
Technological Testing Grounds and Surveillance Sandboxes: Migration and Border Technology at the Frontiers

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ABSTRACT:

Experiments with new technologies in migration management are increasing. From Big Data predictions about population movements in the Mediterranean, to Canada's use of automated decision-making in immigration and refugee applications, to artificial intelligence lie detectors deployed at European borders, States are keen to explore the use of new technologies, yet often fail to take into account profound human rights ramifications and real impacts on human lives.

Our recent report, Technological Testing Grounds: Migration Management Experiments and Reflections from the Ground Up, which can be found at: <https://edri.org/wp-content/uploads/2020/11/Technological-Testing-Grounds.pdf>, attempts to interrogate the growing panopticon of surveillance and automation, foregrounding the lived experiences of people on the move in order to highlight the all-encompassing and unregulated nature of these technological experiments on the frontiers of the border industrial complex.

INTRODUCTION: HARMFUL BORDER TECHNOLOGIES ARE ON THE RISE

*"We are Black and border guards hate us. Their computers hate us too."*¹

– Adissu, living without immigration status in Brussels, Belgium

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In the twenty-first century, 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 across the globe 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 in the Mediterranean and Aegean seas,³ to automated decision-making in immigration applications in Canada,⁴ and Artificial Intelligence (AI) lie detectors at European borders.⁵ These innovations are often justified under the guise of needing new tools to strengthen borders and control migration in novel ways. However, often these technological experiments do not consider their profound human rights ramifications and real impacts on human lives.

Now, as governments move toward biosurveillance to contain the spread of the COVID-19 pandemic,⁶ we are seeing an increase in tracking projects and automated drones.⁷ If previous use of technology is any indication, refugees and other people crossing borders will be disproportionately targeted, and negatively affected by this new tracking technology. Virus-targeting robots⁸, cellphone tracking,⁹ and AI-based thermal cameras¹⁰ can all be used against people crossing borders, with far-reaching human rights impacts, exacerbating systemic discrimination and racist border logics that have been historically weaponized against communities on the move.

This use of technology to manage and control migration is also shielded from scrutiny because of its emergency nature. In addition, the basic protections available to more politically powerful groups, such as citizens with access to lawyers or robust legal mechanisms redress and oversight 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 by involving their perspectives only as an afterthought.

Our recent report, *Technological Testing Grounds: Migration Management Experiments and Reflections from the Ground Up*, 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. 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, featuring over forty interviews with refugees in Belgium and Greece. 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.

A NOTE ON TERMINOLOGY, PHOTOGRAPHY AND VISUAL REPRESENTATION

As part of our interdisciplinary project design, our report and this piece, as published on the *Forum's* website, 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.

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 racial bodies that do not respect people's individual stories.¹¹

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, but in reality, these categories often intersect. 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. This more inclusive terminology also highlights 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 that have traditionally been marginalized, such as refugees and asylum seekers, the ecosystem of migration management technologies affects us all.

THE ECOSYSTEM AND POLITICAL ECONOMY OF BORDER TECH EXPERIMENTS

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 interven-

tions at and around the border has very real impacts on people's lives, exacerbated by a lack of meaningful governance and oversight mechanisms of these technological experiments.

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. This data-gathering also includes the expansion of existing mass-scale databases that underpin these practices to sensitive data, especially biometrics. Such data and technology systems provide an enabling infrastructure for many automated decision-making systems with potentially harmful implications. The

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Politics also cannot be discounted, as migration management is inherently a political exercise. Migration data has long been politicised by states to justify greater interventions in support of threatened national sovereignty and to bolster xenophobic and anti-migrant narratives.¹²

The state's ultimate power to decide who is allowed to enter and under what conditions is strengthened by ongoing beliefs in technological impartiality.¹³

The role and influence of the private sector also plays a part in determining migration. The unequal distribution of benefits from technological development privileges the private sector as the primary actor in charge of development, with the states and governments who wish 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, and affected groups remain the subject, relegated to the margins.¹⁴ 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.

These power and knowledge monopolies are allowed to exist because there is no unified global regulatory regime governing the use of new tech-

nologies, in migration, 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 human rights impacts of these state and private sector practices in migration are 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, including freedom from discrimination, privacy rights, and various procedural concerns.

Unfortunately, the viewpoints of those most affected are routinely excluded from the discussion, particularly around areas of 'ethically-fraught' usages of technology. There is a lack of contextual analysis when thinking through the impact of new technologies of migration 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.

SNAPSHOT FROM THE GROUND: SURVEILLANCE SANDBOXES ON THE FRONTIERS OF EUROPE

Certain places serve as testing grounds for new technologies, and these places are usually 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 on the island of Lesbos. We have visited Lesbos in the aftermath of this fire a number of times 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 without food or water,¹⁵ tear-gassed,¹⁶ and then herded into a new

camp hastily built on the grounds of an old shooting range on a windswept peninsula.¹⁷ 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 allowing people to leave the island camps or coming up with a meaningful plan after years of inaction, the EU's Migration Pact explicitly doubles down on containment and border security. The Pact opens the door to increasingly more draconian tools of surveillance that use new technologies, including facial recognition technologies—not just on adults but also on minors.¹⁸ More and more, violent uses of technology work to push European borders farther afield,¹⁹ contributing to policies of border externalization,²⁰ thus making Europe's migration issues someone else's problem. These policies have direct and dire consequences—such as drownings in the Mediterranean,²¹ pushbacks to Libya²² and Turkey, including using flotation devices,²³ 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,' as it is called, act as testing grounds for new technologies and surveillance mechanisms.²⁴ On Friday March 26th, 2021, Frontex, the EU's border force, put out a press release, proudly stating it commissioned a fulsome report from the Rand Corporation on various uses of Artificial Intelligence in border operations, including: "automated border control, object recognition to detect suspicious vehicles or cargo and the use of geospatial data analytics for operational awareness and threat detection."²⁵ In Greece, the five proposed Multi-Purpose Reception and Identification Centres (MPRICs) on Lesbos, Samos, Chios, Leros, and Kos have all been reported to include "camera surveillance with motion analysis algorithms monitoring the behaviour and movement of centre residents."²⁶ These camps are generously funded by the European Union. Drones, along with cameras, are also being used along the Evros land border with Turkey in an increasing push to militarize migration management.²⁷

In September 2020, FRONTEX also announced that it was piloting a new aerostat maritime surveillance system, using Greece as a testing ground.²⁸ 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.²⁹ FRONTEX in particular has been clear in its messaging to position itself as an agency apt at both controlling migration as well as the spread of COVID-19. According to a

press release from May 2020, FRONTEX stated “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.”³⁰

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.³¹ Held in the fall of 2011, this Congress was a gathering of public and private actors eager to address ‘threats’ such as ISIS’ threat “to send 500,000 migrants to Europe” and “Migrants and refugees streaming into Europe from Africa, the Middle East, and South Asia.”³²

The use of technology is never neutral—it reinscribes the way that powerful actors are able to make decisions that affect thousands of people. Along with Big Tech, big money is also involved in the management of borders, with private security companies making major inroads in the border industrial complex with lucrative contracts procured by governments for shiny new tech experiments, all presented as
a way to strengthen border security.³³

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These technological experiments also play up the ‘us’ vs ‘them’ mentality at the center of migration management policy. Instead of opting for long-term and viable redistribution of resources across the EU, and timely processing of people’s asylum, turning to techno-solutionism and migration surveillance will only exacerbate deterrence mechanisms already so deeply embedded in the EU’s migration strategy.³⁴

WHO BENEFITS? WHO IS A TECHNOLOGICAL TEST SUBJECT? WHAT IS NEXT?

The reach of techno-solutionism in border management is growing. Private sector actors are increasingly able to set the agenda of what counts as worthy priorities, and states are leaning into anti-migration rhetoric in order to strengthen the global border industrial complex. While the use of migration management technologies is sometimes presented as a way to lead to faster decisions regarding accepting or rejecting applications and shortening delays in processing time, these unregulated technological experiments also exacerbate existing barriers to access to justice, while also creating new ones.

In light of these issues, we have to ask ourselves, what kind of world do we want to create, 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. As seen in the migrant crisis, the development of technology occurs in specific spaces that are not open to everyone, and its benefits do not accrue equally.³⁵ Decision-making around implementation occurs without consultation or even sometimes without the consent of the affected groups.³⁶ There is also the deliberate confusion around the spread of technology, again to obfuscate debate, regulation, and slowing of innovation leading to profit.³⁷

Technology replicates power structures in society. Affected communities must also 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.³⁸ *f*

ENDNOTES

- 1 All names and identifying characteristics have been anonymized throughout this report.
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