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DIGITAL TECHNOLOGIES FOR MIGRATION CONTROL AT THE SPANISH SOUTHERN BORDER

2024

A JOURNEY TO THE CROSS-CUTTING EDGE OF DIGITAL AUTOMATION IN CEUTA AND MELILLA AND THE CANARY ISLANDS

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EuroMed Rights is a network of 68 civil society organisations based in the Euro-Mediterranean region. Its work is aimed at promoting and protecting human rights and democracy in the Southern and Eastern Mediterranean regions and at influencing the policies of major European actors towards these areas.

AlgoRace is a project based in Spain that aims to bring an anti-racist perspective to the public debate on Artificial Intelligence (AI) and bring it closer to migrant and racialised communities.

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TABLE OF CONTENTS

EXECUTIVE SUMMARY

In the last two decades, the use of digital technologies at the European Union (EU) borders has become a trending debate that aims to interrogate the use of biometric databases or surveillance technology to manage migration. The EU is investing more resources into technologies that track migration flows, create digital traces through fingerprints or monitor sea borders with drones or cameras. As a result, the governance of migration in the EU has been transformed through different digital technologies. However, a journey into the Spanish southern border reveals two-sides of this transformation. While there are new systems being implemented, fieldwork encounters reveal that the implementation of such technologies is costly and slow.

The introduction of Artificial Intelligence (AI) is not explicitly evident yet in Ceuta, Melilla nor the Canary Islands. This border is characterised by decade-old protocols and mismanagements due to a lack of resources. Official narratives rely on the idea that digital technology is needed to improve the control of borders. However, there is an overall impression that there are not enough means to support this infrastructure, let alone providing training for these systems. Introducing automated systems for detection tasks is seen as useless if there are not enough ships available to conduct the rescue operations.

Borders are heterogeneous infrastructures, and so are digital technologies implemented across different territories. The points of arrival in the Spanish territory are very different. For instance, Ceuta and Melilla are the EU's only land borders with Africa, while the Canary Islands are the main point of the Atlantic route to Europe. Despite these geographical and political differences, there have been attempts to standardise the surveillance, detection and management of migration, such as the Integrated External Surveillance System (SIVE). However, the use of this technological system today differs in mainland Spain, Ceuta and Melilla and the Canary Islands, making disparities in the technification of the borders even more evident. The Spanish border authorities have deployed extensive surveillance equipment to monitor the territorial border between Spain and Morocco, such as drones, thermal cameras and facial recognition systems in Ceuta and Melilla. On the other hand, in the Canary Islands authorities rely more on software aimed to detect vessels and people.

While some of these technologies are implemented at the national level, EU technologies are also deployed at the Spanish southern border. Alongside the main biometric databases (EURODAC, SIS II and VIS), the Entry/Exit System (EES) will be also deployed in Ceuta, Melilla and the Canaries. However, the data collection and entry is heterogenous given differences in practices observed at this border.

The inaccurate data collection remains one of the biggest issues: people arriving in small boats are often not properly identified and their personal information is wrongly registered in databases that keep track of their legal status in Spain.

The first chapter of this report offers an analysis into the current situation of Ceuta and Melilla. Since the massacre of the 24th of June 2022, when 37 people died and 76 went missing at the Nador-Melilla border[1], analogical and digital tools have been combined and deployed to reinforce the only land border that the EU has in the African continent. The geographical and demographic specificities of this border offer a unique opportunity to analyse controversial strategies, such as border externalisation, that are currently being undertaken by Spain, the EU and Morocco to deter migration, which in several cases uncover human rights' violations.

For instance, the Spanish government has awarded multimillionaire contracts to tech companies for assembling technological infrastructure, including thermal cameras, drones with AI, lasers, among other digital technologies.[2] This chapter incorporates interviews with border authorities and several other stakeholders involved in the context of migration control in Melilla.

The second chapter provides an investigation of the situation in the Canary Islands. This chapter is structured by providing a chronological overview of the way in which technology intersects with the Atlantic route, i.e. people departing from countries such as Morocco, Mauritania, Senegal or Mali, amongst others. The proximity to the African continent and the absence of a physical border makes detection a priority to regional authorities who rely on sea surveillance technologies such as SIVE a poorly operated system openly described in the islands as cutting-edge technology that has cost millions of euros from European and national funds.

The incorporation of AI-driven technologies is mainly focused on detection tasks: the SIVE has been updated with image processing tools, such as individuals or boat detection. On the other hand, Salvamento Marítimo, which is a public company that carries out search and rescue operations in the areas of responsibility assigned to Spain, has tendered contracts to purchase smart sensors, drones and even machine learning-based software to equip its boats.

Despite the hype on AI-based technologies, other solutions such as GPS and satellite phones still have a relevant role in the rescue operations, as stated for this report by many of the agents involved in the migration process, such as lawyers, NGOs and police. Similarly, national databases are also playing a key role in the governance of migration in Spain. However, protocols to register the data of people that arrive in small boats differ from island to island, which makes the process complicated to standardise and results in bureaucratic mismanagement that prevail in automated national databases.

This report points out that the border infrastructure uses both analogue and digital systems, a fact that shifts how we should investigate borders as socio-technical elements. While many

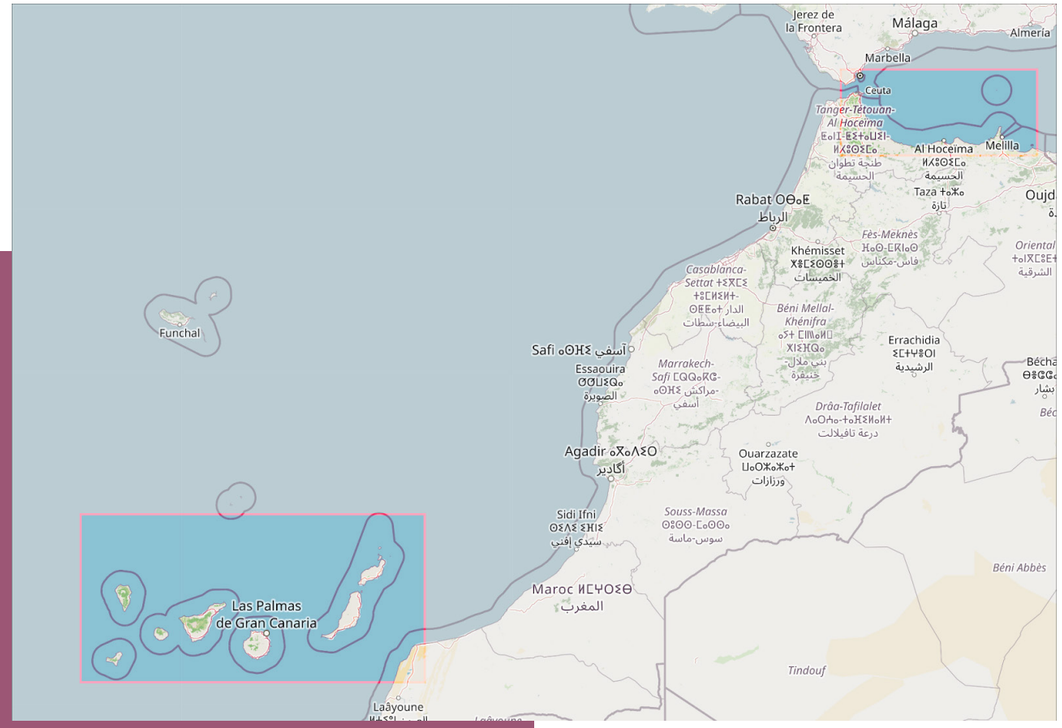
1 Alberto Senante, "Tragedia en la valla de Melilla: Un año de impunidad tras la masacre" Amnesty International, June 23, 2023.
2 José Bautista et al. "Fronteras SA la industria del control migratorio" Por Causa y El Confidencial, July 15, 2022. Available at: https://www.elconfidencial.com/espana/2022-07-15/fronteras-industria-control-migratorio_3460287/

technological tools in the migration process have been deployed in these territories, there is still a notable reliance on more analogical procedures.

Technologies such as databases, drones, cameras and radars used in Ceuta and Melilla depend on the technical capacity of agents of the Guardia Civil, National Police and Frontex and the private companies that these authorities subcontract. A large number of daily decisions are still made based on their own experience but relying on digital evidence gathered by these technologies.

This socio-technical context at the southern Spanish border has led to more human rights violations. Racial profiling and difficulties in accessing asylum are mechanisms that reinforce criminalisation of migrants. Moreover, using infrastructural elements at the borders such as fences and ditches on the Moroccan side and anti-climbing cylinders on the Spanish side has been proved to be dangerous for people trying to cross this border.

Overall, it appears that the introduction of digital technologies in the Southern border is once more not oriented to improve the conditions in which migrants are attended to in the islands, but rather speed up the bureaucratic process of reallocation and possible return, in line with other European countries. However, digital technology at the border is also announced as a marketisation of this infrastructure promoting innovation and sophistication. Thus, it is relevant to scrutinise the use of digital technologies at the border through critical lenses and fieldwork methodologies to demystify the idea of so-called smart borders. This reflection, along with other considerations, are addressed in the final section of the report.



Geographical location of Ceuta and Melilla and the Canary Islands. Source: Javier Sánchez Monedero

METHODOLOGY NOTE

This report aims to provide a comprehensive overview of how technology intersects with the Spanish southern border, taking into account the distinctive peculiarities of Ceuta, Melilla, and the Canary Islands. It has been produced by an investigative journalist and an academic researcher with the support of two researchers and computer scientists with a background on the intersection between the use of digital technologies and migration.

Most of the information has been obtained through fieldwork visits and semi-structured interviews carried out in Ceuta, Melilla and the Canary Islands. This includes 34 interviews with law enforcement agents and border authorities at national and EU level, such Guardia Civil, National Police and Frontex, but also NGOs, lawyers, juvenile educators working at minor and detention centres, journalists, social workers, migration experts, private actors, medical examiners, prosecutors and more.

The diversity of the different actors encompasses those of the security forces (the Guardia Civil and the National Police), who are in charge of border surveillance and control; workers of public institutions, who manage the Temporary Immigrant Stay Centres (CETI); the NGOs, whose work is focused on the defence of the fundamental rights of asylum seekers; among other testimonies from journalists and political figures.

This diversity of sources represents, on the one hand, a challenge when it comes to explaining, in a fair and holistic manner, the context of the Spanish southern border, as well as the deployment of technology as a method of containment for people on the move. On the other hand, heterogeneity offers a unique opportunity to access an up-to-date understanding of the inner workings of the dynamics of border security and the mechanisms of immigrant reception.

The fieldwork was carried out between March and April 2024. In addition to the interviews, the fieldwork complements the research with an updated analysis of the current state of the physical border between Ceuta and Melilla and Morocco. It also provides an updated analysis of the use of digital technologies in the Canary Islands.

The findings of the report were complemented with Freedom of Information Access (FOIA) requests to the Spanish Home Office; interviews with the private firms providing hardware and software for migration surveillance and management; and an extensive review of existing reports, official documents and academic literature on border management in Spain and Europe. Most of this existing research focuses on the irregularities that take place in the migration infrastructure and the consequent violation of fundamental human rights.

ACRONYMS

CATE: Temporary Assistance Centres for Foreigners
CCN: National Coordination Centre
CCRC: Regional Coordination Centre of the Canaries
CEAR: Spanish Commission for Refugees
CETI: Temporary Stay Centre for Foreigners
CIE: Migration Detention Center
COS: Operations and Services Centre
EFV: Fixed surveillance stations
EES: Entry/Exit System
eu-LISA: EU Agency for the Operational Management of Large-Scale IT Systems
EURODAC: European Dactyloscopy
EUROPOL: European Union Agency for Law Enforcement Cooperation
Frontex: European Border and Coast Guard Agency
IMLCF: Legal and Forensic Medicine Science Institute
NIE: Foreigner Identity Number
SAR: Search and Rescue protocols
SIVE: Integrated External Surveillance System
UEFE: Forensic Age Estimation Unit

Policía Nacional: responsible for law enforcement at the state level. Dependent of the Home Office (Ministerio del Interior).
Guardia Civil: military law enforcement organ that operates nationally together with Policía Nacional. It is also dependent on the Home Office.
Red Cross: the only NGO entitled to provide medical assistance to migrants. Subcontract of the Ministry of Inclusion, Social Security, and Migration.
Salvamento Marítimo: public civilian organisation responsible for maritime security in Spanish sea territory.

INTRODUCTION | TOWARDS A REDEFINITION OF THE BORDER SPACE

To discuss the notion of the border in the present context is to refer to a dynamic phenomenon. Despite their fortified facades, contemporary borders are neither merely physical nor can they be interpreted as linear demarcations in a strict sense. Rather, they are porous scenarios in which there are elements of fissure, consensual or non-consensual crossings.[3]

This conceptual framework will be used to undertake a comprehensive analysis of the Spanish southern border,[4] which must be understood as a complex assembly whose infrastructure is sustained not only through state-of-the-art technologies (to speak of "intelligent border" is too hasty), but also depends to a large extent on analogical tools and other actors that shape it and mould it, from one side and from the other, very often breaking its geographical and demographic limits.

In this context, strategies such as the externalisation of borders or the use of technology for the "efficient" detection and expulsion of people on the move have been implemented at an unprecedented pace in the EU over the last decade. The Spanish government has been systematically investing in surveillance technologies at the border.[5] In this report, we will examine in detail the technological assemblage of the border in the specific case of Ceuta, Melilla and the Canary islands and its effects on migration.

The evidence found after our investigation suggests the existence of a slow pace deployment and development of new technologies, both digital and analogical. For instance, the installation of new anti-climbing equipment in the walls of Ceuta and Melilla, as well as the upgrade of thermal cameras, drones with artificial intelligence, laseric illuminators, or biometric tools for facial and fingerprint recognition.

The socio-technical infrastructure of the border raises serious human rights concerns. The restriction of the right to asylum, the criminalisation of migration, the institutional violence and

3 Keina Espiñeira. "Colonialidad en la frontera Ceutí. Sebta mashi Schengen, mashi Euroba," Revista de estudios culturales, 2 (2022): 5-18.
4 Iridia, Novact and Fotomovimiento. La frontera sur: Accesos terrestres. Barcelona: 2017.
5 José Bautista, "Fronteras SA: la industria del control migratorio," Por Causa y El Confidencial, August 15, 2022. https://www.elconfidencial.com/espana/2022-07-15/fronteras-industria-control-migratorio_3460287/

racial segregation through the use of biometric tools are just some of the serious violations that will be addressed throughout this report.

Furthermore, as people on the move constantly seek methods of resistance and subversion against the political and technological obstacles imposed by digital borders,[6] alternative migration pathways might result in important changes not only in routes, but also in demographics. The surge in boat arrivals taking the Atlantic route to the Canary Islands or the growing presence of asylum seekers from Latin America in Ceuta and Melilla proves how infrastructure and policy changes at the border impact on migration routes.

6 Georgios Glouftsios & Stephan Scheel, "An inquiry into the digitisation of border and migration management: performativity, contestation and heterogeneous engineering," Third World Quarterly, 42:1, 123-140, (2021): 133. DOI: 10.1080/01436597.2020.1807929

CHAPTER I | CEUTA AND MELILLA

"New tools and changes in Spain-Morocco relations have led to a big decrease in people crossing the fence"

I. Contextualization of the Spanish southern border

Geographical analysis is the starting point for understanding the dimension and complexity of the border areas of Ceuta and Melilla, two autonomous cities located in the north of Morocco and which constitute the only land borders of the European Union in Africa. The coexistence of different demographic groups makes both cities a veritable melting pot of cultures. In the case of Melilla, which has been examined in more detail in this study due to the larger availability of sources, it is known for being a space of social and religious encounter where catholic, jewish and muslim traditions converge.[7]

Starting with Ceuta, the city is located on the Strait of Gibraltar and forms part of a geopolitical triangle that includes Spain, Morocco and, to a lesser extent, the United Kingdom. With an extension of 18.5km2, it is the largest of the two maritime enclaves and, consequently, the one with the largest border extension. It is also the closest to the peninsula, with only 14 km separating it from the shores of the Iberian Peninsula. For its part, Melilla, with a less extensive area, is located on the peninsula of Cape Tres Forcas, adjacent to the Moroccan city of Nador, and only 100 km from the border with Algeria.

In recent decades, the increase of migratory pressure and number of asylum seekers in the West Mediterranean Basin have caused a rise of techno-political interventions by Spain and the EU, and thus border control and surveillance technologies have been developed and deployed exponentially. Nowadays, with the incorporation of new artificial intelligence tools, Ceuta and Melilla have become real test laboratories where the new detection tools are tested on a daily basis.

These are not the only scenarios in which the deployment of the digital or intelligent border of the European Union is being carried out. The realities of Italy, Malta, Greece, or the Canary Islands present similar and, at the same time, singular characteristics. The migratory routes, and the narratives of the actors who are part of them, acquire the peculiarities and problems of each geographical context. The case of Ceuta and Melilla contributes to gain perspective of the broad and complex panorama of the southern European border.

This chapter presents an updated analysis of the intricate border reality of Ceuta and Melilla, accompanied by a comprehensive examination of the surveillance and control technologies deployed in both territories and their impact on individuals on the move. The research is based on the results of extensive fieldwork and takes as its starting point the different narratives of the actors involved in the North African border. Specifically, these interviews integrated various testimonies from different actors: Guardia Civil and National Police, NGOs such as No Name Kitchen and Solidarity Wheels, as well as lawyers, journalists, officers, etc.

The data collected through the interviews suggest that the border infrastructure functions as a techno-symbolic assemblage of power, in which the migration policies of the European Union, the deployment of analog and digital technology by the Spanish State (Guardia Civil and National Police), and the physical resources represented by the Moroccan security forces converge. The following sections will examine the roles of the three key actors in this process.

7 During the fieldwork, the holy week coincided with ramadan. The streets of Melilla were decorated with ornaments belonging to both religious festivities.

Figure A: Carlos Lancho. A bird's eye view of the geography of Ceuta. A large part of the fence is visible, as well as some of the surveillance posts on the Moroccan side.

II. Breaking the "smart" border

The information obtained from the interview with the Guardia Civil indicates that the Melilla border has undergone a significant transformation in a relatively short period of time, approximately two years. The implementation of new analog and digital tools, as well as changes in diplomatic relations between Spain and Morocco, among other causes, has resulted in a significant decrease in the number of people entering "irregularly" through the fence, both by land and sea. Similarly, in certain instances, such as the 24th of June 2022 massacre, the law enforcement operations on both sides of the border have precipitated a climate of violence. This scenario has inevitably led to a dramatic change in the number of entries as well as the migratory routes, which has coincided precisely with the exponential increase in the arrival of migrant boats to the coasts of the Canary Islands.[8]

While the evidence collected through fieldwork does not allow us to conclude that there currently is an elaborate digital infrastructure in place, this does not exclude the incorporation, in a relatively brief period of time, of artificial intelligence tools as part of the current security strategy.[9]

8 See next chapter: Canary Islands

9 As will be explained further on, algorithmic tools for face and fingerprint detection will become part of the entry-exit system ecosystem.

In fact, the technology deployed at the land fence and at Melilla's maritime border integrates both analogue instruments, such as the use of the new "inverted combs" fences, and digital tools, such as the incorporation of thermal cameras and drones.

Furthermore, we got evidence that the integration of biometric tools will be deployed as a component of the current border surveillance strategy.[10]

Much of the funding for this new infrastructure is coming and will continue to come from European sources. The multi annual budget of the European Union for the period 2021-2027 provides funds for police cooperation for the purchase of instruments already in use at the border and those to be implemented in the near future. On the one hand, there is the Integrated Border Management Fund (IBMF), which aims to curb illegal immigration, combat cross-border crime and implement visa policy (see table below).[11] On the other hand, the Asylum, Migration and Integration Fund (AMIF)aims to articulate a common asylum and immigration policy.[12]

The considerable amount of the European funding, detailed in a recent report by EuroMed Rights and Statewatch, points out that this "technification" of the southern Spanish border "has become central to the external fortification of the European Union, with sophisticated systems of video surveillance, artificial intelligence and biometric technology to close the way to migration and control the entries and exits of the population of third countries".[13]

Name of operation	% EU co-funding	EU contribution granted
SENECA/SIRDEE Information System in the field of borders and visas	75 %	4.000.000,00 €
Technical support activities for the management and monitoring of technology projects in the field of SGSICS	100 %	1.592.082,52 €
EES System Implementation	75 %	1.237.045,25 €
Advanced Passenger Information System (APIS)	100%	1.086.584,12 €
ETIAS National Central System	100%	1.143.750,00 €
National Police Border Control System	75%	1.123.500,00 €

10 Delegación del Gobierno en la Ciudad de Melilla, "Todos los Estados miembros de la UE pondrán a la vez en funcionamiento el Entry/Exit System en sus fronteras," (mpt.gob.es) Ministerio de Política Territorial y Memoria Democrática April 4, 2024.

11 Centro Tecnológico de Seguridad (CETSE), "Fondo de Seguridad Interior (ISF 2021-2027)," Ministerio del Interior. https://cetse.ses.mir.es/publico/cetse/es/proyectosEuropeos/fondoISF/marcoFinanciero-2021-2027/proyectosEuISF

12 Centro Tecnológico de Seguridad (CETSE), "Marco financiero 2021-2027 (ISF)," Ministerio del Interior. https://cetse.ses.mir.es/publico/cetse/es/proyectosEuropeos/fondoISF/marcoFinanciero-2021-2027

13 Chris Jones, et al, Europe's Techno Borders (Copenhagen and London: EuroMed Rights and Statewatch, 2023), https://euromedrights.org/wp-content/uploads/2023/07/EuroMed-Rights_Statewatch_Europe-techno-borders_EN-1.pdf

Name of operation	% EU co-funding	EU contribution granted
Acquisition of SECUGEN devices (BLUECHECKS)	75%	1.669.200,00 €
Acquisition of registration tablets for the Entry and Exit System (EES) at the National Police	75%	593.850,00 €
Contracting of the necessary equipment for the automation of the Entry and Exit System at the land border of La Línea de la Concepción	75%	633.975,00 €
Reinforcement of the technological capabilities of the borders of Campo de Gibraltar and Melilla and updating of the Control Centers for the National Police: Integrated Security and Border Surveillance System (SISVIFRON)	75%	936.650,12 €
Support and maintenance of the Schengen Information System (SIS) and the SIRENE Offices	100%	3.630.218,30 €

Figure B: Table of the budget provided by the Spanish Ministry of the Interior detailing the European funds allocated to each operation, assuming a total amount of €17,646,855.31. This public information does not include other indirect funding through other programs. See:https://cetse.ses.mir.es/publico/cetse/en/proyectosEuropeos/fondoISF/marcoFinanciero-2021-2027/proyectosEuBMVI.html

1. The Analogical Border: The Fence

A visit to the physical fence in Melilla, at night and accompanied by Guardia Civil agents, revealed that the perimeter consists of three wire fences of different heights, recently modernised, which run parallel to each other for 12 kilometres. The outer fences are five metres high, while the inner fence is two metres high. There is a small space between each of these walls, which acts as a narrow road to delay the entry of people crossing the first line of the fence.

At the same time, the structure is reinforced at the edges. Currently, the fence has sections called "inverted combs", which, as the name suggests, are made up of a system of iron bars shaped so that they bend downwards and end up facing the outside of the wall. Their peculiar semicircular shape, which increases the height of the fence by several centimetres and gives it an intimidating appearance, is intended to make it more easy to detain people that intend to cross, as well as to prevent "mass jumps".

This system of inverted combs, which has been also installed in Ceuta, has replaced the former concertina wires, a system of coiled wires with two-pronged spikes. The obvious danger they presented to the lives of people trying to climb the fence was denounced by several human rights organisations[14] and subsequently banned by mandate of the European Union. However, the concertinas are still in use today on the Moroccan side of the border.

14 Amnesty International, "Truth, Justice, Reparations: Spain and Morocco must provide answers to victims of human rights violations in Melilla," December, 13, 2022. https://www.amnesty.org/en/latest/campaigns/2022/12/truth-justice-reparations-spain-and-morocco-must-provide-answers-to-victims-of-human-rights-violations-in-melilla/

Figure C: Carlos Lancho. A picture of the Melilla fence took at night near the Barrio Chino closed check point

Figure D: El Faro de Ceuta. A bird's eye view of the Ceuta fence showing the inverted combs.

For its part, Morocco is also a major player in the operation of the land border, so in order to understand the structure of the fence, it is also important to consider the tools used on the Morrocan side. As the Guardia Civil pointed out, **"while the most technological means are those of the European front, Morocco provides the vital physical resources"**, meaning the agents of the Moroccan Royal Guard who are stationed in watchtowers along the 12-kilometre perimeter. The construction of trenches several metres deep, the use of concertinas and the establishment of police posts are part of the Moroccan control and surveillance strategy.[15]

The two ends of the land fence end at the sea at the Paseo Marítimo of Melilla and the Barranco del Quemadero. According to the Guardia Civil, these two crossings have become the most frequent due to the installation of the concertinas and the reinforcement of the Moroccan security forces. At the southern dyke of the fence, close to the Beni Ensar border crossing, Spain started building in 2020 a new "prototype" fence that is 10 metres high, twice as high as the one that currently runs along the border. The upper part of the fence is reinforced with "anti-climbing" cylinders, which have also been integrated in Ceuta.[16]

15 See: the Border as Political Bargain

16 Gabriela Sánchez, "Así es la nueva valla de Melilla: 10 metros de altura, barrotes y un cilindro antitrepado," October 14, 2020. https://www.eldiario.es/desalambre/foto-nueva-valla-melilla-10-metros-altura-barrotes-cilindro-antitrepado_1_6293160.html

"Morocco play a strategic role in border control and is a key player in the European Union's externalisation migration strategy"

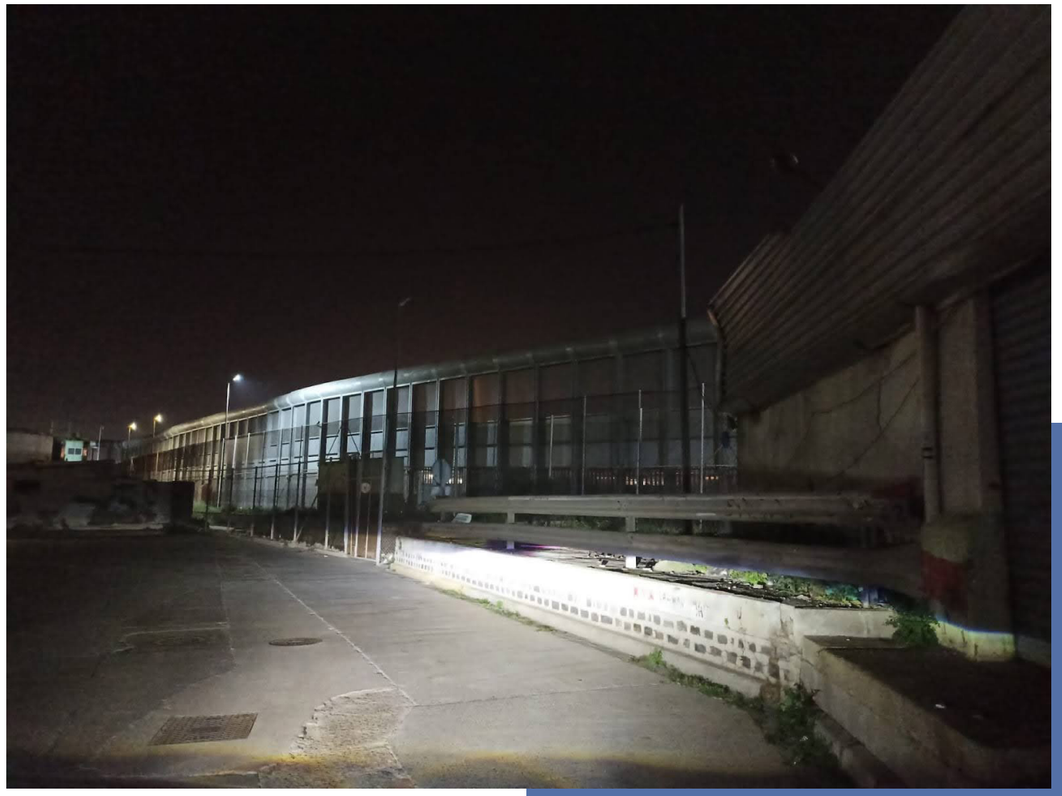


Figure E: Carlos Lancho. The new prototype of the Melilla fence took at night near the Beni-Enzar closed check point

Figure F: El Faro de Ceuta. The new prototype of the Ceuta fence showing the anti-climbing cylinders.

2. The digital border

At the end of 2023, Thales Group, a multinational company specialised in defence but also on the development of AI technology, was selected by the State[17] to deploy in Melilla a new surveillance system composed of fixed stations with high resolution day and night cameras, thermal cameras for night vision, laser illuminators, as well as the Horus software, for "supervision and control" for remote assistance. As stated by Thales itself, the Temporal Consortium formed with Trablisa resulted in a "new system [that] represents a qualitative and quantitative improvement in the surveillance of Melilla's borders, which now has an integrated surveillance system"[18].

Although contracts between the State and Thales are not a novelty[19], it is important to remember that private companies play a fundamental role in the outsourcing strategy for the acquisition of technology. Whether in their collaboration with NGOs for humanitarian aid purposes or in their participation in the assembly of border surveillance, big tech has become a decisive actor in the configuration of migratory flows.[20]

In a recent interview[21], Thales project manager Sandra García Rodríguez confirmed that "the Horus software is the heart of the new surveillance system of the Guardia Civil in Melilla". The contract, with a budget of 2,499,997.50 euros, represents a move forward modernisation of the equipment for the effective detection of migrants. As stated in the expenditure justification for the concession, the supply and installation of the Integrated Surveillance System for the Guardia Civil of Melilla consists of the installation of five fixed surveillance stations (EFV) on the perimeter of the border for detection and tracking of sea, air and land targets[22], which is explained to be distributed as follows:

- EFV1 at the surveillance post formerly known as Golf 1.
- EFV2 at the Legion barracks.
- EFV3 at the point formerly known as Bravo 4.
- EFVs 4 and 5 in the V centenary tower.

The same document states that the EFVs will be controlled locally and remotely from the Operations and Services Centre (COS), which are already fully operational in both Ceuta and Melilla. Each of these EFVs will be integrated into the COS and will incorporate electronic detection devices with the following characteristics, as specified in the technical specifications[23]:

- Day and night observation and surveillance with the ability to detect, recognize and identify targets (people trying to cross the border inside pateras) also in adverse weather conditions using infrared technology.
- Contribution of cartographic data with information generated by the telemeter, which will be linked to the cartography installed in the COS.
- Monitoring and automatic tracking on the image of both cameras (visible and thermal) as well as performing searches according to various pre-programmed patterns in the system [through] video and photographic recordings.
- Automatic scanning of predefined zones. The operator will have control of all the functions of the observation and surveillance system through the control panel, as well as the movement of the platform, orienting it as needed.
- Display of images from the thermal camera and the on the system monitor and the ability to mark targets with a visible laser illuminator homogenised with the cameras' reticles, as well as to view the recordings that have been made.

According to the justification for the contract, the acquisition of this police equipment and weaponry is justified by the lack of resources (technical means) for border control. As stated in the contract between the Spain and Thales, the incorporation of new technological tools is necessary due to the formation of "group of migrants trying to enter Spanish territory illegally, either through border crossings, the perimeter fence or the sea border breakwaters, [all of which]

17 España, Ministerio del Interior, Suministro e instalación de un sistema integral de vigilancia para la Comandancia de la Guardia Civil de Melilla, compuesto por cinco Estaciones Fijas de Vigilancia (EFV,s) y elementos complementarios de Apoyo al Sistema. Expediente: R/0008/A/22/6. February 22, 2023. https://www.boe.es/buscar/doc.php?id=BOE-B-2023-5349

18 Thales, "Thales entrega el nuevo sistema integral de vigilancia en la comandancia de Melilla," December 13, 2023. https://www.thalesgroup.com/es/countries-europe/espana/press_release/thales-entrega-el-nuevo-sistema-integral-vigilancia

19 El Faro de Ceuta, "La Guardia Civil compra tres cámaras térmicas a Thales España por 237.600€," June 13, 2014. https://elfarodemelilla.es/la-guardia-civil-compra-tres-camaras-termicas-a-thales-espana-por-237-600/

20 Mirca Madianou, "The Biometric Assemblage: Surveillance, Experimentation, Profit, and the Measuring of Refugee Bodies," Television & New Media 20, no 6, pp. 581-599 (2019): 15.

21 Carrasco, Benjamín, "S. García (Thales): El software Horus es el corazón del nuevo sistema de vigilancia de la Guardia Civil en Melilla," InfoDefensa, January, 23th, 2024. https://www.infodefensa.com/texto-diario/mostrar/4689787/s-garcia-thales-software-horus-corazon-nuevo-sistema-vigilancia-guardia-civil-melilla

22 Ministerio del Interior, Memoria Justificativa de Gasto: suministro e instalación de un sistema integral de vigilancia para la Comandancia de la Guardia Civil de Melilla. https://contrataciondelestado.es/wps/wcm/connect/0a1021be-51dc-4d37-a9be-b976957da95e/DOC20220420102547MEMORIA+V2.pdf?MOD=AJPERES

23 Ministerio del Interior. Adquisición de un sistema integral de vigilancia para la Guardia Civil en Melilla. January 27, 2022. https://contrataciondelestado.es/wps/wcm/connect/ef804960-4cc5-43f2-99b0-9841b100a211/DOC20220420094938PPT.PDF?MOD=AJPERES

represent a critical point of entry through the Spanish borders"[24]. It adds that these electronic detection devices are an "effective means of detecting, controlling and tracking immigrants, both day and night".

a. Thermal cameras

Security cameras with thermal sensors, mounted on towers between 10 and 15 metres high (depending on the location of each EFV), are strategically placed at various points along the perimeter of Melilla. During the visit through the border fence, the presence of several of these cameras was observed, for example, near the Quemadero border fence, at the western end of the territory, a point that is particularly monitored due to the constant crossings that take place at night by boat or by swimming.

As explained by the Guardia Civil, the incorporation of infrared light in the security cameras makes it possible to detect heat in the absence of light. These are thermal cameras equipped with a state-of-the-art FPA detector[25], with continuous zoom that ensures a horizontal field of view between 2° and 20° within a wavelength band of 3-5 µm. These instruments allow a more accurate detection of persons attempting to cross the border swimming from the Operations and Services Centre (COS), which then alerts the Maritime Rescue Team articulated through the Groups of Specialists in Underwater Activities (GEAS).

Beyond the efficiency of the integration of these surveillance cameras, it is essential to understand that, within the narrative presented by the Guardia Civil, they represent only one part of the border assembly, since their operation depends on the greater or lesser degree of articulation that exists from the COS. In other words, the cameras serve as a support, but they cannot be considered infallible instruments, since in practice thermal cameras can detect other types of objects or animals. For this reason, the operation of this technology depends to a large extent on the analysis skills and availability of the agents in the command centre.

For example, according to the testimony of the Guardia Civil, one of the methods used by human trafficking mafias is to use the keel of the boats, which is difficult to detect with thermal cameras. The agents from GEAS are able to notice that if the keel of the boats, which are made of unstable materials, is unusually large and protrudes above the waterline, there is a high probability that there are people inside. This has serious implications for the safety of people who, in an attempt to avoid detection by technological means, resort to increasingly dangerous strategies. Accidents have been documented on vessels whose crews, in an attempt to avoid detection by thermal cameras, throw their engines overboard, leaving small boats, already in a precarious situation, adrift in the Atlantic[26].

b. Drones with artificial intelligence

The Guardia Civil of Melilla has recently acquired and deployed[27] three new generation drones on the Spanish-Moroccan border. The purchase, made by the company DJI, includes three new drones, model Matrice 300 RTK, with a transmission capacity of 15 km (the fence of Melilla has 12 km), a video signal with full HD resolution and with automatic frequency changes (between 2.4 GHz and 5.8 GHz) for greater stability in terrain with interference, as is the case of the geography of Ceuta and Melilla, and AES-256 encryption to protect data transmission[28].

In addition, as DJI itself points out, the "business" functions of the drones have built-in artificial intelligence tools to "more efficiently" perform the tasks of "detecting and positioning" their

24 Ministerio del Interior, Memoria Justificativa de Gasto

25 The FPA is used as a thermal detector in infrared cameras. It is basically a type of bolometer that measures electromagnetic radiation that comes from a certain object.

26 Daniel X.O Fisher, "Situating Border Control: Unpacking Spain's SIVE border surveillance assemblage," Political Geography 65 (2018): 67–76.

27 The deployment of the new drones and the recent tensions in Melilla followed the fieldwork.

28 DJI Enterprise. Matrice 300 RTK. https://enterprise.dji.com/es/matrice-300

targets. Some of these functions include, on the one hand, "automated targeting" using the AI Spot-Check tool, which allows the detection and identification of "targets of interest" for "future missions". On the other hand, the drones have "trajectory optimisation" through the Waypoints 2.0 functions, which facilitate the creation of up to 65,535 trajectories for "inspection planning".

Although their design and functions are commercial (the Matrice 300 RTKs are not military equipment), it is not difficult to deduce that some of the functions of these drones could have a direct impact on border control. In the case of the Waypoint 2.0 tool, for example, it could be used to automatically program watch routes for border control without the need for manual intervention by Guardia Civil agents. In the case of AI Spot-Check, its functions could serve as a vessel detector and discriminate between commercial vessels and small boats, replacing the COS in manual vessel detection by replacing human fallibility.

For its part, Ceuta intends to copy the installation of this type of drone on its own border with Morocco. As reported by the newspaper El Faro de Ceuta, the autonomous city of Ceuta is seeking to renew the current fleet of drones operated by the Pegaso team with artificial intelligence tools that will allow a more accurate detection of people trying to cross the fence, differentiating them from birds or other animals[29].

A similar case is that of the Eagle One drones deployed by Frontex in the central Mediterranean, which are responsible for surveillance and monitoring the movements of vessels through radio positions for coordination with the Libyan coastguard. By measuring the trajectories of vessels carrying migrants from their points of origin, route data can be collected and used for future predictions. In this case, Eagle One drones, like the Matrice 300 RTK, are commercial rather than military drones, and therefore their functions are not necessarily effective in the context of the central Mediterranean.

In practice, the technology represented by these new drones used on the border with Morocco is increasingly efficient in collecting aerial images through detailed reading of topographical and human elements. This is aimed not only to enhance the detection and position of people trying to cross the fence, but also to track and monitor them in real time through a direct link with the Operations and Services Centre (COS).

Moreover, the investment in replacing obsolete instruments with artificial intelligence tools seems to be part of a migration strategy based not only on the detection of people at the border, but also on the use of specific tools like drones to gather ground data to improve the distinction of commercial vessels from traffickers. Similarly, their autonomy (approximately 55 minutes and depending on the frequency of battery changes) and predictive capacity seem at first glance to offer a significant advantage over human agents in terms of effectiveness and cost.

However, just a few weeks before the DJI drones were introduced at the Melilla border, the interview with the Guardia Civil provided a broader perspective on the use of these instruments in the field. The information obtained suggests that the most frequent use of drones is currently limited, although not exclusively, to the detection of people trying to cross the border by sea, rather than by land, which is much more difficult due to the environmental conditions. So far, drones have had a "tactical" function based on supporting the operations in "rescue, assistance and return" operations and improving visibility during night operations at both ends of Melilla's maritime border (Dique Sur and El Quemadero).

At the same time, the integration and implementation of these new tools at the border is not without certain actual use limitations. This is particularly the case given Morocco's role as an important actor in migratory flows. As will be explained in more detail, the common denominator of all the interviews conducted was the importance of the decisions taken by the Moroccan authorities in border surveillance. In this sense, the effectiveness of drones and thermal cameras depends on the efficacy of the "physical means" for surveillance provided by the Royal Guard (law enforcement agents and the fence infrastructure), as well as on the diplomatic agreements

29 Carmen Echarri, "La vigilancia de la valla: de los drones a la inteligencia artificial," El Faro de Ceuta, February 25, 2024 https://elfarodeceuta.es/vigilancia-valla-drones-inteligencia-artificial/

between Morocco, Spain and the European Union.

These questions invite reflection on the variations that the new generation of drones introduces in practice in their role as tactical support. Beyond the terminology used as a marketing strategy, the new AI-based tools introduced by DJI do not involve overly complex applications and ultimately depend on the technical competence, experience and capacity of Guardia Civil agents, inside and outside the COS, to identify the images recorded and sent by drones in real time.

In this socio-technical context, where human intervention is still essential and where the interaction between digital and analogue technologies is fundamental to the functioning of the border infrastructure, it is inevitable to criticise the certainly distorted image of the border as a fully digitalised space.[30] Understanding the use of these tools through the magnifying glass of technological determinism lacks a complete vision of the reality of migration in all its dimensions. In this sense, it would be more appropriate to go beyond the idea of "intelligent border" and speak of a **process of "smartification" of migration policies** in which the use of semi-military technology, as in the case of drones, contributes to the criminalisation of migration. Indeed, the evidence suggests that these "autonomous" tools, used not only in Spain but also in Italy and Greece, **reinforce the violent containment mechanisms used to detect and expel migrants**[31].

c. Laser illuminators

During the visit, access was gained to a sector of the Port of Melilla from which the boats used for the detection, rescue and return of persons depart and where the seized boats used by the smugglers to transport migrants are kept. From this side of the port, it was possible to observe the presence of laser illuminators, as indicated by the authorities, which, together with thermal cameras, are used to assist in the interception of people who try to enter European territory by swimming or by boat[32].

The laser illuminators are part of the new "smart" installation by Thales and Trablisa, nonetheless they are manually operated. Once the thermal cameras detect the presence of objects in the water, the exact coordinates are focused and illuminated by the laser illuminators, which emit green or similar light from each Fixed Surveillance Station (FSV). With the laser pointers, COS operators are able to reach targets at a distance of eight to ten km2 in the dark. In this way, Guardia Civil agents can pinpoint the exact location of people on the waterline and proceed with the intervention protocol.

d. Entry-Exit System (EES)

The Entry-Exit System (EES), whose implementation has been announced by the European Union for several years as the next big step in migration policy, is not yet fully operational at the borders of Ceuta and Melilla, although its implementation is planned in the short term in 2024[33]. As part of the Sistema Paso Agil (SPA), its deployment depends solely on the decision of the Spanish government and its aim is to digitalise and integrate with European systems the control of travellers between Morocco, Melilla and the Schengen Area. It will be installed at the airport, the port and the Beni-Enzar border crossing, the only one currently open.[34]

According to the government delegate of Melilla, Sabrina Moh, the "first phase" of the infrastructure, with a total cost of 10 million euros, is already functioning and consists of three main buildings

30 Lucrezia Canzutti and Martina Tazzioli, "Digital–nondigital assemblages: Data, paper trails, and migrants' scattered subjectivities at the border," International Political Sociology 17.3 (2023): 14.
31 United Nations Human Rights Council, Special Rapporteur on contemporary forms of racism, racial discrimination, xenophobia and related intolerance, Racial and Xenophobic Discrimination and the Use of Digital Technologies in Border and Immigration Enforcement, New York, NY: UN Headquarters, 2021: 1–24.
32 The legal debate concerning the pushbacks is detailed in part 3.
33 The EES is a new biometric system based on facial and fingerprint recognition which will replace the physical stamping of passports when individuals are required to present their passports for inspection upon arrival in the EU
34 Delegación del Gobierno en la Ciudad de Melilla, "Todos los Estados miembros de la UE pondrán a la vez en funcionamiento el Entry/Exit System en sus fronteras," Ministerio de Política Territorial y Memoria Democrática April 4, 2024.

at the Beni-Enzar checkpoint, although the main works for the EES are still underway and should be completed by November 2024 (at the same time as in the rest of the EU)[35]. The EES will be assigned mainly to the National Police for biometric control, facial recognition and fingerprints including the sides of the hands. It will also include facilities for the Guardia Civil, which will carry out vehicle searches with "state-of-the-art equipment". The Guardia Civil confirmed that the system will be deployed in 2024 and will serve as part of migratory control.

In the case of Ceuta, a similar biometric system is planned to be installed with the aim of controlling border crossings, especially those people who cross the border daily for work, but cannot spend the night in the city[36]. As in the case of Melilla, the details of how the EES will become operational are not known (the government delegation hasn't given clear information), except that it will be installed in 2024 and that it will probably be located at the Tarajal crossing point.

As stated in Iridia's and Novact's 2023 report, the implementation of the system is part of a wider European strategy that aims to modernise and strengthen the European Union's migration policy through the use of artificial intelligence tools at all its external borders. Its implementation would be directly linked to the eu-LISA, the agency responsible for the installation and management of the EES and other transnational databases and systems. In 2017, eu-LISA commissioned the companies Idemia and Sopra Steria to develop a Shared Biometric Information System (SBMS) that, once operational, would be "one of the largest biometric systems in the world, integrating a database of more than 400 million third-country citizens with their fingerprints and facial images", the cornerstone of European border protection"[37].

The EES is the subject of considerable debate in Spanish and European public opinion. From the perspective of the National Police and the Guardia Civil, which follows the border policy of the Spanish government, the implementation of the system is presented as a "reliable solution for migration control". Under this ideological umbrella, gathered through several interviews (including government officials in Ceuta), the implementation of a new socio-technical infrastructure is considered necessary to face the problems of the borders of Southern Europe in a context of intense migratory pressure, increased drug trafficking and intensified human trafficking.

In this context, efforts to digitise biometric information are seen as a fundamental part of the control and surveillance of not only the external but also the internal borders of the EU. Nonetheless, decades of smartification of border zones and collection of data through already existing databases have created an extreme situation for those who, facing a context of structural migration violence, will keep risking their lives in an attempt to overcome the increasingly dangerous obstacles despite the new digital infrastructure.

35 María García, "Beni Enzar estrena la primera fase de la futura frontera inteligente," El Faro de Melilla, June 15, 2024, https://elfarodemelilla.es/beni-enzar-estrena-la-primera-fase-de-la-futura-frontera-inteligente/
36 Carmen Echarri, "La ambición de una frontera segura y ágil, el reto de 2024 en Tarajal," El Faro de Ceuta, May 1, 2024, https://elfarodeceuta.es/ambicion-frontera-segura-agil-reto-2024-tarajal/
37 IRIDIA, "Vulneración de derechos humanos en la Frontera Sur del Estado español 2021 - 2022," Barcelona, 2023. https://iridia.cat/wp-content/uploads/2023/05/CAST-informe-FS.pdf

"The Entry Exit System will be deployed in 2024 to reinforce the migration policy and improve border control"

Figure G: Carlos Lancho. A surveillance tower near the Paseo Marítimo, in Melilla.

III. Case study | the CETI of Melilla

The Temporary Stay Centres for Foreigners (CETI) are an integral part of the border assemblages of Ceuta and Melilla, whose functioning depends, beyond the physical barriers, on the infrastructures of housing for people on the move. In this sense, the CETIs make it possible to reconstruct the path of individuals and communities in their asylum application processes and their interactions with migration authorities.

The access obtained to the CETI of Melilla allows an updated description of the centre's infrastructure, services and facilities. It also provides a description of the demographic composition of the people living there. The testimonies collected allow us to assume the existence of a broad population universe that includes civil servants, NGO workers, private security personnel and communities of asylum seekers whose countries of origin transcend the geographical boundaries of Europe and Africa.

The Ministry of Integration, Social Security and Migration (MISSM), which is responsible for managing the CETIs, defines them as "public administration facilities designed as temporary first reception centres and intended to provide basic social services and benefits to the group of immigrants and asylum seekers arriving in one of the Autonomous Cities". It also adds that the voluntary internment will take place while "the identification and medical examination procedures are carried out, prior to any decision on the most appropriate resource according to their administrative situation in Spain".[38]

In contrast to the CATEs, the CETIs are run with a "semi-open" regime that allows free movement in and out of the centre. Differently from the evidence reported during the first years of COVID-19 - which pointed to a restriction of the movement of asylum seekers and to cases of structural discrimination[39] - during the fieldwork it was observed that people were currently allowed flexible entry and exit from the centre, while being obliged to reside there while their procedure is pending.

Since their inception, first in Melilla in 1999 and then in Ceuta in 2000, the CETIs have changed their logistics and the services they offer. These changes are due to the different migratory contexts that have emerged in recent decades. These different historical moments, from their creation, to the misnamed "refugee crisis" of 2015, to the COVID-19-19 pandemic and the subsequent massacre of 2022, have shaped the public imaginary, often negatively, and created a climate of enormous suspicion towards these centres regarding the treatment of asylum seekers. The testimonies gathered through observation and a visit to the CETI of Melilla offer new perspectives that enrich the study of these centres and the dynamics of their interaction with other actors at the border. The results of the research offer unique data that open the doors to further studies of diasporas in order to understand the complexity of migratory movements.

The CETI of Melilla

Primary sources, who will remain strictly anonymous throughout this report, point to a large change in the population temporarily living in the CETI of Melilla in a relatively short period

38 Ministerio de Trabajo y Economía Social. "Centros de Estancia Temporal de Inmigrantes (CETI)". https://www.mites.gob.es/es/Guia/texto/guia_15/contenidos/guia_15_37_3.htm

39 Maite Daniela Lo Coco, Sani Ladan, Diana Cardona y Andrés G. Berrio, Vulneraciones de derechos en la frontera sur: Gran Canaria y Melilla. Barcelona: IRIDIA, OXFAM, 2021. https://iridia.cat/wp-content/uploads/2021/01/INFORME-DDHH-FRONTERA-SUR-2021.pdf

of time. In just two years, according to officials, the centre has gone from accommodating around 2,000 people, mainly black Africans, to 400 people mostly from South America. From the testimonies collected, it is clear that this change in the origins of the people served by the CETI of Melilla has radically altered the type of assistance offered by the centre and forced a reconfiguration of the facilities.

This situation raises even more questions when we consider that in 2022 Melilla was the scene of one of the most violent border episodes in the history of contemporary Spain, in which black Africans were the victims. The new situation and the demographic change make it necessary to examine the reasons for such a radical change and the presence of asylum seekers who arrived in Spain on international flights from America and who, at the same time, decided to manage and await their asylum decisions in Melilla.

From Melilla to the peninsula

One of the reasons that explains the reduced presence of black Africans in the CETI of Melilla are the significant changes brought about by the repeated rulings of the Supreme Court (SC) on the mobilisation of asylum seekers. On several occasions, the SC has established jurisprudence by stating that persons who have started their asylum procedure may change their place of residence to any part of the national territory, by notifying the authorities, which implies freedom of movement from Melilla to the peninsula.[40]

This position is reflected in Resolution No. 1128/2020, which insists that "any foreign citizen who has applied for international protection or asylum in the Autonomous Cities has the right to move and settle in any other city in the national territory, without this right being restricted by their status as an applicant for international protection, and with the obligation to inform the administration of this change of address".[41]

Despite the appeals filed by the state administration to overturn the ruling, the Supreme Court has insisted that the mobility of asylum seekers must be guaranteed. According to the testimonies collected on the ground, this ruling by the SC has led to the displacement of a significant proportion of the black Africans asylum-seekers who have been living in Melilla, and particularly in the CETI, over the last two years.

However, although the jurisprudence favours the asylum seekers in this respect, this situation should not and cannot be interpreted in a general way as a regime of free movement. In reality, as can be seen, the crossing from Melilla to the peninsula, which takes place by sea and air, is heavily guarded by a migration system of extreme vigilance that restricts the passage from one side of the Mediterranean to the other.

Solidarity Wheels and No Name Kitchen, two NGOs working on the ground with asylum seekers in Ceuta and Melilla respectively, insist that the changes in legal doctrine violate the fundamental rights of people on the move, especially with regard to the right to seek asylum. In particular, the ruling of Constitutional Court judgement 13/2021 allows the return of "irregular" migrants at the border if their entry is intercepted on the spot:

40 Pablo Sainz, "El Supremo falla de nuevo a favor del derecho a la libre circulación de las personas solicitantes de asilo," elsaltodiario, February 16, 2021.

41 Tribunal Supremo, Libertad de circulación y fijación de residencia dentro de todo el territorio nacional del solicitante de protección internacional. Sentencia desestimatoria 29/07/2020 ROJ: STS 2662/2020 - ECLI:ES:TS:2020:2662. https://www.poderjudicial.es/stfls/TRIBUNAL%20SUPREMO/ACUERDOS%20y%20ESTUDIOS%20DOCTRINALES/FICHERO/20230601%20Cuadernos%20de%20casaci%C3%B3n%20-%20Extranjer%C3%ADa%20v2.pdf

> *"The application of the border rejection foreseen in Ceuta and Melilla is considered for cases different from those of refoulement, since the power of rejection attributed to the State security forces and bodies is done in order to prevent the materialisation of illegal entry into Spanish territory, while that attempt, not culminated, is taking place".*[42]

This "special regime", which has been repeatedly denounced by the Special Rapporteur on the Human Rights of migrants, reinterprets the concept of the border by establishing a difference between a "physical" border and an "operational" border, and considers that people who cross the former, but not the latter, are not really on Spanish territory and can therefore be sent back.[43] The creation of these "exception zones", where international rules on the reception of asylum seekers are relaxed, has had a particular impact in Ceuta, where between 2021 and 2022 collective expulsions of thousands of people to Morocco took place without any guarantees of protection or assistance.[44]

In addition, changes to the border infrastructure have made it more difficult for people to cross. As detailed in the previous sections, the introduction of inverted combs, the triple wall, the wide range of digital surveillance tools, and the presence of concertinas and trenches on the Moroccan side all pose a major challenge to those trying to cross the fence.

At the same time, the closure of border crossings and customs by Morocco during the first months of the COVID-19 pandemic had a radical impact on the flow of people. The disruption caused by the cessation of commercial activity has had a long-term impact and has led to a tightening of the movement of people in and out of the country. In 2024, only the Beni Ensar border crossing remains open, heavily guarded by agents of the Guardia Civil and the National Police, and only citizens with visas can enter, with an explicit ban on overnight stays.

Importantly, this case study should be considered as specific to Melilla and cannot be generalised to the rest of the southern border. The decrease in the number of black Africans arriving through the land or sea borders of Ceuta and Melilla contrasts with an exponential increase in the number of people of Moroccan, Senegalese and Algerian origin, as well as from Mali, Guinea or Gambia arriving to the Canary Islands.

All these socio-technical elements (legal, technological and diplomatic) that have appeared at the Melilla border in the last four years can begin to explain, although perhaps insufficiently, the reasons for an exponential change in the demography of migrants arriving in Melilla.

From America to Melilla

Although the first arrivals of people of Latin American origin in Melilla took place at the end of 2023, this number has continued to grow in recent months. The visit carried out in March 2024

42 Tribunal Constitucional, Recurso de inconstitucionalidad 3848-2015. Interpuesto por el Parlamento de Cataluña en relación con diversos preceptos de la Ley Orgánica 4/2015, de 30 de marzo, de protección de la seguridad ciudadana. Sentencia 13/2021, January 28, 2021. https://www.boe.es/buscar/doc.php?id=BOE-A-2021-2832

43 United Nations Human Rights Council, Special Rapporteur on the Human Rights of Migrants, Report on means to address the human rights impact of pushbacks of migrants on land and at sea, New York, NY: UN Headquarters, 2021 A/HRC/47/30 (un.org)

44 United Nations Human Rights Council, Special Rapporteur on the Human Rights of Migrants. Human rights violations at international borders: trends, prevention and accountability, New York, NY: UN Headquarters, 2022 A/HRC/50/31 (un.org)

confirmed that a significant percentage of the migrants living in the CETI of Melilla are of Latin American origin. At present, the centre houses around 400 people from different countries in the Central American, Caribbean and South American regions, as well as from other countries in Central and North Africa. Undoubtedly, this demographic change has generated significant changes in the centre's infrastructure in the last two years. According to the information that could be obtained through interviews with public officials and NGO workers within the CETI, this population is mostly composed of parental and single-parent families, and children, living with their parents in the centre. Similarly, the testimonies collected indicate that the young and single population, which was the majority until two years ago, has decreased considerably since 2022.

As far as the causes of this change are concerned, there are still doubts behind the unusual and increasing movement of citizens from Latin American countries who, for one or more reasons, decide to travel to the other side of the Mediterranean to present their asylum applications.

According to the Spanish Commission for Refugee Assistance (CEAR)[45], this migratory phenomenon actually has a pragmatic reason: the collapse of the asylum system has created delays in the administration, especially when it comes to getting appointments for the presentation of asylum applications in the peninsula. This situation has created the necessity to explore subaltern mechanisms and Melilla is presented to asylum seekers from Latin America as an opportunity to speed up their migratory regularisation processes. The reality could not be more complex, as many people who arrive in the peninsula from the Americas and then in Melilla find themselves in a legal limbo, without a solution to their immigration procedures and unable to return to the peninsula because of an expired visa.

Solidarity Wheels, an organisation that accompanies and gives legal advice to asylum seekers, points out that this type of situation is difficult to interpret due to the lack of transparency of the CETI of Melilla and the "opaque criteria" for access to it. According to two NGO workers, the constant change in admission criteria has a direct impact on the social groups in need of assistance. As highlighted in their recent report, which includes testimonies from people of Latin American origin, the migratory scenario in Melilla shows several patterns of discrimination against people of Moroccan or Latin American origin, restrictions on mobility (people with expired visas cannot leave the city) and difficulties in accessing the CETI[46]. On 23 April, Solidarity Wheels denounced the expulsion of eight people from the centre, who are now homeless. According to the NGO, this practice of temporary expulsion is recurrent in the CETI of Melilla and warns that this type of action has no legal basis.[47]

In this context, in April 2024, the Ministry of Defense ordered the urgent construction of a temporary shelter on Alboran Island, a small islet located 39.5 miles off the coast of Melilla[48]. The implementation of this project, similar to the boat/prison that the United Kingdom has arranged to house refugees, will cost 1 300 000 euros. The fact that the island is only inhabited by a detachment of the Navy suggests further militarization and criminalization of the migration system. Refugees arriving here would be completely isolated, unable to return to Melilla or Morocco and under a state of high vulnerability.

45 Information provided by an interview.
46 Solidarity Wheels, Yesterday no, today yes, and tomorrow? Going deeper into the legal insecurity, lack of transparency and changes in the criteria for access to the CETI of Melilla (2023) https://www.solidarywheels.org/_files/ugd/0a7d28_95bada4ac5984297a473776f485cf7b5.pdf
47 El Salto, "Denuncian expulsiones sin respaldo legal en el CETI de Melilla", April 23, 2024 https://www.elsaltodiario.com/melilla/denuncian-expulsiones-respaldo-legal-ceti-melilla
48 José Manuel Abad, "Defensa construirá un refugio temporal para inmigrantes en la isla de Alborán," April 16, 2024

An updated description of the CETI of Melilla.

The new demographic composition of the CETI has undoubtedly brought about a drastic change, requiring a restructuring of the facilities and services. The fieldwork was able to verify the state of the buildings, the typology of the facilities, the support services provided, the number of people working in the public administration and the presence of various NGO staff. Capacity, which is limited to 782 people, has fluctuated over the last four years, with a downward trend, as explained in the following chart[49]:

	Population	Capacity Rate	Number of people attended
2020	1472	188,26 %	3123
2021	725	92,74 %	3478
2022	280	35,82 %	1284

The CETI operates under a semi-open regime. During the night the centre remains closed. Entrances and exits are made by means of a personal card containing the personal data previously requested. The CETI does not admit non-asylum seekers, so visits require prior permission from the public administration. The strict protocol defines the areas allocated to the different functions and services of the buildings. A description of each sector is given below:

A. Surveillance:
The internal security of the CETI, as well as access controls, are under the control of the private company Clece Seguridad, whose contract with the state has a budget of 1,963,654 euros. As stated in the justification report, the aim of outsourcing the centre's security is to maintain order in an area where different nationalities come together[50]. Nonetheless, the company has been denounced for institutional violence against certain groups of migrants[51].

B. Housing modules:
The centre has a number of rooms that are not family rooms, i.e. they separate the men of each family from the mothers with their children (whose age could not be determined). According to the protocol established for the centre, each room is designed to accommodate a maximum of eight people.

C. Medical service:
The medical service module is provided by the Spanish Red Cross, an organisation that collaborates with the CETI. The service operates in the mornings and afternoons and provides primary care or basic assistance. There is also a dental service.

D. Legal aid office:

49 Ministerio de Inclusión, Seguridad Social y Migraciones. Memoria justificativa de gasto para la contratación del servicio de seguridad y vigilancia con destino al centro de estancia temporal de inmigrantes (CETI) de Melilla. 2023 https://contrataciondelestado.es/wps/wcm/connect/a079d1bb-29ad-4983-82ad-1e7a3da68a83/doc20230914125641memoria+justification+service+security+and+surveillance.pdf?mod=ajperes
50 Ibid.
51 Iridia, "Comunicado: Un grupo de personas residentes en el CETI de Melilla denuncian violencia institucional por parte de la seguridad privada del centro," June 3, 2022. https://iridia.cat/es/comunicado-un-grupo-de-personas-residentes-en-el-ceti-de-melilla-denuncian-violencia-institucional-por-parte-de-la-seguridad-privada-del-centro/

The centre offers a voluntary legal aid service, in collaboration with the CEAR and the UNHCR.

E. "Aulario":
The participation of Melilla Acoge, for thirty years, and of ACCEM, for six years, in the Centre has allowed the existence of educational services. These services have changed over time, especially as a result of changes in the demographic composition of the CETI. For example, while the teaching of Spanish used to be one of the pillars of the "curriculum", these classes have now fallen into disuse, so other classes are now offered. Among other educational services, Melilla Acoge and ACCEM offer training and information sessions on social resources.

F. Ministry of Inclusion, Social Security and Migration:
There are 20 government officials, including members of the National Police. The centre also has a psychology service, which provides support in the form of information sessions, psychiatric background studies and referrals in cases of drug addiction.

G. Warehouses:
Modules containing clothing and other basic necessities. Each person entering the CETI is given a bag of items.

H. Sports facilities

I. Kitchen and dining room

J. Daycare

The information to be processed from this report should take into account the variable nature of the CETI of Melilla. Also, the difficulty of carrying out investigations within the centre must be taken into account due to the control practices that change according to the current management of migration policy. In this regard, the results obtained in the 2024 fieldwork cannot be interpreted as a 'fixed' reality, but rather as a cyclical one.

IV. The Border as Political Bargain

Throughout this report, reference has been made to the importance of Morocco as a border agent. Without exception, all the interviews conducted during the fieldwork in Ceuta and Melilla point to the fact that the Moroccan authorities play a strategic role in border control. The Maghreb country remains a transit destination for many people from various African countries and is a key player in the European Union's externalisation migration strategy[52].

During the visit along the borders of Ceuta and Melilla, it was possible to observe the means used by the Moroccan security forces as a strategy of deterrence. In the case of Melilla, as explained above, the dismantling of the concertinas on the Spanish fences has not led to a reciprocal response from the other side of the border. At present, Morocco is maintaining and expanding the use of concertinas on the walls, which can be up to five metres high in certain sectors and serve as a direct extension of the triple fence on the Spanish side.

In addition to these containment mechanisms, which have been denounced by several human rights organisations for the high risk they pose to human life, in 2023 a reinforced system of trenches was dug around the perimeter of the now-closed Barrio Chino crossing, where 37 people died in 2022. The construction of these trenches is part of the installation of new barriers in the area, with more metres of concertinas and other instruments whose aim is to prevent those who try to climb the fences[53].

People returned to Morocco from Spain under the External Borders and Migration Control Agreement are subjected to extremely violent treatment. In many cases, migrants are put on buses and taken to different cities in southern Morocco or to the border with Algeria[54], without any medical assistance[55], and in some cases they are placed in informal detention centres[56]. These practices of forced displacement, in addition to police raids on migrant settlements, continue with the complicity of the European Union[57] and the Spanish state[58].

A recent case that illustrates this problem is that of Basir, the fictitious name of a Sudanese citizen who crossed the Melilla fence in 2022 and survived the 24 June massacre. Turned back by the Spanish authorities in less than 72 hours and forcibly displaced far from the border, Basir applied for asylum at the Spanish embassy in Rabat. In February 2024, after a year without a response to his request, the Audiencia Nacional issued a precautionary measure requiring the government to transfer him to Spain pending a final decision on his asylum application. The case, which establishes an important jurisprudence on this type of cases of deportation and forced displacement, can be extrapolated to thousands of other people living in the streets of Moroccan cities in situations of extreme vulnerability[59].

This systematic pattern of refoulement follows the logic of the "extraterritorialisation" of borders, which is an intrinsic part of the European Union's migration policy. Moreover, the new Pact on Migration and Asylum, which was approved by the European Parliament on 10 April 2024, "reinforces the policy of externalisation and relaxes accelerated procedures and systematic detention"[60]. All of this, together with the incorporation of new surveillance and data collection technologies[61], points to the relativisation of human rights violations and the normalization of facial profiling, arbitrary pushbacks and the return of individuals to "safe third countries" where they are at risk of violence[62].

52 Iridia, Novact, Vulneración de derechos humanos en la Frontera Sur del Estado español 2021 - 2022. Barcelona: 2023. https://iridia.cat/wp-content/uploads/2023/05/CAST-informe-FS.pdf

53 Juan Carlos Sanz, "Marruecos refuerza la frontera con Melilla un año después de la tragedia del asalto a la valla," El País, June 24, 2023.
54 EuroMed Rights, Return Mania. Mapping policies and practices in the EuroMed Region. Belgium: April 2021 https://euromedrights.org/wp-content/uploads/2021/04/EN_Chapter-2-Returns-Spain-to-Morocco_Report-Migration.pdf.
55 International Federation for Human Rights (FIDH). "Frontera Marruecos-España: callejón sin salida mortal." September 19, 2018. https://www.fidh.org/es/temas/derechos-de-los-migrantes/frontera-marruecos-espana-callejon-sin-salida-mortal
56 Maite Daniela Lo Coco and Elísa González-Hidalgo, "The double logic of European outsourcing: protection and deportation in Morocco," Revista CIDOB d'Afers Internacionals, n.º 129 (December 2021), p. 79-106. DOI: doi.org/10.24241/rcai.2021.129.3.79
57 María Martín, Lola Hierro, Diego Stacey, "Marruecos, Túnez y Mauritania usan fondos de la UE para detener a migrantes y dejarlos en el desierto," El País, May 21, 2024. https://elpais.com/internacional/2024-05-21/detenciones-masivas-y-traslados-forzosos-asi-se-destierra-con-dinero-europeo-a-migrantes-en-el-norte-de-africa.html
58 Amnesty International, "Marruecos: La incesante ofensiva contra miles de personas migrantes y refugiadas de origen subsahariano es ilegítima," 2018. https://www.amnesty.org/es/latest/press-release/2018/09/morocco-relentless-crackdown-on-thousands-of-sub-saharan-migrants-and-refugees-is-unlawful/
59 María Martín, "El Gobierno demora la orden de la Audiencia Nacional de traer a España al sudanés que pidió asilo en Rabat," 2024. https://elpais.com/espana/2024-04-11/el-gobierno-demora-la-orden-de-la-audiencia-nacional-de-trasladar-a-espana-al-sudanes-que-pidio-asilo-en-rabat.html
60 CEAR, "El Pacto Europeo de Migración y Asilo será «devastador» para los derechos humanos," Abril, 10, 2024. https://www.cear.es/pacto-europeo-devastador-derecho-asilo-derechos-humanos/
61 See: Entry-Exit System (EES)
62 AccessNow. "The EU Migration Pact: a dangerous regime of migrant surveillance." April, 2024. https://www.accessnow.org/press-release/joint-statement-eu-migration-pact-a-dangerous-regime-of-migrant-surveillance/

Chapter II | Canary Islands

I. The use of digital technologies in the migration process

Various entities take part in the migration procedure in the Canary Islands, each with specific responsibilities for assisting and managing people arriving on *pateras* or *cayucos*[63]. In this context, technology intersects with their work in various ways — from the detection of boats using long-range surveillance cameras and sensors to the use of scientific-based methods to estimate migrants' age or identity, which also involve the input of biometric data into databases.

This chapter provides an overview of the journey migrants go through when they cross the Atlantic route and arrive into the Canary Islands, and how technology intervenes in every step of the process. Importantly, the use of digital surveillance does not make crossing the Atlantic route less dangerous: only in 2023, at least 950 people died trying to reach the islands[64].

In the following sections, each technology is described by providing an analysis about how it is implemented, which actor is responsible for its deployment and how it impacts on people on the move. This analysis is the result of fieldwork encounters, semi-structured interviews and FOIA petitions. Concretely, these interviews took part in the Canary Islands with different actors: Guardia Civil and National Police, Red Cross, NGOs such as Alarm Phone, lawyers, juvenile educators, journalists, social workers, migration experts, Frontex former workers, medical examiners, prosecutors, among others.

Within our investigation, we discovered that some technological systems involved in the journey from the African continent to the Canary Islands are not cutting-edge but rather rely on analogue systems or off-the-shelf technologies. For instance, migrants departing from countries like Senegal, Mauritania, or Gambia often carry GPS systems or satellite phones to alert NGOs and other parties as they approach the islands. After our interviews, several actors acknowledged that this approach is very effective to save lives on the sea. However, these devices are thrown away in the sea upon arrival, particularly those that could leave a digital trace, since individuals that carry those devices risk being pushed-back or prosecuted for human-trafficking by the Spanish authorities. Even regular compasses are most likely dispatched.

When people depart on a small vessel, Spanish Search and Rescue (SAR) protocols come into play if national authorities or third countries have not detected and intercepted them before. The protocols are activated once a patera is detected in the Spanish maritime area, while Morocco and other departure African countries are required to attend to the rescue if the vessel is still within African coasts.The Guardia Civil takes charge of coordinating the entire response to the detection of a patera's entry[65].

In fact, Guardia Civil also pools the detection of the boats, but this task is generally supported by the intervention of NGOs that are conducting their own independent operations. Guardia Civil calculates that around 75% of the alerts they receive of small vessels crossing the Atlantic route come from NGOs, such as Alarm Phone[66] and Caminando Fronteras[67], two of the most active humanitarian organisations in the region[68].

Alarm Phone, for instance, provides a hotline that anyone can contact with information about the departure, location and destination of the patera. They sometimes even receive warnings through social media of close relatives. In other cases, migrants themselves alert these NGOs with the coordinates of their position and route using satellite phones while crossing the very dangerous Atlantic route.

In spite of these elemental communications, the Guardia Civil counts with its own protocol to search for pateras in the ocean: the SIVE, which stands for Sistema Integrado de Vigilancia Exterior (Integrated External Surveillance System in English)[69]. The SIVE is a system consisting of cameras and radars stationed at various points in the Canary Islands that provides information about the transit of vessels and other elements. The radar sends an alert when it detects an unusual body in a specific point in the sea and the cameras provide a rough image of the object. The Guardia Civil interprets the image, decides whether the subject located may or may not be a patera and launches the rescue operation. The SIVE's radio of action is limited to approximately 20 kilometres.

SAR operations are also carried out by vessels, planes and sometimes drones. These vehicles are normally equipped with thermal cameras and sensors that facilitate the identification of pateras in the sea. Taking into account that the SIVE is a short-range technology, the patrols with the usual ships and aircrafts are the only way to detect the approach of small boats in the vast ocean separating the Canaries from Africa.

63 Small boats in which migrants travel from African countries to Spain and other European countries. The main difference between both is the size.

64 According to numbers provided by the International Organization for Migration. https://www.accem.es/al-menos-3-997-personas-murieron-en-2023-en-la-frontera-sur-de-europa/

65 Orden PRE/3108/2006, de 10 de octubre, por la que se da publicidad al Acuerdo de Consejo de Ministros por el que se dispone la creación de la autoridad de coordinación de las actuaciones para hacer frente a la inmigración ilegal en Canarias y se establecen normas para su actuación. https://www.boe.es/diario_boe/txt.php?id=BOE-A-2006-17743

66 Alarm Phone. https://alarmphone.org/en/

67 Caminando Fronteras. https://caminandofronteras.org/

68 The Guardia Civil gave this figure in an event coordinated by Cruz Roja that took place in the Club Editorial Prensa Ibérica in 2022. The training counted with members of different security forces and other professionals of the field, as well as NGOs working on migration matters.

69 Guardia Civil. "Sistema Integrado de Vigilancia Exterior". https://www.guardiacivil.es/es/prensa/especiales/sive/funciones.html

"The guys at the minor centres are sometimes the first to know that a patera is coming because their cousin is travelling in it. One telephone call: that is all the Artificial Intelligence that it takes".[70]

70 Testimony gathered from interviews with educators in centres for minor migrants in Lanzarote.

Once the Guardia Civil decides to launch a SAR mission, they usually notify Salvamento Marítimo to rescue the people aboard the patera. Salvamento Maritimo is the public civilian organisation responsible for maritime security in Spanish sea territory. They do not only conduct search and rescue operations involving migrants but also handle various other maritime tasks throughout the country, such as coordinating different types of rescues, assisting stranded vessels, and performing towing operations. On rare occasions, the Guardia Civil may directly carry out the rescue of the small boat. Salvamento Maritimo is also the sole organisation authorised to venture into African waters for small boat rescues. For the Guardia Civil to intervene, the boat must have already entered Spanish waters.[71] [72]

The fact that the Guardia Civil is responsible for coordinating the operation and authorising Salvamento Maritimo to conduct rescue operations of vessels in distress at sea has sparked significant criticism from subordinate bodies and NGOs, including the Ombudsman[73]. Salvamento Maritimo has frequently criticised how this centralised command structure has hindered their ability to promptly rescue small boats, even in cases where they had already located the vessel[74].

71 As explained by a member of Salvamento Maritimo in on the ground interviews.
72 https://www.congreso.es/entradap/l14p/e24/e_0240301_n_000.pdf
73 Call for input into the European Ombudsman's strategic inquiry OI/3/2023/MHZ concerning the role of the European Border and Coast Guard Agency (FRONTEX) in the context of search and rescue (SAR) operations.
74 COPE. June 2023. Salvamento Marítimo sobre la tragedia: "La decisión no la tomamos nosotros, hay un mando único que decide". https://www.cope.es/emisoras/canarias/las-palmas/gran-canaria/noticias/salvamento-maritimo-sobre-tragedia-decision-tomamos-nosotros-hay-mando-unico-que-decide-20230623_2778751

Caminando Fronteras and other humanitarian organisations have echoed these concerns by claiming that this could negatively impact on migrants' rights and threaten their lives[75].

After the rescue is carried out and individuals on the patera are safely brought to shore several national and European actors intervene upon arrival. The National Police, Red Cross, and other secondary actors such as Frontex, the Immigration Agency, health workers, and cultural mediators take over and initiate the process of data collection (such as fingerprints or face pictures) and registration of people onboard[76].

The National Police is also in charge of "classifying" adults and minors: the former are allocated in Temporary Care Centres for Foreigners (known as CATE in Spanish), while the latter are placed in specific minor centres. This is due to a national law that states that Autonomous Communities are responsible for minors while the State is responsible for adults.

Age estimation is the most complicated step to fulfil in the filiation process, as normally people on the move travel undocumented. The state in which they usually leave their country and the extreme conditions they face in the sea leaves them devoid of any personal belongings. Sometimes, they do not even know what year they were born or remember their full name[77]. The lack of a passport or other documentation unleashes great disparities in the collection of data and how this data is digitalised later on. In most cases, this process has to be mediated by translators or cultural mediators, but the resources are scarce in the islands[78].

Frontex occasionally supports operations at the ports too. They operate under the coordination of the Regional Coordination Centre of the Canaries (CCRC) of the Guardia Civil but carry out their own missions. They conduct independent interviews, primarily focused on gathering data for their investigations, concerning vessel departure, the route taken, the sender in the country of origin, and the person responsible for navigation[79].

Once the screening is completed at the harbour, people are taken to CATEs and the centres for minors. Within these centres, their registration is completed, their fingerprints printed out (not always using scanners, as in the Canary Islands the use of inked fingerprints is still predominant) and assigned an identity number, called NIE (which stands for Número de Identificación de Extranjero or Foreign

75 La Voz de Lanzarote. April 2022. Dos ocupantes de una patera rescatada a la deriva se suicidaron por la agonía que estaban viviendo. https://www.lavozdelanzarote.com/actualidad/sociedad/dos-ocupantes-patera-rescatada-deriva-se-suicidaron-por-agonia-estaban-viviendo_211499_102.html
76 The Guardia Civil does not intervene in the reception at the ports, except in the island of El Hierro. They only respond upon the arrival of the small boat when it reaches the island under its own means, meaning that no rescue party has been sent to rescue it.
77 As stated by Red Cross and Civil Protection workers in on the ground interviews.
78 Ibid.
79 As explained in on the ground interviews with National Police.

Identification Number in English).

When the police is uncertain about the age of an individual claiming to be a minor, they will seek the assistance of the provincial prosecutor to arrange a medical examination to estimate their age. This examination typically involves a hand bone scan or an orthopantomography (dental radiography). The results of the test offer an estimated age, which can be confirmed if original identity documents are provided. In such cases, the documentation must be authenticated by the public prosecutor's office, which officially determines the age through a decree. Sometimes, the resulting age differs from the one stated in the identity documents. The office then decides which age is valid.

The medical examination can take two to three months to be completed, as it is conducted in public hospitals on the islands, and the capacity of these centres can be limited. While awaiting the results, migrants are held in the appropriate minor centre. Even if an individual is over 18 years, if they self-declare themselves as minors, they will remain in this centre rather than being transferred to CATEs. In the worst-case scenario, a self-declared minor who has not had their age officially verified but has been arrested and taken to prison on suspicion of piloting the small boat might remain in prison until the test results are sent to the public prosecutor's office.

Their fate in the country hinges on the decisions made during this period: minors are placed under the guardianship of the Spanish state and the Autonomous Community, while adults remain in internment centres until their administrative situation is resolved. Under Spanish law, they can only stay in a CATE for no more than 72 hours and then either be relocated to another temporary centre (CETI) to receive assistance from a humanitarian aid program; begin the process for asylum or international protection; or be transferred to an Immigration Detention Center (commonly referred to as CIE or Centro de Internamiento de Extranjeros in Spanish) and await authorities to be pushed-back[80].

The conditions to which these people are subjected in CATEs or CETIs, together with the internment in CIEs, represent one of the most controversial aspects of migration policy in Spain due to the continuous violation of their fundamental rights. As heavily denounced by lawyers and other humanitarian organisations, migrants are constantly deprived of the legal aid they are entitled to when they face interviews with the national authorities. Moreover, migrants face the opacity of the Spanish bureaucratic system which makes it very complicated to understand what are their rights[81].

80 Iridia. May 2022. Vulneraciones de derechos en la respuesta institucional a las llegadas de personas migrantes en Canarias. https://iridia.cat/wp-content/uploads/2022/05/informe_vulneracion_derechos_canarias_abril_mayo_22-1.pdf

81 Irídia and Novact. 2023. Vulneración de derechos humanos en la Frontera Sur del Estado español 2021-2022. Available at: https://iridia.cat/es/publicaciones/vulneracion-de-derechos-humanos-en-la-fs-del-estado-espanol-2021-2022/

Figure H: A group of people residing in the 'Las Raíces' camp, in the north of Tenerife. Source: Naiara Bellio. (April 9 2024)

As a result, their right to information and asylum can be violated when they arrive at CATEs[82]. On the other hand, in CIEs, detentions and expulsions are managed without processing the proper paperwork, as denounced by organisations such as Iridia.[83]

Technology-wise, some of these centres are out of range and count with no wifi. In some CIE, the use of smartphones is not even permitted. This situation has led to the intervention of lawyers and NGOs like the French Télécoms Sans Frontière, who have tried installing routers in the vicinity of the centres to at least provide Internet connection to the interns so that they can communicate with their relatives.

As migration expert and consultant Txema Santana points out, access to the Internet

82 idem.

83 Iridia. May 2022. Vulneraciones de derechos en la respuesta institucional a las llegadas de personas migrantes en Canarias. https://iridia.cat/wp-content/uploads/2022/05/informe_vulneracion_derechos_canarias_abril_mayo_22-1.pdf

is also crucial in the country of origin even in the days prior to the start of the journey: Internet access provides migrants with valuable information to assess their journey, such as weather predictions.

"The type of the trip, the chosen route or even consulting the weather conditions is essential. But it cannot be done without a stable internet connection"

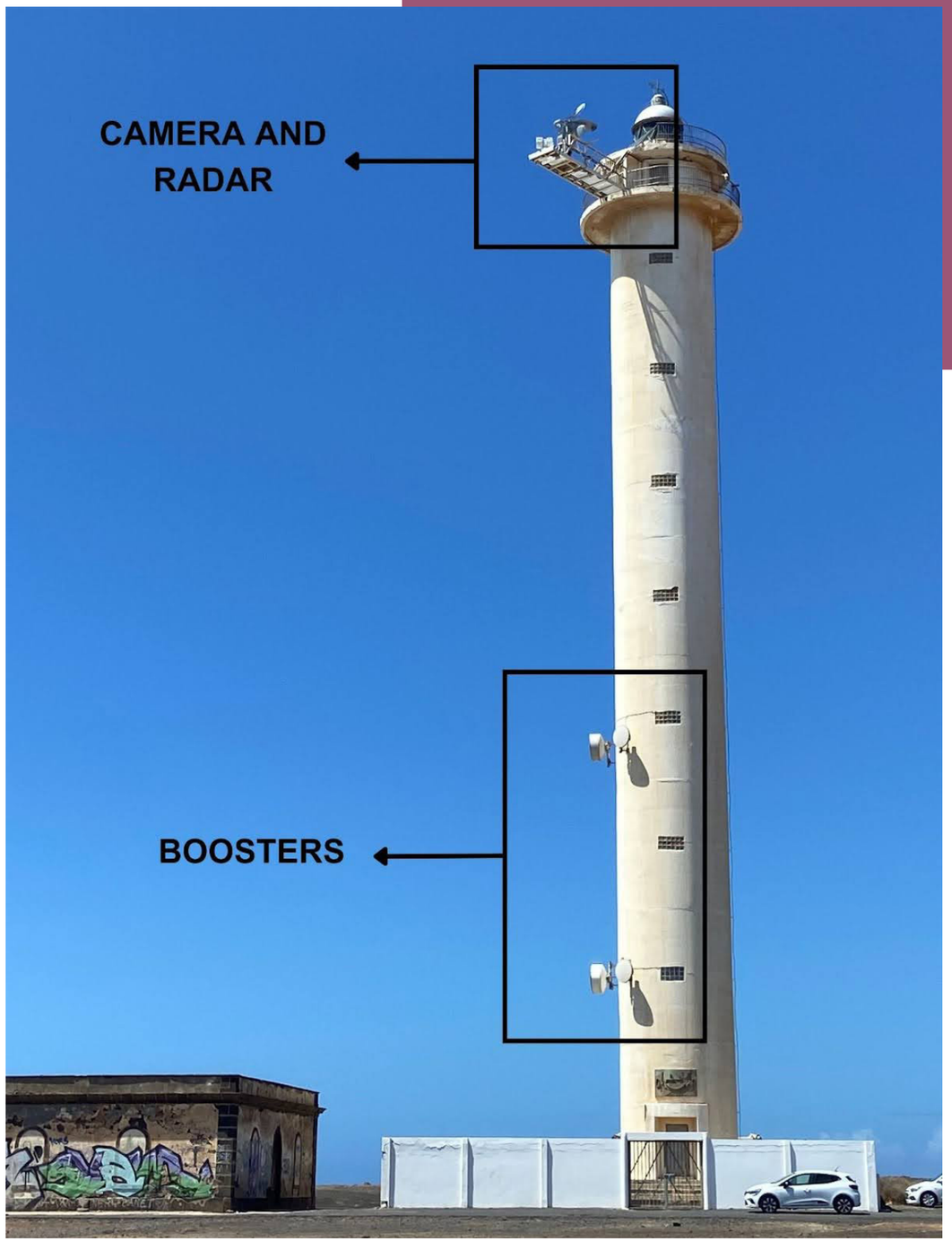
The presence of technology is transverse in the migration process in the Canary Islands, but, there is hardly any cutting-edge technology as opposed to the use of more rudimentary systems. The concept of Artificial Intelligence is mostly present in project documentation running in the long term and public tenders, as it is exposed in this report, but not noticeable in the Canarian border.

II. Integrated External Surveillance System (SIVE)

SIVE stands for Sistema Integrado de Vigilancia Exterior, which translates to Integrated External Surveillance System. It is the main technological system used to detect and monitor the arrival of pateras to the Canary Islands, but is also used against drug-trafficking. There are command posts deployed along the peninsular coast as well. It is not a sole computer programme, but rather a combination of infrastructure and systems that allows the Guardia Civil to search and intercept the pateras when they are approaching the islands.

The SIVE is managed and controlled from Guardia Civil coordination centres. In the Canary Islands, there are two main centres: the Regional Coordination Centre of the Canaries (CCRC, in Spanish) in Gran Canaria and the headquarters of the Guardia Civil in Tenerife. The software of the system is managed in provincial centres across the country. They all communicate with the National Coordination

Figure I: SIVE cameras and radars have been installed in a lighthouse in Playa Blanca, a village in the south of Lanzarote. Image: Naiara Bellio. Taken on March 30 2024.



Centre (CCN), based in Madrid.
Currently, there are 24 SIVE stations spread across the islands[84]. 17 of these stations are located in the province of Las Palmas de Gran Canaria: four in Lanzarote, five in Fuerteventura and eight in Gran Canaria[85].

The physical infrastructure consists mainly of an electro-optical camera and a radar that connect to a central control unit. They are usually installed in a tower to give them a certain height and a panoramic view of the ocean, and located near the coast or on mountains. The radar is constantly throwing out echos to detect objects in the ocean. Whenever one of these objects is detected, the system sends an alarm to the control unit in the coordination centres.

Radar alerts are displayed on multiple screens in coordination centres. These screens show digital maps covering the surveilled area by the system. Within these maps, law enforcement authorities can monitor vessels passing through in real time: when the echo detects a new object at sea, it will display its location on the programme and signal it as a "suspicious" object or not. Agents working with SIVE will then focus the camera on the location indicated by the radar[86].

The SIVE system has a range of approximately 19 and 22 kilometres[87]. In order to surveil longer distances, Spanish border authorities deploy ships, planes and sometimes drones – Western Sahara, the closest point of departure for African migrants, is already 100 kilometres away. Range of cameras depends on weather conditions. On a clear and sunny day, the range is the same as that of the radar. On the other hand, in bad weather conditions the range could be cut in half. For instance, fog or haze (known as calima, which is very common in the eastern islands), can significantly reduce visibility[88].

Images captured with cameras are not rendered with the same quality of a regular CCTV, but rather give an approximate shot of selected location. As described by members of Salvamento Maritimo and Guardia Civil officers, images are not "sharp", especially at night: in the dark, the system captures black and white footage and shapes that are not neat. It is then up to the Guardia Civil officers to interpret these images and decide whether to activate the rescue protocols or not.

As simple as this might appear to be, border guards working with SIVE can take up to 10 years to be able to proficiently manage the system[89]. This includes not only learning how to control the computer programme or system, but to really understand the environment of the borderspace and interpret components that are characteristics from it. For instance, being able to distinguish between a cayuco and a sailing boat through the limited lens of the cameras, or aiming the cameras to the right spot when the weather and sea conditions are rough. In the Canary Islands this kind of training is scarce and lacks continuity over time[90].

In Las Palmas de Gran Canaria province, there are seven operators dedicated to managing information retrieved by SIVE. Operators are not working exclusively on monitoring the images and alerts, but have to work on other tasks as well. This means that their attention span is limited and can vary depending on the volume of work[91].

The latest available data on the number of vessels detected by SIVE in the whole country is reflected in the 2018 Annual Security Report of the Home Office: 303 vessels (not only pateras, but all kinds of vessels)[92].

"The system is good, but also easy to boycott"[93]

The SIVE has a major problem with waves. Sometimes, SIVE misclassified waves as pateras. This occurs because there are instances when the small boat travels at a speed comparable to the movement of the waves (around six miles per hour), and what the radar detects is the motion of the wave crest.

To fact-check what originated the radar to set-off, officers need to manually focus the camera to the exact location and inspect the images in search of a possible vessel, but also check how frequently it appears on the screen. Sometimes it is the height of the waves what impedes both the radar and the camera from working properly.

The radar's sensitivity can be adjusted in days of bad weather to prevent it from signalling the waves, but that will also entail that fewer vessels are detected – including small boats with people on board[94]. This is a challenging problem that has persisted over the years. As a result, the Guardia Civil has had to recently remove several radars because they were malfunctioning[95].

84 According to data provided by the Home Office after the filing of a FOIA request.
85 According to an interview with a member of Escribano Mechanical & Engineering, the firm in charge of maintenance of the system in Las Palmas de Gran Canaria province.
86 Description based on interviews with a Guardia Civil officer and a manager at Escribano Mechanical & Engineering.
87 Ibid.
88 Ibid.
89 Fisher, D. X. (2018). Situating border control: Unpacking Spain's SIVE border surveillance assemblage. Political Geography, 65, 67-76.

90 Based on an interview with a Gran Canaria-based Guardia Civil officer who has worked in border control. The officer requested to remain anonymous.
91 According to an interview with a manager at Escribano M&E.
92 Ministerio del Interior. 2018. "Informe Anual de Seguridad Nacional". https://www.dsn.gob.es/sites/dsn/files/IASN2018%20WEB.pdf
93 Ibid.
94 Ibid.
95 Information obtained during fieldwork. On previous occasions, the Guardia Civil has publicly admitted the existence of the problems with radars in media: https://www.elindependiente.com/espana/2021/09/28/la-guardia-civil-admite-que-los-sensores-de-los-radares-para-detectar-pateras-superan-su-vida-util/.

"It also experiences flaws in depth perception. One night we were searching for a small boat in Almería. We couldn't see anything, it was very dark. The Guardia Civil would tell us the patera was ahead of us, so we moved in a straight line to find it. The problem is that it wasn't actually ahead of us, but behind. However, the perspective in the radar screen made it seem like we were on the same line".[96]

96 As explained by Manuel Capa, a worker in Salvamento Marítimo.

Over the years, there have been cases where the Civil Guard misinterpreted the system's results, opting not to activate the rescue protocol, believing the radar alerts were merely large waves instead of migrant boats. There have also been instances where the SIVE failed to alert the presence of these vessels altogether. Later, it emerged that these were indeed boats carrying migrants that had capsized while awaiting rescue that never arrived. This includes the incident in 2009 off Lanzarote, where 25 people died[97], and another shipwreck in 2018 on the same island, resulting in 7 fatalities[98].

"The material is not working anymore"

Although the SIVE is commonly known for its role in migration-related surveillance activities, the system was actually built to counter illegal drug trafficking in the Strait as well. It only reached the Canaries in 2004: Fuerteventura was the first island where it was installed; followed by Lanzarote (2006); Gran Canaria (2007); and Tenerife (2008)[99]. Since then, it has experienced several updates from different companies that have received millionaire investments through public tenders to take over the maintenance of the devices, as the Foundation PorCausa has reported thoroughly in the past years[100].

The equipment has been passing from hand to hand for the last two decades: the firms Indra, Amper Systems, Inetum, Atos, Deimos, have been in charge in the last 10 years of the maintenance of the stations and the hardware, as well as the provision of parts for the devices. National firms like Telefonica have also participated in this process by extending the range of satellite communications of the system[101]. In 2022, Escribano Mechanical Engineering took the lion's share of the tendered money – 19 million euros – to take over maintenance and upgrades.[102]

In 2024, the hardware and the software in the Canary Islands is managed by Escribano Mechanical Engineering in the case of the province of Las Palmas of Gran Canaria, while Indra remains in charge of the maintenance in Santa Cruz of Tenerife (with a grant of 3.4 million euros). Other firms like Atos continue to supply parts to the hardware (cameras and radars).

The very instability in managing maintenance and replacing devices is what causes the system to not function at its full potential. A member of the Guardia Civil

97 EL DIA. March 2009. El SIVE detectó la patera naufragada en Lanzarote pero no actuó al confundirla con las señales de fuertes olas. https://www.eldia.es/canarias/2009-03-03/16-SIVE-detecto-patera-naufragada-Lanzarote-actuo-confundirla-senales-fuertes-olas.htm

98 Diario de Lanzarote. July 2018. El Gobierno se excusa en que la meteorología hizo que el SIVE no detectara la patera de la tragedia de Costa Teguise. https://www.diariodelanzarote.com/noticia/el-gobierno-se-excusa-en-que-la-meteorolog%C3%ADa-hizo-que-el-sive-no-detectara-la-patera-de-la

99 Guardia Civil. SIVE. https://www.guardiacivil.es/es/prensa/especiales/sive/localizacion.html

100 PorCausa (2022). Industria del Control Migratorio (ICM): Manual de instrucciones. https://porcausa.org/wp-content/uploads/2022/07/Manual-de-Instrucciones-de-ICM-2022.pdf

101 Ibid.

102 InfoDefensa. September 2022. La Guardia Civil encarga a Escribano la puesta a punto de su sistema de detección de pateras y narcolanchas. https://www.infodefensa.com/texto-diario/mostrar/3883177/guardia-civil-encarga-escribano-puesta-punto-sistema-deteccion-pateras-narcolanchas

explained that over the past decade, there has been a tendency to "cannibalise" cameras and radars: instead of swapping out devices with entirely new parts, parts from other units are reused. Based on their experience with the system, devices frequently malfunction due to these inconsistencies.

Investigations like the one conducted by PorCausa, which list all contracts related to the SIVE and maritime surveillance between 2014 and 2022, show exactly the amount of money offered through the Contracting Portal and the recipient company. However, the reality in the Canary Islands is that the devices are not serviced as frequently as necessary.

The most recent and telling example of this management issue arises in Lanzarote, where radars and cameras for one of the posts remained stored for over a decade, despite payment already made to the responsible companies[103]. In the same area, shortly after installing a new post in the northern region of Guinate, it was vandalised and set on fire, rendering it unusable and sparking a political uproar due to negligence[104].

Integrating AI through Perseo

Most SIVE cameras are based in electro-optical technology, which combines camera features and its lenses with the ability to handle them electronically. The current devices provided by Escribano Mechanical Engineering use OTEO-S (Observation and Tracking Electro-Optical System), an in-house product. These cameras replace the ones installed in the early stages of system implementation.

The company has also upgraded the software on which SIVE is based with another in-house product called PERSEO. It's a computer platform that consolidates all the functionalities of the SIVE devices, such as radar sensors, electro-optical cameras, communication systems with the control centre, operation consoles, and more[105].

According to PERSEO's main manager, Herminio Tribaldos, the system uses AI-driven algorithms to automatically classify "suspicious" vessels. PERSEO uses image recognition technology to analyse the silhouette and the size of boats that are detected by the SIVE and state whether they are sailing ships, merchant ships, passenger boats, etc. or pateras and drug trafficking vessels, the two main objectives of the system.

In order to classify vessels as suspicious or not, the system analyses other parameters such as the area in which the radar detected the vessel; the trajectory the vessel was following; and the speed at which it was travelling:

103 Atlántico Hoy. September 2023. El SIVE de Lanzarote: 19 millones para mantenimiento y sólo funciona un radar. https://www.atlanticohoy.com/politica/sive-lanzarote-19-millones-mantenimiento-solo-radar-funciona-inmigracion-canarias_1521835_102.html

104 RTVC. October 2023. Queman el SIVE de Lanzarote. https://rtvc.es/queman-sive-de-lanzarote/

105 Presentación Escribano M&E. December 2023. https://anyflip.com/ezgnc/xbsb/basic

"A merchant ship, for instance, might not be considered suspicious, but a sailboat or smaller vessels could easily be seen as potentially friendly or hostile. A vessel coming from the open sea would be the first indicator that it is suspicious."

III. SAR: Search And Rescue parties and their use of technologies

Both Salvamento Marítimo and the Guardia Civil conduct patrols along the Atlantic Route, even in the absence of reports or sightings of small boats. The Guardia Civil also operates aeroplanes and helicopters based in Senegal or Mauritania. Additionally, the Spanish Air Force deploys aerial assets in the islands to support detection efforts[106].

Search and rescue missions typically involve onboard technology such as radars, sensors, and thermal cameras, which serve as aids in detection tasks. As previously mentioned, the SIVE is a short-range detection system, so it can only be used when small boats are already close to the islands. The Guardia Civil also uses drones to complement patrol duties.

106 Home Office. October 2023. "Grande-Marlaska anuncia la incorporación inmediata de dos nuevos aviones de la Guardia Civil a la vigilancia de la ruta migratoria atlántica". https://www.interior.gob.es/opencms/es/detalle/articulo/Grande-Marlaska-anuncia-la-incorporacion-inmediata-de-dos-nuevos-aviones-de-la-Guardia-Civil-a-la-vigilancia-de-la-ruta-migratoria-atlantica/

1. The use of satellite telephones in the Canarian routes

Satellite phones are still a key player in the journeys migrants set forth on the different Atlantic routes, as it is the only device that can provide coverage in the open sea. The main provider of these devices is the firm Thuraya. They are not marketed specifically for migration routes, but they are the only communication channel migrants can count on during the fateful days-long journeys and are a turning point in rescue operations.

They work similarly to a regular cell phone: they allow making calls and also provide accurate geographic coordinates of the caller's position. With satellite phones, people coming in pateras can contact NGOs watching out in the sea or national authorities directly and inform them of their coordinates.

There are also language and knowledge barriers to overcome: a translator is needed in many occasions in order to properly understand the numbers transmitted. There are occasions where the person dictating the location does not know how to use the appliance properly and reads the printed serial number instead of the numbers marked on it[107].

"We do not count with any kind of geolocaliser: all the information we can obtain depends on what the people at the other end of the line can transmit in a common language".[108]

Whenever an NGO such as Alarm Phone or Caminando Fronteras receives one of these calls, they communicate the coordinates to Salvamento Marítimo — in the case where Salvamento Maritimo cannot organise the rescue, they alert the Guardia Civil.

Usually, these devices are provided to the people aboard by the people who have arranged the departure of a patera. This process has been going on for years, and it remains one of the safest methods for the migrants to orient the journey and reach the islands safely, according to NGOs.
However, before reaching the islands, migrants are instructed to get rid of every electronic device they might carry, even if these are not traceable (such as compasses). "I have never seen them", says Manuel Capa, a member of Salvamento Marítimo who has worked in rescue operations in the Canary Islands for several years.

107 According to experiences that came out in interviews during fieldwork in the Canary Islands.
108 According to a member of Alarm Phone.

2. An attempt by Salvamento Marítimo to use machine learning

Salvamento Marítimo is working on an in-house project that contains artificial intelligence-based products, such as the use of smart sensors and automated detection programmes for "castaways and objects dangerous to navigation"[109]. This programme would also allow the detection of smaller vessels carrying people in the Atlantic Route.

As of May 2024, the project iSAR, as it's called, had only been tested in the Canary Islands as a pilot, according to an interview conducted that month with Nestor Perales, Head of Air Service and Operations Directorate at Salvamento Marítimo. It is expected to start running officially in the islands in the second semester of 2024.

Currently, detection missions carried out by Salvamento Marítimo involve regular human staff: operators sit in helicopters and planes in SAR operations looking out of the windows to catch sight of small pateras or castaways. Concurrently, other workers scan the live images that are collected by regular cameras in search of the vessels.

"This searching method is not optimal because you can pass over the object you are looking for, but not see it; either due to exhaustion or saturation, because you're distracted, because the images are not good quality, etc. That's where algorithms had to be put in", says Perales.

The project includes three main technological components: intelligent sensors and radars connected to cameras with image recognition software; drones equipped with these systems; and the development of a digital communication network that all these devices can connect to through an AI-driven software platform. The companies providing the technology are Overwatch Imaging (California, US), Schiebel (Austria), and GMV (Spain), respectively. GMV also supplies the Guardia Civil with software management platforms for the SIVE stations in mainland Spain.

Perales said the cameras and radars will be installed on planes to scan the ocean using an image recognition algorithm to detect objects and small vessels. When the camera identifies a potential target, it takes a photo, marks the location on a digital map and sends the coordinates to Salvamento Marítimo's coordination centre. The imaging cameras are accompanied by a thermal camera because, according to Perales, this is currently the only way they have been able to detect bodies floating in the sea. They do not use technology aimed to identify colours or human silhouettes.

109 Proyecto iSar. https://isar.sasemar.es/

The systems in Project iSAR are meant to act in those cases where the standard radars used by Salvamento Maritimo are ineffective: especially in the detection of small objects or people) in the middle of the ocean.

"Radars are effective for locating large boats, but not a small raft, people overboard or a boat on rough seas, because the radar picks up too much noise. With large waves, the radar sends the echo but the sea continually bounces the signal back, which makes the system send constant alerts for non-existent objects".

At the time of the production of this report, the planes intended to carry the radars and drones were undergoing maintenance and awaiting necessary certification from aviation authorities. Additionally, the cameras had been returned to the US for recalibration of the image recognition algorithms. Overwatch Imaging had promised Salvamento Marítimo that their software would be able to detect castaways in the dead of the night, but during the testing phase, the system failed to do so. While it detected small objects, it did not manage to detect dummies thrown into the water[110].

3. The role of Frontex and EUROSUR

Frontex's role in managing the borders of the Canary Islands has undergone significant changes over the years. Its peak involvement occurred during the European HERA mission in 2006 when it actively participated in coordinating patrols in international waters. At the time, it used its own equipment, vessels and planes. Because of following agreements between Spain and countries like Mauritania and Senegal, the zone they were allowed to navigate expanded to include waters from those nations as well.

As of today, Frontex lacks its own technical resources to conduct maritime surveillance in the region, but is still present in the islands and primarily focuses on gathering intelligence data. By the time of publication of this report, there are 67 agents deployed across the islands[111].
Frontex agents don't consistently attend port arrivals, but when they do, their main focus consists in updating their internal databases. In these instances, they mostly engage in two tasks: "screening", where they attempt to identify migrants, and conducting intelligence interviews with them.

110 According to an interview with the Head of Air Service and Operations Directorate at Salvamento Marítimo.
111 According to an information request sent to Frontex within the framework of this research.

Typically, newcomers don't possess documentation. Information is gathered through cultural mediators—individuals skilled in identifying accents and facial features, among other things, to determine the region the person hails from in case they are unwilling to provide their details[112].

During intelligence operations, interviews often involve questions such as "who recruited you," "which beach was used for boarding the patera," "who was in charge of the vessel," or "where were you situated until the departure of the patera." Protocols are different in each island, but at least in Lanzarote, Frontex are the first to interview the rescued – even before the Red Cross and the Canary Health Service (SUC) provide them with health care[113].

This data is managed directly by Frontex and is occasionally shared with national authorities such as the National Police or immigration offices at a national level. In Europe, the main recipient of the data they collect is EUROPOL. Intelligence gleaned from these interviews is disseminated through EUROSUR, an intercommunity platform accessible to all member states[114]. This information network contains non-personal data on migration processes but focuses particularly on networks of individuals and 'mafias' involved in organising the departure of small boats and the Atlantic route journey.

Regarding the Southern Border, the relationship between Spanish authorities and Frontex remains unstable due to discrepancies mainly arising from the lack of transparency on behalf of the agency regarding the parallel registration of migrant information. These disagreements have led to several failed attempts to remove the agency from the islands[115]. In 2024, it was announced that Frontex would withdraw from the islands due to a lack of agreement with the Home Office regarding the handling of intelligence information. However, an understanding was reached, and Frontex continues to fulfil its role[116].

This data that Frontex gathered is then shared with European partners. Moreover, Frontex also invests in technology that aligns with this objective. To achieve this, the agency relies on private companies and EU funds to supply technical resources to other states. For example, through EUROSUR, Frontex shares information derived from satellite images of 'hot spots' – as in beaches where people depart from, for instance – obtained through agreements with specialised centres like the European Satellite Center in Torrejón de Ardoz, which is located in Spain. Additionally,

112 According to an interview conducted with a former Frontex executive.
113 According to interviews conducted in the island with Red Cross employees and volunteers.
114 Tazzioli, Martina. "Spy, track and archive: The temporality of visibility in Eurosur and Jora." Security Dialogue 49.4 (2018): 272-288. Rijpma, Jorrit, and Mathias Vermeulen. "EUROSUR: saving lives or building borders?." European security 24.3 (2015): 454-472.
115 El País. January 2024. Frontex amenaza con irse de España. https://telegra.ph/Frontex-amenaza-con-irse-de-Espa%C3%B1a-01-25-3
116 elDiaro.es. January 2024. Frontex resuelve las "cuestiones técnicas" con España y levanta la "suspensión temporal" a las operaciones contra la migración.
https://www.eldiario.es/desalambre/frontex-resuelve-cuestiones-tecnicas-espana-levanta-suspension-temporal-operaciones-migracion_1_10877097.html

Frontex contracts private companies to manufacture surveillance devices such as radars for member states (and third parties).

IV. Registration upon arrival: the use of databases

One of the most vulnerable points in the migration process in the Canary Islands is the identification of individuals arriving on pateras. In the vast majority of cases, these individuals arrive without documentation, don't speak Spanish, and have endured traumatic situations, such as spending several days at sea with little food and water, uncertain if they'll reach their destination. They may exhibit signs of disorientation and declining health, which also impede their ability to communicate or provide accurate identifying information to the authorities.

As a result, the personal data of many of these individuals may contain errors from the moment they enter the Spanish administration's databases. These inaccuracies can persist throughout their bureaucratic journey and pose one of the main challenges to the digitalisation of this process.

Upon reaching the port, Red Cross registers personal and identifying data and conducts a basic examination of each person. Every piece of data, including health information, is documented and stored in a database managed by Red Cross. This form includes personal data and a large questionnaire about the medical condition in which the migrants left their country and arrived in the Canaries[117] — although a former collaborator of the organisation noted that such a report "is hardly filled out most of the time"[118].

Each traveller is then given a wristband indicating their condition and categorising them into different groups. Green signifies good health; red indicates a need for further medical assistance; pink suggests a possible infection by scabies infection; and golden denotes extreme vulnerability (for example, travelling from a country at war), among others.

Unlike the Guardia Civil, which is not involved in administrative tasks related to migration, the Police oversees the entire process of placing individuals in centres and determining their administrative status. They run their own screening of newcomers, gathering information such as names, gender, age, nationality, embarkation point, motive for departure, and more. They also record details about the patera, including the registry number of the patera; type (usually wooden or rubber boats, known as zodiacs); dimensions; characteristics; brand, model and fabrication number of the engine; the arrival location and province; embarkation

117 A lawyer showed us the official Red Cross questionnaire. Most of the identifying data were filled in, but the information regarding the extensive medical exploration was not.
118 According to on the ground interviews conducted in Lanzarote.

origin; and details about the skipper's filiation and nationality[119]. The Police is also in charge of determining a first estimation of the migrants' age.

A collaborator of Civil Protection in El Hierro, the most westerly Canary Island, said in an interview that in many cases where migrants arrive at the ports and can't recall or accurately state their date of birth, the police will simply note the year of birth to determine their age. This could lead to a systematic error in data registration, as whether someone is considered a minor or not would depend on their month of birth. In this scenario, hypothetically, anyone born in 2006 would be 18 years old (as of 2024).

Although it is not evidenced by many of the people who work in the reception of the migrants, we have found that in some cases the Police also take photographs of the minors who arrive in pateras in Tenerife. According to the National Police, these photographs are taken on the orders of the provincial prosecutor's office, in cases where they request to assess the age of a minor or a person who identifies as underage at the port before taking them to the corresponding centre[120]. It is unclear who within this office is responsible for assessing the photograph and determining the age of the person who appears in it.

In Tenerife, during fieldwork, we also observed that on some occasions such pictures are sent by the officers through WhatsApp[121]. When asked about this procedure, the National Police said that this channel is used in one-off cases where "immediacy" is relevant in the decision making process. The Police said they share these photos with the provincial prosecutor's office and that WhatsApp is not a regular communication channel, although we could verify that these pictures are taken consistently in Tenerife.

All the information about the migrants that is collected by the Police is stored in the national database ADEXTTRA. This database mixes information about foreign nationals, non-EU citizens, or Spanish citizens impacted by migration regulations, including people who enter the country through maritime routes. It includes information to identify individuals, but also socio-economic variables of individuals. The database also contains biometric data: the police keep facial images, fingerprints and voice samples[122]. According to the Police, the photographs taken of minors in ports such as Los Cristianos are not stored in ADEXTTRA[123].

The data stored in ADEXTTRA is managed by the Spanish Home Office and is

119 According to an inquiry of the Ministry of Interior we had access to.
120 According to an inquiry we submitted to the National Police.
121 Information obtained from images provided by a local photographer in Tenerife.
122 Registro de Actividades de Tratamiento de datos. June 2023. Tratamientos RGPD. Ministerio de Inclusión, Seguridad Social y Migraciones – Dirección General de Gestión del Sistema de Acogida de Protección Internacional y Temporal (DGGSAPIT).) https://sede.inclusion.gob.es/documents/387478/0/4.+Tratamientos+MISSM-DGGSAPIT+_v1.1.pdf/3c95dcd1-a0b2-7ac5-55b3-2f6a914019e1?t=1686809540726
123 According to an inquiry we submitted to the National Police and the Provincial Police of Santa Cruz de Tenerife.

shared with other law enforcement agencies and public administration offices involved in migration procedures. Information concerning adults is also transmitted to European organisations like Interpol and Europol. This data is also shared with the large-scale biometric databases at the European level, such as SIS II. Data regarding minors is shared with other European border authorities or agencies responsible for unaccompanied minors.

The Red Cross creates its own database containing identifying and health information gathered through interviews conducted upon the arrival of migrant individuals at the port. Currently, the Ministry of Inclusion, Social Security, and Migration is responsible for the management of this database. Despite having received funding from the Spanish Home Office and the EU for many years, the Red Cross now provides healthcare assistance as a subcontractor of this Ministry[124].

The Ministry of Inclusion, Social Security, and Migration is also responsible for the SIRIA database. This database aims to provide information about capacity within migration centres to better coordinate the distribution of migrants across the Spanish territory. It includes information on applicants and recipients of Temporary International Protection, which sometimes encompasses individuals arriving on small boats. It records details such as identification and contact information, age, gender, nationality, family composition, personal characteristics, social and psychological circumstances, economic and employment status, academic and professional background, health information, judicial documentation, and ethnic origin. This data is shared with the Guardia Civil and Police, EU bodies, as well as public and private entities such as the Red Cross, CEAR, or ACCEM[125].

Fingerprints are also uploaded to EURODAC and the national fingerprint database ABIS (previously known as SAID). Initially intended solely for asylum seekers, EURODAC's use has expanded, and today, data from virtually all so-called "irregular" migrants are entered into it. ABIS, on the other hand, is a national database that stores detained people's biometric data and that is currently used by the National Police to run a face recognition program[126].

"Digitalization for deportation, but not for fulfilling rights"

As put by Txema Santana, the administrative-level digitalisation efforts in migration primarily prioritise managing deportations and/or returns of migrants. However, there are few initiatives aimed at digitising bureaucratic processes to ensure the protection of these individuals' rights. In an interview, he explains how the lack of

124 https://www.boe.es/diario_boe/txt.php?id=BOE-A-2023-20749

125 Registro de Actividades de Tratamiento de datos. June 2023. Tratamientos RGPD. Ministerio de Inclusión, Seguridad Social y Migraciones – Dirección General de Gestión del Sistema de Acogida de Protección Internacional y Temporal (DGGSAPIT).)https://sede.inclusion.gob.es/documents/387478/0/4.+Tratamientos+MISSM-DGGSAPIT+_v1.1.pdf/3c95dcd1-a0b2-7ac5-55b3-2f6a914019e1?t=1686809540726

126 El País. May 2024. "La Policía española ya usa en sus investigaciones un sistema automático de reconocimiento facial." https://elpais.com/tecnologia/2024-05-28/la-policia-espanola-ya-usa-en-sus-investigaciones-un-sistema-automatico-de-reconocimiento-facial.html

consonance at the time of adding data to EURODAC reproduces interoperability problems with programs that manage fingerprints in Spain and in the EU.

In most CATEs in the Canary Islands, migrants' fingerprints are still taken with ink rather than using LiveScan, the digital scanning machine used in police stations. According to a National Police officer who was interviewed for the report, they scan fingerprints using ink and paper[127]. The document (called 'decadactilar' in Spanish) with the 10 fingerprints is then scanned and uploaded to ABIS. In Gran Canaria, Frontex sometimes participates in this process along with the National Police, as LiveScan machines are not yet in use due to the impossibility to digitally register the great volume of people that are managed in CATEs upon arrivals[128].

V. Age estimation through bone radiology

Defining the real age of the migrants that reach the Canary Islands is crucial when managing the way forward for their life and legal status. Whenever the National Police is not able to establish their age – either because someone has self-declared to be a minor and officers doubt their version or because they cannot provide a year of birth and there is no documentation to verify it – they alert the provincial alien prosecutor. This organism then requests a medical examination to determine an approximate age[129].

Around 600-700 people undergo this process yearly in the Canary Islands. Only in the province of Las Palmas, the Legal and Forensic Medicine Science Institute (IMLCF) attended 339 cases between January and March 2024[130].

This scientific-technological procedure is standard to many European countries. In the Canary Islands the quantity of tests that can be done varies depending on the spikes of arrivals of pateras. There are three main tests conducted in the age verification processes:

A basic examination of the person and the oral cavity along with an interview. It is always the first step in the procedure. Medical examiners ask about filiation data and make an initial deliberation on how to proceed. In very rare occasions, this plain examination will be enough to elucidate the real age of a person.

"We have seen cases where boys come in alleging they are 15 years old, but as

127 The National Police officer requested not to be quoted by his name.

128 According to the same interview with the officer. The same National Police officer said Frontex had sent LiveScan machines for this task, but we could not verify this independently.

129 The following description of the process is based on on the ground interviews conducted with representatives of the Forensic Age Estimation Unit (UEFE) at the Legal and Forensic Medicine Science Institute (ILMF) in Las Palmas, Gran Canaria.

130 Data obtained in on the ground interviews conducted with members of the UEFE of the IMLCF.

soon as you strike a conversation and study their physiognomy you can assess that they are largely off age", admits in an interview Anahí Domínguez, one of the anthropologists working at the Forensic Age Estimation Unit (UEFE, in Spanish) at the IMLCF in Las Palmas, Gran Canaria. The alleged minors that face that situation still have to undergo the medical tests.

X-ray of the carpus, examining the closure of the bony epiphyses. The first assessment consists of a regular radiograph of the carpus, i.e. the bones that form the wrist. As explained by Diana García, also anthropologist and member of the UEFE at the IMLCF, "there are many bones in the hand, and depending on the stages they remain closed or open. As a person grows older and gets older, the epiphyses close and we stop growing". That is the most evident symptom, for them, that a person has stopped growing.

This evaluation is done by comparing the X-Ray with the population sample contained in the Atlas of Greulich and Pyle, a compendium of radiographs of Americans created in 1957 that covers images from newborns to 19-year-olds. Medical examiners do a first visual comparison and establish an illustrative age range. This figure is then compared with other publications that contain "multiracial" values to tighten the accuracy of the test.

The lack of representativeness in the publications of population samples is the main backlash against these methods. Some researchers talk about the "subjectivity of radiological readings": bone maturation is influenced by genetic, environmental, socioeconomic, etc. factors which means that even within the same country or ethnic background, there are significant differences to be taken into account[131]. Moreover, Sharam Koshravi and others have deeply investigated the political gaze of X-Ray technologies which is linked to racial capitalism, colonial racism and sexism[132].

An orthopantomography (a panoramic radiograph of the mouth). The third test is encouraged in those cases where the X-ray of the carpus provides a result that is too different from the testimony of the person or the impression of the professionals assessing the case. It includes obtaining a panoramic image of the teeth, molars, gums, maxilla and mandible. What medical examiners look into in this particular test is the development of third molars – the so-called wisdom teeth.

From these two scans (or one, as appropriate), the forensic surgeons establish what they call a "minimum age". When compared with the atlases and population sample publications, they usually assign a range of age. For instance, a minor could be

131 Vestri, G., & González Martín, N. (2012). Los menores de edad migrantes no acompañados y sus exigencias jurídicas: Un diálogo entre España y México. https://www.observatoriodelainfancia.es/ficherosoia/documentos/3456_d_Migraciones_menores_Espana_Mexico.pdf

132 Khosravi, Shahram, ed. The Gaze of the X-Ray: An Archive of Violence. Vol. 2. transcript Verlag, 2024.

between 15 and 17 years old according to the result of a test and between 16 and 17 according to the second. The disparity is solved by using the highest among the minimum: 16 years in this case.

The reasoning behind this is that if bone maturation states that a boy has reached the age of 16, but the population sample being compared says that few children in the sample were 16 (as the average was higher), assigning him the lowest number and underestimating the possible age is a way of "protecting" the children[133].

"With this assessment we say that this is how young a minor can be – we do not assure that is the real age."

This argument is also used to justify the criticisms raised by NGOs that African children are subjected to tests that are based on American population standards[134]. "If we compare a child that has had good nutrition and one that has not, chances are that the first will reach bone maturity earlier than the second, even though they are the same age. The healthy child's bones will be more developed, while the undernourished's bone age will be smaller than his actual age. If I compare a person from sub-Saharan Africa to a standard of 'well-developed', instead of being assessed as being 18 years old, it will go down to 17, even though the real age is 18", says García.

In the end, it all comes down to the ossification of the bones. García and Domínguez recall the case of a boy from Mali who was so tall he would have to duck under the doorframe. Nevertheless, when the results of the test came out they said he was 14.

"In many cases, they truly do not know their age"

According to the doctors, there is a considerable gap of knowledge among the children coming from Mali, Gambia or Morocco. While the first do not usually know their exact date of birth, the latter are the best at remembering their filiation data. Those from Gambia, according to the doctors, tend to doubt their age until they get the medical test done: "We are experiencing a peak rise in the cases of Gambian migrants who self-declare minors, but are in fact overage".

The tests are obviously not always accurate. If any doubt remains after the scanners of the mouth and the carpus, there is a third, more costly option: a computed tomography (CAT) of the collar bone. According to García and Domínguez, this examination is done when the rest of the trials offer a range of 18-19 years, but the

133 According to interviews conducted with the examination doctors of the UEFE of the IMLCF.

134 La Provincia. November 2023. Ayuda al Refugiado cuestiona la fiabilidad de las pruebas de edad. https://www.laprovincia.es/canarias/2023/11/10/ayuda-refugiado-cuestiona-fiabilidad-pruebas-94476713.html

interviewee assures he/she is underage, or when this person does not have wisdom teeth, and therefore the orthopantomography cannot be properly assessed.

Artificial Intelligence to scan mouth X-rays

At the time of publication of this report, the IMLCF is working along with the University of Granada on the development of a program based in Machine Learning to analyse the orthopantomographies. The program is supposed to compare the scan with a large database of previous X-Ray images and give an estimated age.

Neither García nor Dominguez see this kind of system as a substitute for their work. Especially taking into account that they are lacking technical and human resources at the institute. "What we do by eye with the atlas, the AI would do for us. As further support in the estimation it could work fine, but at the moment we do not see that AI can tell you the exact age just by comparing the data. What about the interview? And what kind of data would the database be based on? Healthy children? What about children who are missing some stage of development?" And adds:

"How am I going to use AI if I don't even have a proper X-Ray machine".

VI. Mistreatment of personal and health data and its consequences

Age is a key feature to govern migration in the EU. An inaccurate age estimation leads to vastly different treatment on individuals. Documented cases illustrate how prosecutors' offices prioritising X-Ray evidence over providing identification documentation has negatively impacted the living conditions of people on the move. Some argue the medical test is sometimes overestimated when it cannot always distinguish between over or underage:

"Even with a 'balanced' comparison, the margin of error would always be very high—two years up or down. This means that if we are investigating the age of a person who is allegedly between the age of majority and minority, such a highly erroneous activity could change the treatment and protection given to them".[135]

135 Vestri, G., & González Martín, N. (2012). Los menores de edad migrantes no acompañados y sus exigencias jurídicas: Un diálogo entre España y México. https://www.observatoriodelainfancia.es/ficherosoia/documentos/3456_d_Migraciones_menores_Espana_Mexico.pdf

The most extreme case arises when minors who have not been able to confirm their age are identified as the alleged skippers of the boats and are transferred to prisons until the case is elucidated. In 2024 alone, two children aged 17 and 16 spent several weeks in prison because their initial registration data listed them as adults. In the second case, involving a young Gambian who also provided documentation indicating he was a minor, it was concluded from the orthopantomography conducted that he was over 18 years old[136].

Since January 2023, almost 1,000 minors who reached the islands in small boats were allocated in adult centres because their age was wrongly registered: 523 in 2023 and 442 between January and May 2024[137].

These rights violations have been ongoing over the years and across different contexts, not only confined to the Canary Islands. Previous reports of similar cases support this claim, except that instead of falsely accusing people of driving a boat, they are denied shelter in centres and pushed onto the streets. Cases have been documented in Madrid, for instance, where plenty of migrants are reallocated after arriving in the country by sea[138].

"It's very uncommon for a person arriving on a small boat to have their data registered accurately."

The migration lawyer Louelia Mint asserts that often migrants themselves write their names on registration documents. However, even in these cases, there's no guarantee of them being identified properly. Mint also notes that during many data reviews with migrants, they point out misspellings of their names, even in the NIE document.

In an interview, the Foreign Prosecutor of Las Palmas de Gran Canaria, Teseida García, confirms this: "Sometimes we collect personal data and use a name, but suddenly documentation for that person appears, and the name changes from 'Mohamed Gayes' to 'Mohammed Bayes,' with 'g' and a single 'm'. This can lead to bureaucratic issues for that individual."

According to the prosecutor, such errors are corrected when editing the initial decree outlining the person's situation within the humanitarian assistance program. However, modifications are made only if a valid identification document is presented

136 elDiario.es. March 2024. Cinco meses en prisión con 16 años acusado de patronear una patera en la que murieron once personas. https://www.eldiario.es/canariasahora/migraciones/cinco-meses-prision-16-anos-acusado-patronear-patera-murieron-once-personas_1_11233026.html

137 EFE. May 2024. Cerca de mil menores llegados en cayuco a Canarias han acabado en centros para adultos. https://efe.com/canarias/2024-05-21/mil-menores-migrantes-canarias-filiados-como-adultos/

138 Vestri, G., & González Martín, N. (2012). Los menores de edad migrantes no acompañados y sus exigencias jurídicas: Un diálogo entre España y México. https://www.observatoriodelainfancia.es/ficherosoia/documentos/3456_d_Migraciones_menores_Espana_Mexico.pdf

and confirmed through scientific examination by the prosecutor's office, which has the final authority in updating both age and personal information.

"If you don't have a document that identifies you, you are left with what it sounds like to the person who picks it up for the first time and drag it along"

Additionally, the lack of proper digitalisation and maintenance of data in databases disproportionately impacts on minors. If their information is not accurately completed and updated, they may turn 18 without acquiring the necessary documentation to leave the minors' centre and seek employment or housing as residents in the country. These situations could entail administrative violence as other organisations have already exposed[139].

Digital technologies have become a key instrument to estimate migrant's age or identify them through their fingerprints. However, technology veracity is again situated upfront migrant's narratives and trained with Western values. This could potentially jeopardise fundamental rights. Moreover, AI will be supposedly implemented to improve the efficiency of these systems such as in the case of X-Rays. But, again, we observe that users are sceptical about how AI is going to improve their decision-making given that their infrastructure clearly lacks investment. It is hard to imagine how AI can enhance procedures such as age estimation if the context in which it will be implemented has poor instruments to begin with.

139 No Name Kitchen; El Taller-Frontera Sur Gran Canaria; Solidary Wheels; No Borders For Human Rights. "BURORREPRESIÓN EN LA FRONTERA SUR: violencia administrativa en Canarias, Ceuta y Melilla". https://burorrepresion.org/wp-content/uploads/2024/06/INFORME-BURORREPRESION-red.pdf

CONCLUSION

The evidence gathered during the fieldwork for this investigation in the Spanish southern border brings forward some key reflections. First of all, both in the Canary Islands and Ceuta and Melilla, the use of technology for purposes of border surveillance, detection, prevention and containment of mobility are largely prioritised over uses that focus on favouring rescue or protection. While expected, this finding confirms wider trends in the Mediterranean region where we see technology being used to implement a repressive migration policy regime where the protection of people on the move is secondary to the militarisation of borders.

Another key finding, is that the border infrastructure combines both analog and digital systems, calling for a reconsideration of the border as a socio-technical space. While technological tools are prevalent throughout the migration process in the territories we studied, there is a noticeable lack of avant garde technology compared to the reliance on more basic systems.

Moreover, the technologies used in Ceuta, Melilla and the Canary Islands — such as thermal cameras, drones, light lasers, satellite phones, smart sensors, radars, and the use of databases for collecting biometric and fingerprint information — largely depend on the technical capacity and training of the agents of the Guardia Civil, National Police and Frontex, who act as end users of such systems and perform non-automated consequential decisions on a daily basis.

The technological deployment implemented at the southern Spanish border has led to an increasing number of cases of human rights violations. Racial profiling, difficulties in accessing asylum, and the criminalisation of people on the move contravene their fundamental rights. Moreover, the continued use of analog

technology, such as the case of concertinas and other mechanisms such as ditches on the Moroccan front, as well as the installation of anti-climbing cylinders on the Spanish side, pose a serious danger to the physical integrity of individuals.

Human rights violations occur concurrently with other deprivation of rights: migrants arriving in Spain are assigned with identification numbers, but in cases where identification is not possible, they are dehumanised to the extent in which they are not given a proper name and identity. Their identification data could be wrongly registered in most cases, leading to a mismanagement of their future status as residents in Spain or other European countries. Migrants are also deprived in many cases of receiving legal assistance and are poorly informed about what their data is being used for. Furthermore, the unbalance of power when facing border authorities or the police can discourage them from requesting further information pertaining to their rights and issues of data protection. Some organisations have analysed this effect as bureaucratic repression[140] and pointed to the fact that migrants do not feel entitled to ask about their own rights as they are afraid of being pushed back.

Several NGOs, human rights defenders and academics warn that there are harmful elements in the use of biometric tools, such as facial recognition, fingerprint scanning and the collection of personal information. Issues such as the systematic violation of privacy (in violation of current legislation protecting it), the breakdown of international protection and the right to seek asylum, and the rejection of migrants in vulnerable situations are just some of the pernicious effects of a digitalised border.[141] [142] [143] [144]

From this perspective, it should be noted that the introduction of the Entry Exit System (EES) could create an ethical dilemma regarding the use and scope of biometric and EES data collection tools. From the lenses of human rights advocacy, it is inevitable to address several concerns and threats posed by the uncontrolled use of biometric tools and instruments for the systematic extraction of information. The development of digital border management raises serious questions about the risks it could represent to people in situations of extreme vulnerability, as new technologies "increase the scope and precision of the racially discriminatory operation of borders", with governments and Big Tech deploying tools at borders that are in some cases experimental and dangerous in the context of migration.[145]

140 Frontera Sur Canaria, No Name Kitchen and Solidary Wheels "Bureauoreession on Spain's southern border: Administrative violence against migrants in the Canary Islands, Ceuta and Melilla" June 2024. Accessible at: https://burorrepresion.org/wp-content/uploads/2024/06/INFORME-BURORREPRESION-red.pdf.

141 Valdivia, A., Serrajòrdia, J. C., & Swianiewicz, A. (2023). There is an elephant in the room: Towards a critique on the use of fairness in biometrics. AI and Ethics, 3(4), 1407-1422.

142 Scheel, S. (2019). Autonomy of migration?: Appropriating mobility within biometric border regimes. Routledge.

143 Glouftsios, G., & Scheel, S. (2021). An inquiry into the digitisation of border and migration management: performativity, contestation and heterogeneous engineering. Third World Quarterly, 42(1), 123-140.

144 Tazzioli, M. (2019). The making of migration: The biopolitics of mobility at Europe's borders.

145 United Nations Human Rights Council, Special Rapporteur on contemporary forms of racism, Racial discrimination, xenophobia and related intolerance, Racial and Xenophobic Discrimination and the Use of Digital Technologies in Border and Immigration Enforcement, New York, NY: UN Headquarters, 2021: 1–24.

Similar to other European countries, Spain uses public funds to develop new technological projects in border management that are not fully deployed. Million-euro tenders are fueling the AI-driven industry, using the migrant population as test subjects during implementation, only to discover that the systems do not perform as expected. These systems are then sold to public administrations, which can circumvent regulations in the interest of national security — the AI Act itself includes derogations in the area of law enforcement, national security and migration.

In Ceuta and Melilla, the complex relationship between Big Tech, the state and the European Union has resulted in multi-million-euro contracts for new equipment whose only purpose is improving border surveillance. This technological apparatus is designed to leverage automation to enhance the detection, control, and tracking of immigrants. In Melilla, the CETI showed that the demographic shift of the migrant population is due to two key factors: the collapse of the asylum system on the mainland and the obstacles created by Morocco and Spain at the border, which both hinder and criminalise migration. Furthermore, this situation is hard to interpret due to the lack of transparency of the CETI and the opaque criteria for accessing it.

In the Canary Islands, the primary focus for digitising the migration process is on investing in detection technologies, such as the SIVE and AI-driven systems aimed to improve the detection of small boats and castaways. However, the main issue is the lack of sufficient human resources to fully use these technologies. The staff working for the Guardia Civil and Salvamento Marítimo are limited, and they are primarily concerned with improving their working conditions and expanding their rescue equipment: no matter how many stranded vessels an automated system can detect, it will not make a difference if there are no rescue ships available to respond. Data collection is still manually processed in the Canary Islands. Nevertheless, the information is then poured into national and European and national databases. These registers are then used to support decision making, even if the data is not up to date or mistaken, which lead to serious consequences for migrants looking to legalise their status. Wrong age estimation is also driving the criminalisation and imprisonment of innocent minors.

In the specific case of Eurodac, the new Pact on Migration and Asylum updates and extends the fingerprint database "with a view to collecting more information and including more categories of migrants in order to optimise the tracking of "irregular" movements and to monitor the itineraries of asylum seekers". The way in which Eurodac operates, by standardising people through algorithmic profiling[146], is the subject of criticism that denounces attempts to "liquefy" and "petrify" the complex and heterogeneous identities of people on the move. All this leads to the

146 Philippa Metcalfe, "Autonomy of Migration and the Radical Imagination: Exploring Alternative Imaginaries within a Biometric Border," Geopolitics, Vol.27, no.1 (2022): 53

construction of a system based on datified and immutable bodies in time[147].

Finally, it is important to underline that a key player in Spain's migration policy is Morocco. The cooperation of Moroccan authorities and the technological infrastructure on the Moroccan side of the borders with Ceuta and Melilla remain to these days a crucial element of border control. Despite the abundance of evidence of systemic violations against people on the move in Morocco, from the abusive practice of forced deportations to desert areas to the violent means used by the border authorities, the European Union and Spain continue to collaborate with Morocco, providing it with millions of euros in funding as part of their externalisation of border strategy[148].

147 Brigitta Kuster and Vassilis S. Tsianos, How to Liquefy a Body on the Move: Eurodac and the Making of the European Digital Border, In: Bossong, R., Carrapico, H. (eds) EU Borders and Shifting Internal Security. (Springer, Cham, 2016). https://doi.org/10.1007/978-3-319-17560-7_3

148 May Bulman, et al. Desert dumps. Lighthouse Reports, Washington Post, Enass, Der Spiegel, El Pais, IrpiMedia, ARD, Inkyfada and Le Monde. May, 2024
https://www.lighthousereports.com/investigation/desert-dumps/

BIBILIOGRAPHY

Abad, José Manuel "Defensa construirá un refugio temporal para inmigrantes en la isla de Alborán," April 16, 2024

ACCEM. "Al menos 3.997 personas murieron en 2023 en la frontera sur de Europa." January 21, 2024.
https://www.accem.es/al-menos-3-997-personas-murieron-en-2023-en-la-frontera-sur-de-europa/

AccessNow. "The EU Migration Pact: a dangerous regime of migrant surveillance." April, 2024. https://www.accessnow.org/press-release/joint-statement-eu-migration-pact-a-dangerous-regime-of-migrant-surveillance/

Alberto Senante, "Tragedia en la valla de Melilla: Un año de impunidad tras la masacre", Amnesty International, June 23, 2023. Disponible en https://www.es.amnesty.org/en-que-estamos/blog/historia/articulo/tragedia-en-la-valla-de-melilla-nunca-mas/

Alonso, Martín. "El SIVE de Lanzarote: 19 millones para mantenimiento y sólo funciona un radar." Atlántico Hoy, September 25, 2023.

Amnesty International. "Marruecos: la incesante ofensiva contra miles de personas migrantes y refugiadas de origen subsahariano es ilegítima." September 7, 2018. https://www.amnesty.org/es/latest/press-release/2018/09/morocco-relentless-crackdown-on-thousands-of-sub-saharan-migrants-and-refugees-is-unlawful/

Amnesty International. "Truth, Justice, Reparations: Spain and Morocco must provide answers to victims of human rights violations in Melilla." December 13, 2022.
https://www.amnesty.org/en/latest/campaigns/2022/12/truth-justice-reparations-spain-and-morocco-must-provide-answers-to-victims-of-human-rights-violations-in-melilla/

Atlántico Hoy. September 2023. El SIVE de Lanzarote: 19 millones para mantenimiento y sólo funciona un radar. https://www.atlanticohoy.com/politica/sive-lanzarote-19-millones-mantenimiento-solo-radar-funciona-inmigracion-canarias_1521835_102.html

Barbero, Iker. "The Foreigners´ Temporary Stay Centres As The New Model Of Migration Control: Current Situation, Legal (De)Regulation And Mechanisms Of Control And Guarantee Of Rights." Derechos y libertades: Revista de Filosofía del Derecho y derechos humanos. N° 45, (2021): 267-302. https://doi.org/10.20318/dyl.2021.6108

Bautista, Jose. "Fronteras SA: la industria del control migratorio." Por Causa y El Confidencial, August 15, 2022.
https://www.elconfidencial.com/espana/2022-07-15/fronteras-industria-control-migratorio_3460287/

Bautista, José et al., "Fronteras S.A.: la industria del control migratorio", Por Causa y El Confidencial, July 15, 2022. Disponible en: [https://www.elconfidencial.com/espana/2022-07-15/fronteras-industria-control-migratorio_3460287]

BOE. Orden PRE/3108/2006, de 10 de octubre, por la que se da publicidad al Acuerdo de Consejo de Ministros por el que se dispone la creación de la autoridad de coordinación de las actuaciones para hacer frente a la inmigración ilegal en Canarias y se establecen normas para su actuación. https://www.boe.es/diario_boe/txt.php?id=BOE-A-2006-17743

Call for input into the European Ombudsman's strategic inquiry OI/3/2023/MHZ concerning the role of the European Border and Coast Guard Agency (FRONTEX) in the context of search and rescue (SAR) operations.

Caminando Fronteras. Monitoreo del derecho a la vida, primeros 5 meses de 2024. https://caminandofronteras.org/monitoreo/monitoreo-del-derecho-a-la-vida-primeros-5-meses-2024/

Canzutti, Lucrezia, and Martina Tazzioli. "Digital—nondigital assemblages: Data, paper trails, and migrants' scattered subjectivities at the border." International Political Sociology 17.3 (2023). https://doi.org/10.1093/ips/olad014

Carrasco, Benjamín. "S. García (Thales): El software Horus es el corazón del nuevo sistema de vigilancia de la Guardia Civil en Melilla." InfoDefensa, January 23, 2024. https://www.infodefensa.com/texto-diario/mostrar/4689787/s-garcia-thales-software-horus-corazon-nuevo-sistema-vigilancia-guardia-civil-melilla

Carrasco, Benjamín. "La Guardia Civil encarga a Escribano la puesta a punto de su sistema de detección de pateras y narcolanchas." InfoDefensa, September 9, 2022. https://www.infodefensa.com/texto-diario/mostrar/3883177/guardia-civil-encarga-escribano-puesta-punto-sistema-deteccion-pateras-narcolanchas

CEAR, "El Pacto Europeo de Migración y Asilo será «devastador» para los derechos humanos," April, 10, 2024. https://www.cear.es/pacto-europeo-devastador-derecho-asilo-derechos-humanos/

Centro Tecnológico de Seguridad (CETSE). "Fondo de Seguridad Interior (ISF 2021-2027)." Ministerio del Interior. https://cetse.ses.mir.es/publico/cetse/es/proyectosEuropeos/fondoISF/marcoFinanciero-2021-2027/proyectosEuISF

Centro Tecnológico de Seguridad (CETSE). "Marco financiero 2021-2027 (ISF)." Ministerio del Interior. https://cetse.ses.mir.es/publico/cetse/es/proyectosEuropeos/fondoISF/marcoFinanciero-2021-2027

Chris Jones, et al, Europe's Techno Borders (Copenhagen and London: EuroMed Rights and Statewatch, 2023), https://www.statewatch.org/media/3964/europe-techno-borders-sw-emr-7-23.pdf

Comisión Española de Ayuda al Refugiado (CEAR). "El Pacto Europeo de Migración y Asilo será devastador para los derechos humanos." April 10, 2024. https://www.cear.es/pacto-europeo-devastador-derecho-asilo-derechos-humanos/

COPE. June 2023. Salvamento Marítimo sobre la tragedia: "La decisión no la tomamos nosotros, hay un mando único que decide". https://www.cope.es/emisoras/canarias/las-palmas/gran-canaria/noticias/salvamento-maritimo-sobre-tragedia-decision-tomamos-nosotros-hay-mando-unico-que-decide-20230623_2778751

Delegación del Gobierno en la Ciudad de Melilla. "Todos los Estados miembros de la UE pondrán a la vez en funcionamiento el Entry/Exit System en sus fronteras." Ministerio de Política Territorial y Memoria Democrática. April 4, 2024. https://mpt.gob.es/portal/delegaciones_gobierno/delegaciones/melilla/actualidad/notas_de_prensa/notas/2024/04/2024-04-05_1.html

Diario de Lanzarote. July 2018. El Gobierno se excusa en que la meteorología hizo que el SIVE no detectara la patera de la tragedia de Costa Teguise. https://www.diariodelanzarote.com/noticia/el-gobierno-se-excusa-en-que-la-meteorolog%C3%ADa-hizo-que-el-sive-no-detectara-la-patera-de-la

DJI Enterprise. Matrice 300 RTK. https://enterprise.dji.com/es/matrice-300

Echarri, Carmen. "La ambición de una frontera segura y ágil, el reto de 2024 en Tarajal." El Faro de Ceuta, May 1, 2024. https://elfarodeceuta.es/ambicion-frontera-segura-agil-reto-2024-tarajal/

Echarri, Carmen. "La vigilancia de la valla: de los drones a la inteligencia artificial." El Faro de Ceuta, February 25, 2024. https://elfarodeceuta.es/vigilancia-valla-drones-inteligencia-artificial/

EFE. May 2024. Cerca de mil menores llegados en cayuco a Canarias han acabado en centros para adultos. https://efe.com/canarias/2024-05-21/mil-menores-migrantes-canarias-filiados-como-adultos

EL DIA. "El SIVE detectó la patera naufragada en Lanzarote pero no actuó al confundirla con las señales de fuertes olas." March 2009. https://www.eldia.es/canarias/2009-03-03/16-SIVE-detecto-patera-naufragada-Lanzarote-actuo-confundirla-senales-fuertes-olas.htm

elDiario.es. March 2024. Cinco meses en prisión con 16 años acusado de patronear una patera en la que murieron once personas. https://www.eldiario.es/canariasahora/migraciones/cinco-meses-prision-16-anos-acusado-patronear-patera-murieron-once-personas_1_11233026.html

elDiaro.es, January 29, 2024 "Frontex resuelve las "cuestiones técnicas" con España y levanta la "suspensión temporal" a las operaciones contra la migración." https://www.eldiario.es/desalambre/frontex-resuelve-cuestiones-tecnicas-espana-levanta-suspension-temporal-operaciones-migracion_1_10877097.html

El Faro de Ceuta. "La Guardia Civil compra tres cámaras térmicas a Thales España por 237.600€." June 13, 2014. https://elfarodemelilla.es/la-guardia-civil-compra-tres-camaras-termicas-a-thales-espana-por-237-600/

El País. Enero, 2024. Frontex amenaza con irse de España. https://telegra.ph/Frontex-amenaza-con-irse-de-Espa%C3%B1a-01-25-3

El País. May 28, 2024. "La Policía española ya usa en sus investigaciones un sistema automático de reconocimiento facial". https://elpais.com/tecnologia/2024-05-28/la-policia-espanola-ya-usa-en-sus-investigaciones-un-sistema-automatico-de-reconocimiento-facial.html

El Salto Diario. "Denuncian expulsiones sin respaldo legal en el CETI de Melilla." April 23, 2024. https://www.elsaltodiario.com/melilla/denuncian-expulsiones-respaldo-legal-ceti-melilla

España. Ministerio de Inclusión, Seguridad Social y Migraciones. Memoria justificativa de gasto para la contratación del servicio de seguridad y vigilancia con destino al centro de estancia temporal de inmigrantes (CETI) de Melilla. 2023 https://contrataciondelestado.es/wps/wcm/connect/a079d1bb-29ad-4983-82ad-1e7a3da68a83/doc20230914125641memoria+justification+service+security+and+surveillance.pdf?mod=ajperes

España. Ministerio del Interior. Anuncio de formalización de contratos de: Jefatura de Asuntos Económicos de la Guardia Civil. Objeto: Suministro e instalación de un sistema integral de vigilancia para la Comandancia de la Guardia Civil de Melilla, compuesto por cinco Estaciones Fijas de Vigilancia (EFV,s) y elementos complementarios de Apoyo al Sistema. Expediente: R/0008/A/22/6. February 22, 2023. https://www.boe.es/buscar/doc.php?id=BOE-B-2023-5349

España. Ministerio del Interior. Adquisición de un sistema integral de vigilancia para la Guardia Civil en Melilla. January 27, 2022. https://contrataciondelestado.es/wps/wcm/connect/ef804960-4cc5-43f2-99b0-9841b100a211/DOC20220420094938PPT.PDF?MOD=AJPERES

España. Ministerio del Interior. Memoria Justificativa de Gasto: suministro e instalación de un sistema integral de vigilancia para la Comandancia de la Guardia Civil de Melilla. https://contrataciondelestado.es/wps/wcm/connect/0a1021be-51dc-4d37-a9be-b976957da95e/DOC20220420102547MEMORIA+V2.pdf?MOD=AJPERES

España. Ministerio de la Presidencia. Acuerdo de Consejo de Ministros por el que se dispone la creación de la autoridad de coordinación de las actuaciones para hacer frente a la inmigración ilegal en Canarias y se establecen normas para su actuación. Orden PRE/3108/2006. October 10, 2006. https://www.boe.es/diario_boe/txt.php?id=BOE-A-2006-17743

España. Ministerio de Inclusión, Seguridad Social y Migraciones. Resolución de 29 de septiembre de 2023, de la Dirección General de Atención Humanitaria e Inclusión Social de la Inmigración, por la que se modifica la de 14 de noviembre de 2022, por la que se establece la planificación de prestaciones, actuaciones y servicios que deben atenderse dentro del programa de atención humanitaria mediante acción concertada para los ejercicios 2023-2026. Septiembre 29, 2023. https://www.boe.es/diario_boe/txt.php?id=BOE-A-2023-20749

España. Tribunal Constitucional. Recurso de inconstitucionalidad 3848-2015. Interpuesto por el Parlamento de Cataluña en relación con diversos preceptos de la Ley Orgánica 4/2015, de 30 de marzo, de protección de la seguridad ciudadana. Sentencia 13/2021, January 28, 2021. https://www.boe.es/buscar/doc.php?id=BOE-A-2021-2832

España. Tribunal Supremo. Libertad de circulación y fijación de residencia dentro de todo el territorio nacional del solicitante de protección internacional. Sentencia desestimatoria 29/07/2020 ROJ: STS 2662/2020 - ECLI:ES:TS:2020:2662. https://www.poderjudicial.es/stfls/TRIBUNAL%20SUPREMO/ACUERDOS%20y%20ESTUDIOS%20DOCTRINALES/FICHERO/20230601%20Cuadernos%20de%20casaci%C3%B3n%20-%20Extranjer%C3%ADa%20v2.pdf

Espiñeira, Keina. "Colonialidad en la frontera Ceutí. Sebta mashi Schengen, mashi Euroba." Revista de estudios culturales, 2 (2022). https://dialnet.unirioja.es/servlet/articulo?codigo=4326202

EuroMed Rights. Return Mania. Mapping policies and practices in the EuroMed Region. Belgium: April 2021 https://euromedrights.org/wp-content/uploads/2021/04/EN_Chapter-2-Returns-Spain-to-Morocco_Report-Migration.pdf

Fisher, D. X. (2018). Situating border control: Unpacking Spain's SIVE border surveillance assemblage. Political Geography, 65, 67-76. https://doi.org/10.1016/j.polgeo.2018.04.005

Fuentes, Cristina, Isabella Carril Zerpa y Gonzalo Fanjul. Industria del Control Migratorio (ICM): Manual de instrucciones. PorCausa, 2022. https://porcausa.org/wp-content/uploads/2022/07/Manual-de-Instrucciones-de-ICM-2022.pdf

Gabinete de la Presidencia del Gobierno. Informe Anual de Seguridad Nacional 2023. Madrid: 2023. https://www.dsn.gob.es/es/documento/informe-anual-seguridad-nacional-2023

Gabriela Sánchez, "Así es la nueva valla de Melilla: 10 metros de altura, barrotes y un cilindro antitrepado," October 14, 2020. https://www.eldiario.es/desalambre/foto-nueva-valla-melilla-10-metros-altura-barrotes-cilindro-antitrepado_1_6293160.html

García, María. "Beni Enzar estrena la primera fase de la futura frontera inteligente." El Faro de Melilla, June 15, 2024. https://elfarodemelilla.es/beni-enzar-estrena-la-primera-fase-de-la-futura-frontera-inteligente/

Georgios Glouftsios & Stephan Scheel, "An inquiry into the digitisation of border and migration management: performativity, contestation and heterogeneous engineering," Third World Quarterly, 42:1, 123-140, (2021): 133. DOI: 10.1080/01436597.2020.1807929

Guardia Civil. "Sistema Integrado de Vigilancia Exterior." https://www.guardiacivil.es/es/prensa/especiales/sive/funciones.html

Guardia Civil. SIVE. https://www.guardiacivil.es/es/prensa/especiales/sive/localizacion.html
Abad, José Manuel. "Defensa construirá un refugio temporal para inmigrantes en la isla de Alborán." El País, April 16th, 2024

Home Office. October 2023. "Grande-Marlaska anuncia la incorporación inmediata de dos nuevos aviones de la Guardia Civil a la vigilancia de la ruta migratoria atlántica". https://www.interior.gob.es/opencms/es/detalle/articulo/Grande-Marlaska-anuncia-la-incorporacion-inmediata-de-dos-nuevos-aviones-de-la-Guardia-Civil-a-la-vigilancia-de-la-ruta-migratoria-atlantica/

InfoDefensa. September 2022. La Guardia Civil encarga a Escribano la puesta a punto de su sistema de detección de pateras y narcolanchas. https://www.infodefensa.com/texto-diario/mostrar/3883177/guardia-civil-encarga-escribano-puesta-punto-sistema-deteccion-pateras-narcolanchas

International Federation for Human Rights (FIDH). "Frontera Marruecos-España: callejón sin salida mortal." September 19, 2018. https://www.fidh.org/es/temas/derechos-de-los-migrantes/frontera-marruecos-espana-callejon-sin-salida-mortal

Iridia. "Comunicado: Un grupo de personas residentes en el CETI de Melilla denuncian violencia institucional por parte de la seguridad privada del centro". June 3, 2022. https://iridia.cat/es/comunicado-un-grupo-de-personas-residentes-en-el-ceti-de-melilla-denuncian-violencia-institucional-por-parte-de-la-seguridad-privada-del-centro/

Irídia, Novact and Fotomovimiento. La frontera sur: Accesos terrestres. Barcelona: 2017. https://iridia.cat/es/publicaciones/frontera-sur-accesos-terrestres/

Iridia, Novact Vulneración de derechos humanos en la Frontera Sur del Estado español 2021 - 2022. Barcelona: 2023. https://iridia.cat/wp-content/uploads/2023/05/CAST-informe-FS.pdf

Iridia, "Vulneración de derechos humanos en la Frontera Sur del Estado español 2021 - 2022," Barcelona, 2023. https://iridia.cat/wp-content/uploads/2023/05/CAST-informe-FS.pdf

Iridia. Mayo de 2022. Vulneraciones de derechos en la respuesta institucional a las llegadas de personas migrantes en Canarias. https://iridia.cat/wp-content/uploads/2022/05/informe_vulneracion_derechos_canarias_abril_mayo_22-1.pdf

Jones, Chris, Romain Lanneau, Yasha Maccanico, and Alice Troy-Donovan. Europe's Techno Borders. Copenhagen and London: EuroMed Rights and Statewatch, 2023. https://www.statewatch.org/media/3964/europe-techno-borders-sw-emr-7-23.pdf

Khosravi, Shahram, ed. The Gaze of the X-Ray: An Archive of Violence. Bielefeld: Transcript Verlag, 2024.

Kuster, B., Tsianos, V.S. "How to Liquefy a Body on the Move: Eurodac and the Making of the European Digital Border". In EU Borders and Shifting Internal Security by Rphael Bossong, and Helena Carrapico. Cham: Springer, 2016. https://doi.org/10.1007/978-3-319-17560-7_3

Lahora, M.J. "El Gobierno se excusa en que la meteorología hizo que el SIVE no detectara la patera de la tragedia de Costa Teguise." Diario de Lanzarote, July 11, 2018. https://www.diariodelanzarote.com/noticia/el-gobierno-se-excusa-en-que-la-meteorolog%C3%ADa-hizo-que-el-sive-no-detectara-la-patera-de-la

La Provincia. November 2023. Ayuda al Refugiado cuestiona la fiabilidad de las pruebas de edad. https://www.laprovincia.es/canarias/2023/11/10/ayuda-refugiado-cuestiona-fiabilidad-pruebas-94476713.html

La Voz de Lanzarote. April 2022. Dos ocupantes de una patera rescatada a la deriva se suicidaron por la agonía que estaban viviendo. https://www.lavozdelanzarote.com/actualidad/sociedad/dos-ocupantes-patera-rescatada-deriva-se-suicidaron-por-agonia-estaban-viviendo_211499_102.html

Lo Coco, Maite Daniela, Andrés G. Berrio, Clara Calderó Delgado, Siham Jessica Korriche. Vulneraciones de derechos en la respuesta institucional a las llegadas de personas migrantes en Canarias. Barcelona: IRIDIA, NOVACT, 2022. https://iridia.cat/wp-content/uploads/2022/05/informe_vulneracion_derechos_canarias_abril_mayo_22-1.pdf

Lo Coco, Maite Daniela, Sani Ladan, Diana Cardona y Andrés G. Berrio. Vulneraciones de derechos en la frontera sur: Gran Canaria y Melilla. Barcelona: IRIDIA, OXFAM, 2021. https://iridia.cat/wp-content/uploads/2021/01/INFORME-DDHH-FRONTERA-SUR-2021.pdf

Lo Coco, Maite Daniela and González-Hidalgo, Eloísa. "The double logic of European outsourcing: protection and deportation in Morocco." Revista CIDOB d'Afers Internacionals, n.° 129 (December 2021): 79-106. doi.org/10.24241/rcai.2021.129.3.79

Madianou, Mirca. "The Biometric Assemblage: Surveillance, Experimentation, Profit, and the Measuring of Refugee Bodies." Television & New Media 20, no 6, pp. 581-599 (2019). https://doi.org/10.1177/1527476419857682

Martín, María; Hierro, Lola; Stacey, Diego "Marruecos, Túnez y Mauritania usan fondos de la UE para detener a migrantes y dejarlos en el desierto," El País, May 21, 2024. https://elpais.com/internacional/2024-05-21/detenciones-masivas-y-traslados-forzosos-asi-se-destierra-con-dinero-europeo-a-migrantes-en-el-norte-de-africa.html

Martín, María "El Gobierno demora la orden de la Audiencia Nacional de traer a España al sudanés que pidió asilo en Rabat". 2024. https://elpais.com/espana/2024-04-11/el-gobierno-demora-la-orden-de-la-audiencia-nacional-de-trasladar-a-espana-al-sudanes-que-pidio-asilo-en-rabat.html

Martín, María. "Frontex amenaza con irse de España." El País. January 25, 2024. https://telegra.ph/Frontex-amenaza-con-irse-de-Espa%C3%B1a-01-25-3

May Bulman, et al. Desert dumps. Lighthouse Reports, Washington Post, Enass, Der Spiegel, El Pais, IrpiMedia, ARD, Inkyfada and Le Monde. May, 2024 https://www.lighthousereports.com/investigation/desert-dumps/

Metcalfe, Philippa. "Autonomy of Migration and the Radical Imagination: Exploring Alternative Imaginaries within a Biometric Border." Geopolitics, Vol.27, no.1 (2022).

Ministerio de Inclusión, Seguridad Social y Migraciones. Memoria justificativa de gasto para la contratación del servicio de seguridad y vigilancia con destino al centro de estancia temporal de inmigrantes (CETI) de Melilla. 2023 https://contrataciondelestado.es/wps/wcm/connect/a079d1bb-29ad-4983-82ad-1e7a3da68a83/doc20230914125641memoria+justification+service+security+and+surveillance.pdf?mod=ajperes

Ministerio del Interior. “Grande-Marlaska anuncia la incorporación inmediata de dos nuevos aviones de la Guardia Civil a la vigilancia de la ruta migratoria atlántica.” October 16, 2023. https://www.interior.gob.es/opencms/es/detalle/articulo/Grande-Marlaska-anuncia-la-incorporacion-inmediata-de-dos-nuevos-aviones-de-la-Guardia-Civil-a-la-vigilancia-de-la-ruta-migratoria-atlantica/

Ministerio del Interior. Adquisición de un sistema integral de vigilancia para la Guardia Civil en Melilla. January 27, 2022. https://contrataciondelestado.es/wps/wcm/connect/ef804960-4cc5-43f2-99b0-9841b100a211/DOC20220420094938PPT.PDF?MOD=AJPERES

Ministerio del Interior. 2018. “Informe Anual de Seguridad Nacional”. https://www.dsn.gob.es/sites/dsn/files/IASN2018%20WEB.pdf

Ministerio del Interior, Memoria Justificativa de Gasto: suministro e instalación de un sistema integral de vigilancia para la Comandancia de la Guardia Civil de Melilla. 2022. https://contrataciondelestado.es/wps/wcm/connect/0a1021be-51dc-4d37-a9be-b976957da95e/DOC20220420102547MEMORIA+V2.pdf?MOD=AJPERES

Ministerio de Trabajo y Economía Social. “Centros de Estancia Temporal de Inmigrantes (CETI)”. https://www.mites.gob.es/es/Guia/texto/guia_15/contenidos/guia_15_37_3.htm

No Name Kitchen; El Taller-Frontera Sur Gran Canaria; Solidary Wheels; No Borders For Human Rights. “BURORREPRESIÓN EN LA FRONTERA SUR: violencia administrativa en Canarias, Ceuta y Melilla”. https://burorrepresion.org/wp-content/uploads/2024/06/INFORME-BURORREPRESION-red.pdf

Pascual, Manuel G. “La Policía española ya usa en sus investigaciones un sistema automático de reconocimiento facial.” El País, May 28, 2024. https://elpais.com/tecnologia/2024-05-28/la-policia-espanola-ya-usa-en-sus-investigaciones-un-sistema-automatico-de-reconocimiento-facial.html

Planes operativos de las actuaciones de Frontex en España: https://www.defensordelpueblo.es/resoluciones/planes-operativos-de-las-actuaciones-de-frontex-en-espana/

Política Territorial y Memoria Democrática April 4, 2024. https://mpt.gob.es/portal/delegaciones_gobierno/delegaciones/melilla/actualidad/notas_de_prensa/notas/2024/04/2024-04-05_1.html

PorCausa (2022). Industria del Control Migratorio (ICM): Manual de instrucciones. https://porcausa.org/wp-content/uploads/2022/07/Manual-de-Instrucciones-de-ICM-2022.pdf

Presentación Escribano M&E. December 2023. https://anyflip.com/ezgnc/xbsb/basic

Proyecto iSar. https://isar.sasemar.es/

Registro de Actividades de Tratamiento de datos. June 2023. Tratamientos RGPD. Ministerio de Inclusión, Seguridad Social y Migraciones – Dirección General de Gestión del Sistema de Acogida de Protección Internacional y Temporal (DGGSAPIT). https://sede.inclusion.gob.es/documents/387478/0/4.+Tratamientos+MISSM-DGGSAPIT+_

v1.1.pdf/3c95dcd1-a0b2-7ac5-55b3-2f6a914019e1?t=1686809540726

Rijpma, Jorrit, and Mathias Vermeulen. “EUROSUR: saving lives or building borders?.” European security 24.3 (2015): 454-472. https://doi.org/10.1080/09662839.2015.1028190

RTVC. Octubre 2023. Queman el SIVE de Lanzarote. https://rtvc.es/queman-sive-de-lanzarote/

Ruiz Benedicto, Ainhoa, María Fraile Moreno, and Sani Ladan. ¿Quién vigila al vigilante? Planes operativos de las actuaciones de Frontex en España. Violencia en las fronteras e impunidad de Frontex. Barcelona: Centre Delás and Iridia, 2024. https://centredelas.org/wp-content/uploads/2024/02/informe62_QuienVigilaAlVigilante_CAST_DEF_.pdf

Sainz, Pablo. “El Supremo falla de nuevo a favor del derecho a la libre circulación de las personas solicitantes de asilo.” El Salto Diario, February 16, 2021. https://www.elsaltodiario.com/refugiados/-supremo-fallar-derecho-libre-circulacion-solicitantes-asilo-

Sánchez, Gabriela. “Así es la nueva valla de Melilla: 10 metros de altura, barrotes y un cilindro antitrepado.” Eldiario, October 14, 2020. https://www.eldiario.es/desalambre/foto-nueva-valla-melilla-10-metros-altura-barrotes-cilindro-antitrepado_1_6293160.html

Sanz, Juan Carlos. “Marruecos refuerza la frontera con Melilla un año después de la tragedia del asalto a la valla.” El País, June 24, 2023.

Salvador, Antonio. “La Guardia Civil admite que los sensores de los radares para detectar pateras superan su vida útil.” El Independiente, September 29, 2021. https://www.elindependiente.com/espana/2021/09/28/la-guardia-civil-admite-que-los-sensores-de-los-radares-para-detectar-pateras-superan-su-vida-util/

Senante, Alberto. “Tragedia en la valla de Melilla: Un año de impunidad tras la masacre.” Amnesty Internacional, June 23, 2023. https://www.es.amnesty.org/en-que-estamos/blog/historia/articulo/tragedia-en-la-valla-de-melilla-nunca-mas/

Solidarity Wheels. Yesterday no, today yes, and tomorrow? Going deeper into the legal insecurity, lack of transparency and changes in the criteria for access to the CETI of Melilla. November, 2023. https://www.solidarywheels.org/_files/ugd/0a7d28_95bada4ac5984297a473776f485cf7b5.pdf

Tazzioli, Martina. “Spy, track and archive: The temporality of visibility in Eurosur and Jora.” Security Dialogue 49.4 (2018): 272-288. Rijpma, Jorrit, and Mathias Vermeulen. “EUROSUR: saving lives or building borders?.” European security 24.3 (2015): 454-472.

Thales. “Thales entrega el nuevo sistema integral de vigilancia en la comandancia de Melilla.” December 13, 2023. https://www.thalesgroup.com/es/espana/press-release/thales-espana-presenta-su-solucion-de-vigilancia-inteligente

Tribunal Constitucional, Recurso de inconstitucionalidad 3848-2015. Interpuesto por el

Parlamento de Cataluña en relación con diversos preceptos de la Ley Orgánica 4/2015, de 30 de marzo, de protección de la seguridad ciudadana. Sentencia 13/2021, January 28, 2021. https://www.boe.es/buscar/doc.php?id=BOE-A-2021-2832

Tribunal Supremo, Libertad de circulación y fijación de residencia dentro de todo el territorio nacional del solicitante de protección internacional. Sentencia desestimatoria 29/07/2020 https://www.poderjudicial.es/stfls/TRIBUNAL%20SUPREMO/ACUERDOS%20y%20ESTUDIOS%20DOCTRINALES/FICHERO/20230601%20Cuadernos%20de%20casaci%C3%B3n%20-%20Extranjer%C3%ADa%20v2.pdf

United Nations Human Rights Council, Special Rapporteur on the Human Rights of Migrants, Racial and Xenophobic Discrimination and the Use of Digital Technologies in Border and Immigration Enforcement, New York, NY: UN Headquarters, 2021 A/HRC/47/30 (un.org)

United Nations Human Rights Council, Special Rapporteur on the Human Rights of Migrants. Human rights violations at international borders: trends, prevention and accountability, New York, NY: UN Headquarters, 2022 A/HRC/50/31 (un.org)

Vargas, Natalia G. "Cinco meses en prisión con 16 años acusado de patronear una patera en la que murieron once personas." elDiario.es, March 21, 2024. https://www.eldiario.es/canariasahora/migraciones/cinco-meses-prision-16-anos-acusado-patronear-patera-murieron-once-personas_1_11233026.html

Vestri, G., & González Martín, N. Los menores de edad migrantes no acompañados y sus exigencias jurídicas: Un diálogo entre España y México. Sevilla: Universidad Pablo de Olavide, 2012. https://www.observatoriodelainfancia.es/ficherosoia/documentos/3456_d_Migraciones_menores_Espana_Mexico.pdf

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