence from the EU, we need to specifically consider the inclusion of red-lines, the requirement of human rights impact assessments before deploying AI-based technologies, and the abolition of the use of automated decision-making technologies which cause harms to marginalized communities and infringe upon their human rights.

## WHO BENEFITS? WHO IS A TECHNOLOGICAL TEST SUBJECT?

While the use of migration management technologies may lead to faster decisions and shorten delays, they may also exacerbate and create new barriers to access to justice. At the end of the day, we have to ask ourselves, what kind of world are we actively creating, and who actually benefits from the development and deployment of technologies used to manage migration, profile passengers, or other surveillance mechanisms?

Technology is far from neutral. It reflects norms, values, and power in society. The development of technology occurs in specific spaces that are not open to everyone and its benefits do not accrue equally.[155] Decision-making around implementation occurs without consultation or even sometimes without the consent of the affected groups.[156] There is also the deliberate confusion around the spread of technology, again to obfuscate debate, regulation, and any incursions to innovation leading to profit.[157]

Technology replicates power structures in society. Affected communities must be involved in technological development and governance. While conversations around the ethics of AI are taking place, ethics do not go far enough. We need a sharper focus on oversight mechanisms grounded in fundamental human rights, mechanisms that recognize the very real risks and harms of technologies used to manage migration, often at the expense of human rights and human lives.


CLOSE
MORIA!
SMASH
FASCISM


MIGRATION
IS NOT A CRIME


NO BORDERS
NO NATIONS

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ADDITIONAL FOOTNOTES

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# Technological Testing Grounds

## Migration Management Experiments and Reflections from the Ground Up

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*Graffiti in Mytilene, Lesvos*
*(Photo by Kenya-Jade Pinto, September 2020)*