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## Assessing Migrant Safety at EU External Borders: Navigating the Intersection of AI, Policy, and Human Security

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Date: 4-7-2024  
Management Society and Technology of Public Governance across Borders  
word count:10033

## Abstract

This thesis examines the integration of Artificial Intelligence (AI) in EU border management and its implications for migrant safety, using the Human Security framework as a theoretical lens. The central research question is: *“How does the EU address migrant safety in its implementation of AI at the external borders of the EU?”* The study hypothesises that while AI can enhance border security, it also poses significant risks to migrant safety that are not fully addressed by current EU policies. Data for this research comprises EU policy documents, including the AI Act and the New Pact on Migration and Asylum, which are analysed using qualitative content analysis facilitated by Atlas.TI. The findings indicate that existing EU regulations prioritise national security over migrant safety, often overlooking the ethical and human rights implications of AI technologies. The study concludes that to safeguard migrant well-being, EU policies need to integrate comprehensive Human Security considerations and enforce stricter regulations on AI applications. This research contributes to the discourse by highlighting the critical need for balancing technological advancements with human securities in the context of migration.

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## List of Abbreviations

AI

Artificial Intelligence

EU

European Union

CEAS

Common European Asylum System

## 1. Introduction

For centuries migration has been a fundamental part of history, involving both people moving by choice and must, through war or persecution. Such movements have had big impacts on societies and countries. Streams with a high volume of people bring challenges where the borders need to react on (Castles, 2000). Due to the migration streams borders are tightened and are innovated. The innovation at the border control is expected to incorporate new technologies. A recent addition to the control of external borders is the incorporation of Artificial Intelligence (AI). AI influences the borders as it is able to help in efficient border security management by new detection systems and surveillance technology. Additionally, the EU Member States use AI tools to manage threats that come from migrant movements (Szwed, 2022).

There is a very broad application for the use of AI, including verification of travel documents, risk assessment, examination of asylum application and detecting the emotional state of a person. AI is far more incorporated in the whole migration cycle for security of the EU borders, for example automated border checksum. These AI systems allow for a smaller number of workers covering the borders and so securing them more effectively (European Parliament. Directorate General for Parliamentary Research Services., 2021).

Multiple studies have examined the various aspects about the potential benefits and risk of AI systems in border control. For example the study of the transformative impact of borders from Md Kabir (Kabir et al., 2023). Or the European Union's Artificial Intelligence Act that aims to regulate high risk AI systems, promoting AI technology while protecting individuals affected by these systems. However, the EU AI Act falls short in addressing and preventing harms coming from AI use in the migration context. It lacks specific bans on different AI technology that leaves different individuals vulnerable and exposed to risks (*Letter*, n.d.). The safety of migrants, specifically that of forced migrants in the EU, becomes an important topic in the ongoing migration streams, particularly concerning the safety of migrants (European Parliament. Directorate General for Parliamentary Research Services., 2021).

The existing literature provides valuable insights into the potential benefits and challenges of the implementation of AI at EU borders. However, as the EU strives to manage its borders effectively in the face of increasing migration flows, the concept of Human Security becomes a high priority. Human security is in short, the shift of perspective to political attention from states to individuals. So, seen as subjectives that need security and have to be prioritised (Bilgic et al., 2020).

Despite the existing literature's insights, there remains a notable gap in the analysis of how the EU specifically addresses human security concerns in its implementation of AI at its external borders. This gap is particularly notable through the political attention given to questions about the EU's management of migrants and the critique on the new reforms and policies. For example the new EU AI act and the Asylum and Migration pact are new reforms where a lot of discussion is about. There are multiple articles from the European commission debating about the policies of AI. Moreover, it is important to do independent research that critically scrutinises the actions of the EU. However, this aspect is currently underrepresented in the existing literature.

This research aims to fill this gap by applying the concept of Human Security as a theoretical lens to examine the EU's approach to migrant safety. This research tries to contribute to the academic discourse by offering a focused analysis of the aspect of AI implementation in border management, namely migrant safety.

This paper tries to research this gap by conducting a qualitative content analysis of the descriptive research question: “*How does the EU address migrant safety in its implementation of AI at the external borders of the EU?*”

Together with the following sub-questions:

- What is the impact of AI on migrant safety?
- In which way has migrant safety been incorporated in EU documents about asylum, borders and migration?
- Does the new EU pact on migration and asylum provide a new form of policy for migrant safety?

Through systematically coding a list of EU documents and policies a qualitative content analysis is going to be applied with the help and use of Atlas.TI. A basis for this research will be the Human Security framework.

## 2. Theory

The Human Security framework is developed by the 1994 Human Development Reports. From then on, the focus of security shifted from overall state and border control by the military to the protection of the individuals from threats. The Human Development Report of 1994 defined Human Security as “Including safety from such chronic threats as hunger, disease and repression, and protection from sudden and hurtful disruptions in the patterns of daily lives, whether in homes, jobs or communities” (United Nations, 1994). Human security encompasses much more than protection from violence and crime. This framework has as its strength that it can give an adequate response to threats of new insecurities for individuals that the world of today gives. On different occasions this framework is being used to analyse threats and how they affect individuals. It said that individuals have to be protected from social violence, economic distress and environmental degradation. The Human Development Report identified seven core elements that together form the basic needs of Human Security. These elements consist of, economic security, food security, health security, environmental security, personal security, community security and political security (United Nations, 1994). It is not a definitive list, the UN charter refers to it more as flexibly to ‘fundamental freedoms’ (Gómez & Gasper, n.d.). However, with these elements this paper is going to assess how the EU acts on the safety of forced migrants at the external borders of the EU. This is outlined in the figure below.

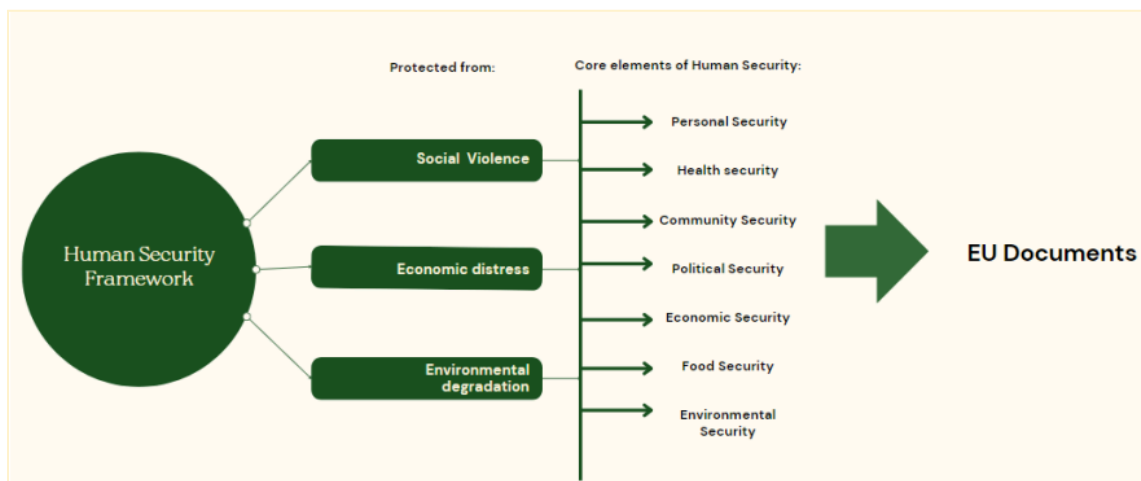


Figure 1: Diagram assessing migrant safety through Human Security Framework

The Human Security framework as a theoretical lens is going to be used in the research to assess the safety of migrants in the European Union. The study will examine the EU's policies and practices of AI border control within the context of Human Security on migration. The aim is to evaluate to which extent the EU addresses the diverse threats and vulnerabilities faced by migrants when coming at the borders of the EU.

This approach broadens the concept of security beyond the traditional way of national security, which prioritises state sovereignty. The shift towards a more people-centred approach enables more effective responses that give protection to all individuals. Human security complements rather than replaces state security, aiming to achieve a balance between the security of the state and that of its citizens. Ultimately, the primary responsibility for ensuring the safety of citizens lies with the governments of individual nations (*General Assembly United Nations*, 2012). Specifically, it analyses the EU's approach to ensuring the aforementioned core elements for migrants at protected borders. The Human Security framework serves as the background of this research, providing a conceptual framework



through which phenomena such as migrant safety can be understood. This framework offers a structured approach to organising and analysing data within the specific context of EU border policy. The complex issues are broken down into manageable components for analysis, with each core element of the Human Security framework informing specific aspects of the analysis. For instance, the economic security dimension guides the examination of the socioeconomic conditions faced by migrants, such as employment opportunities and access to financial resources. Health security involves analysing healthcare access, the quality of medical services available to migrants, and the prevalence of health issues among migrant populations. Environmental security looks at how environmental factors and conditions, such as living environments and exposure to hazards, impact migrants' well-being. Personal security addresses threats of violence, exploitation, and abuse that migrants might face (United Nations, 1994). By systematically applying these elements, the Human Security framework allows for a thorough evaluation of the EU's approach to migrant safety. This framework highlights the interconnectedness of various security dimensions and provides a holistic view of the challenges and needs of migrants. Through this analysis, areas for improvement in EU border policy can be identified, ensuring that policies not only protect borders but also safeguard the human security of migrants.

In addition to the Human Security framework, a human rights perspective is essential for evaluating the EU's approach to migrant safety within the context of AI implementation at borders. Human rights refer to the basic rights and freedoms that belong to every person in the world, simply because they are human (Nations, n.d.). Human rights principles, including the right to privacy and non-discrimination serve as standard measures for assessing the ethical and legal implications of AI technologies. The EU's AI Act, particularly its human rights impact on individuals crossing borders, serves as a critical lens through which to assess this for AI security (Molnar, 2023).

Migrant safety at the border is a critical issue, especially for individuals fleeing violence. Migrant safety as a concept is in this case used as the protection of individuals who are on the move. Incorporating measures to safeguard the physical, mental and social well-being of individuals, as well as ensuring their access to basic rights and services is crucial. These forced migrants face already significant risks during their journey to seek asylum, encountering dangers such as human trafficking and discrimination. AI implementation by administrations such as Frontex, the European border and coastguard agency, complicates the situation for migrants seeking asylum. Ensuring migrants safety at the border involves clear and specific policies that incorporate human safety for all (Zaken, 2016). AI, is a machine learning technology that uses algorithms to do all kinds of tasks that typically require human intelligence. These tasks include skills such as problem-solving, learning, decision-making and perception (*What Is Artificial Intelligence?*, 2023). AI is not without its drawbacks, particularly when it comes to potential biases coming from bad design or incomplete information. These biases lead to threats, thereby potentially undermining the security of migrants (Berendt, 2018). At the borders of the EU there are four major applications of technology that incorporate AI in their use or are under consideration. The applications are biometric identification, emotion detection, specific data-based risk profiles and AI use for monitoring, analysing and forecasting of migration trends and security (European Parliament. Directorate General for Parliamentary Research Services., 2021). Research reveals a troubling pattern in the EU's approach to the increase of asylum application. It shows a tendency to prioritise border security over the fundamental rights of immigrants. While the EU emphasises Human Security and human rights within its own framework, there are challenges in effectively implementing these principles. The EU has struggled to uphold agreed-upon rights for immigrants among rising asylum applications, migrant arrivals, and security

concerns (Peerboom, 2022). Based on this theoretical framework, a hypothesis can be made. It can be said that the European Union prioritises the safety of its member nations over the well-being of the international community as a whole. This prioritisation is expected to be seen in EU documents, where emphasis is placed on national security concerns. While migrant safety is addressed, it appears that it only gives attention to the basic human rights and in response to significant threats, lacking specificity. Notably, the recent EU legislation on migration and asylum offers various directives, however, it fails to address the potential impact of AI on migrant safety.

### 3. Methods

#### 3.1 Introduction

The aim of this thesis is to look into policy documents about border security, AI and migration of the EU and trying to look into how migrant safety is being assessed. The increasing volume of migration and the EU's investment in AI for border management make this a critical area for research. This part explains the method used to carry out the analysis to show how the research question together with the sub-questions are being answered. Based on the theory a coding scheme has been developed by making first a preliminary coding scheme out of the Human Security framework, through which the policy documents are analysed. In this part all the steps and decisions are laid down through which the analysis can be carried out with. First, the case description will be explained. Secondly, the method of data collection will be described, which are policy documents from the EU. To finally explain the coding scheme and how it's been developed to analyse the documents in order to form a conclusion.

#### 3.2 Case Description

This section describes the reasons for the choice of the EU external borders together with AI technology and migrant safety assessment in policy documents of the EU. The choice of the EU external borders is primarily due to the high pressure of migration streams at these borders. Since the migration peak in 2015 there have been high volumes of migration flows toward Europe due to ongoing conflicts such as the Syrian civil war and extreme poverty (*EU Migration and Asylum Policy*, n.d.), Together with the EU's technological development this presents a complex case to explore how AI can simultaneously be a tool and risk to the security of migration. Moreover, there is a lack of representation in the literature, as AI is a new technology, and the aim of this thesis is also to achieve a better representation of AI in migrant security. Because the EU has in general a free to travel policy written up in the Schengen agreement, looking at the external borders where the security is higher is important (*(PDF) The EU's Internal and External Borders in a World Torn by Conflict*, n.d.). Additionally, the recently introduced EU AI Act underscores the EU proactive approach in this area. The availability of EU policy in English helps to better analyse these documents. Moreover, policy documents of the EU can be found at the EU websites, which are available for everyone, which facilitates thorough analysis.

The choice to use EU policy documents is made given that the research targets the management of migrant safety at the EU's external borders. Many of the documents have been recently developed in response to the adoption of AI technology, which necessitated new regulations to address emerging challenges. The analysed documents are expected to contain legislation that addresses migrant safety and upholds fundamental and human rights. In this way, this thesis will be able to contribute to the ways in which EU member states manage migrant safety while incorporating new technologies. These documents are being analysed with an interpretative approach, allowing for a nuanced understanding of their implications and effectiveness.

### 3.3 Method of Data Collection

In order to analyse migrant safety, policy documents of the EU about migration, AI and border security are needed for the analysis. The documents were manually sourced from EUR-Lex, ensuring the latest regulations and strategies were included. This thesis analyses the safety of migration at the EU external borders where AI is being incorporated, so documents with a focus on these aspects (AI, border security and migration) were selected for analysis. The area of AI is still in development and due to this, it is important to have the latest regulation so it reflects the latest strategies. Therefore, the latest documents were chosen from all the related sources, although some older EU documents, such as those on fundamental rights and the Dublin Regulation, were also included due to their continued importance. To analyse migrant safety it will be needed to do a qualitative research approach, specifically a content analysis of the policy documents. Due to the content analysis, migrant safety can be critically analysed in the documents to see how it is being assessed.

At first, the documents related to asylum application and management were searched for and listed. Next, documents related to border control have been listed, searched at border control and the different systems that the EU has incorporated in their security. The Entry/Exit system is one example of such a system. Then the AI related documents were searched for and listed. Key documents include the EU AI Act, the New Pact on Migration and Asylum and various directives and regulations related to asylum, border control systems and data protection. All these policy documents are listed in Appendix A. Together, these documents summarise the EU's strategy in the areas of migration and control. So providing a foundation for analysing the EU's focus and its application for migrant safety. These documents are analysed using an interpretative approach to gain a nuanced understanding of their implications and effectiveness.

### 3.4 Method of Data Analysis

To analyse the EU policy documents, a content analysis will be conducted. A content analysis is a method that is used to analyse the relationship between different concepts and the key content of documents. Due to its main strength this method is chosen for this thesis. Namely, this method has the ability to analyse content of the documents more in depth and see the general line in total. Specifically it will be used to examine how migrant safety is ensured at the external borders of the EU where new AI technology is being integrated, through in-depth content analysis. However, one limitation of this method is that there are more relevant regulations than can be analysed due to the time limit. From the list of all relevant documents only a couple were coded in the analysis. These were again chosen due to the relevance of the subject. Specifically, they were selected through the connection with each other through the CEAS, the Common European Asylum System. Atlas.TI, the tool utilised for analysis, enabled faster and clearer data analysis. Although it helps with the regulations to be analysed, it is still necessary to be very selective with the regulations as they will determine the results. To assess migrant safety in terms of the various aspects defining Human Security, a coding scheme is necessary to identify relevant elements and themes. The coding scheme is developed through making first a preliminary coding scheme with eight codes of the eight securities of the Human Security Framework. Through iterative reading and analysing, additional codes were added to capture themes and nuances. The final scheme included additional codes such as the *notion of fundamental rights*, *data security* and *focus on the EU system*.

The Human Security framework is being used to code all the documents in the Data Appendix. Therefore the seven securities are being acknowledged. Trying to find if there is a notion of those safeties and so of migrant safety.

Before tackling all the documents the codes that were set out were the seven security elements. However what all the codes encompasses is not specifically mentioned in the text and some can overlap somewhere. Therefore an explanation about every code is needed.

#### *Personal security*

The first code is personal security, this refers to the protection of both physical violence as well as mental violence. It protects individuals from physical violence, abuse and threats to personal safety. It includes all protection from crime, domestic violence and human trafficking. It ensures freedom from fear of violence and coercion. It encompasses thus all kinds of things that have to do with the individual and affects their freedom and self (United Nations, 1994).

#### *Health Security*

With health security it is about the protection of individuals from diseases and health threats. This involves ensuring that there are healthcare services and that measures are in place to protect individuals from pandemics and other health crises. Everything that pertains to this concept is for the promotion of physical and mental well-being. Effective health security requires healthcare infrastructure and rapid response systems for health emergencies (United Nations, 1994). Examples can be rules for immediate health care checks or rules for the access to healthcare services.

#### *Community Security*

Community security is a complex aspect because it frequently intersects with personal security. However, community security specifically involves ensuring that individuals feel safe and supported within their communities and social groups. It encompasses the protection and well-being of groups that share a common cultural identity and a broad set of values (United Nations, 1994). For example, community security can include measures to prevent violence and discrimination against ethnic minorities. This ensures that all members can live free from fear and with the assurance that their cultural identities are respected.

#### *Political Security*

With political security the themes under this aspect encompass the protection against political repression and oppression. Together with the promotion of participation in governance and justice. It also refers to respect for 'basic' human rights, meaning basic political and civil rights (United Nations, 1994). Fundamental rights falls too under this part, however in the coding scheme there is made a separate code to foreground it.

#### *Economic security*

Economic security refers to the assurance of a basic income, typically from lucrative productive work or from publicly funded safety nets. However, many people face difficulties finding and keeping jobs, which contributes to widespread economic insecurity. Migration is closely related to economic security, as people often move to find better job opportunities and improve their living conditions.

When coding economic security in the documents, sections should be highlighted that discuss these aspects of economic stability and financial well-being. Themes that fall under economic security are job creation, income stability, social safety nets, investment, workplace conditions and financial aid (United Nations, 1994).

### *Food Security*

With food security it is about that all people have enough food access and that the distribution is right among the people. Policies and programs aimed at enhancing food security for migrants, which includes equality distribution but also nutrition value, affordability and cultural appropriateness of food sources (United Nations, 1994).

### *Environmental Security*

The code for environmental security focuses on safeguarding individuals from environmental diseases and unhealthy lifestyles. This aspect of security addresses critical issues like pollution and climate change. It ensures that natural resources and sustainable management is a priority. It should encompass the sustainable development goals that are set out (United Nations, 1994) .

While coding the documents other codes were added to have a clear oversight at the end, which are explained below.

### *Fundamental Rights*

Another code that is added is the notion of fundamental rights. For this research it is better if fundamental rights and political security are separated. This separation is necessary because fundamental rights are crucial in ensuring migrant safety and human security. By distinctly examining fundamental rights, this research underscores its importance and relevance in the context of migrant safety and broader human rights considerations.

### *Data security*

This code is added while reading the first documents. In theory it is part of personal security, however it is here separated because technology is a large aspect in this research. This code facilitates a focused analysis of the strategies and policies intended to strengthen data security within EU policy documents related to AI technology, providing a clearer understanding of its significance.

### *Focus EU System*

The latest code added is 'Focus EU System', which captures the regulatory emphasis on EU-related systems and processes. This includes articles granting authorities legislative authority, the Commission, for instance. It includes regulations and policies that dictate how the EU system operates. By analysing documents with this code, a better understanding of the structural and procedural priorities of the EU can be gained and how these regulations impact the Union.

<i>Key concepts</i>	<i>Codes</i>	<i>Description</i>
	Personal Security	Protection physical and mental violence
Social Violence	Health Security	Protection diseases and health threats
	Community Security	Safety within communities or groups
Economic Distress	Political Security	Protection against political oppression and repression. And participation in governance and justice
	Economic Security	Assurance of basic income
	Food Security	Access to food and fair distribution of food
Environmental degradation	Environmental Security	Sustainable development and protection from unhealthy lifestyles
	Notion Fundamental Rights	Fundamental rights of all individuals
Additional codes	Data Security	Security and rules around data
	Focus EU System	Emphasis on EU-related processes

*Table 1: Overview coding scheme*

Afterwards, the number of security notions will be divided by the number of pages of the policy documents in order to standardise the numbers and so being able to compare and take conclusions out of the coded documents.

The analysis of the documents aims to answer the three sub-questions and so in the end the research question of this thesis. Therefore, it is necessary to first look into the impact of AI on migrant safety through looking into the EU AI Act. And secondly, examining how migrant safety is incorporated in the relevant EU documents, followed by an analysis of the EU Pact on Migration and Asylum to determine if it provides new forms of policy for migrant safety.

First, Atlas.TI will be used to analyse the relevant documents with the help of the coding scheme. This approach helps to identify in the documents which aspects of the Human Security framework is focussed on. In essence, the coding will be able to observe which aspects are mentioned and how frequently, so prevailing the focus on migrant safety in the EU policy documents.

## 6. Analysis

### 6.1. Analysis Introduction

This section presents the findings from the content analysis of EU policy documents, structured around the core elements of the Human Security framework. This section aims to critically evaluate how the EU addresses migrant safety through its AI-related border policies. By presenting the analysed policy documents the sub-questions will be answered to give an answer to the research question of this thesis in the conclusion: *“How does the EU address migrant safety in its implementation of AI at the external borders of the EU?”*.

First, there is looked at the impact of AI on migrant safety. Thereafter, it is described how the EU incorporated migrant safety within the various policy documents about asylum, borders and migration. To end it with the last section, where the third sub-question is being answered about the New EU pact on migration.

### 6.2. Impact of AI on migrant safety

Migrant safety refers to the protection and well-being of individuals who are migrating from one country to another. It ensures various measures to safeguard the physical, mental and social well-being of individuals. Moreover, migrant safety ensures access to basic rights and services (*IOM Thematic Paper*, n.d.). In the last decade, AI has developed into a technology that is incorporated into multiple sectors, including marketing, education, and healthcare. It is also used for border security, including facial recognition and biometric border checks. For migrants at the borders, this technology can have both positive and negative impacts.

On the positive side, AI-powered surveillance systems can monitor borders more effectively, identifying and preventing human trafficking and smuggling activities. AI can also improve biometric systems (such as fingerprints and facial recognition) to accurately identify and register migrants, ensuring they receive the appropriate protections and services. Additionally, the automated data analysis and predictive power of AI technologies offer safety and efficient management of migration processes (Nalbandian, 2022).

However, there are also significant drawbacks of AI on migrant safety. The collection and use of personal data can lead to privacy violations if not properly managed. Moreover, AI technologies can inherit biases from the data they are trained on, potentially leading to discriminatory practices in screening migrants. Heavy reliance on these technologies can also reduce human oversight, which is crucial when dealing with vulnerable populations such as migrants (Nalbandian, 2022).

To manage these challenges, multiple regulations have been established to guide the incorporation and use of AI technologies. The latest regulation in the EU is the EU AI Act from March 2024, which creates a legal framework for AI technologies . It seeks to ensure that AI technologies are safe and respect fundamental rights. The EU AI Act classifies AI systems into four categories based on the risk they pose: unacceptable risk, high risk, limited risk, and minimal risk. Technologies that fall into the unacceptable risk category are banned immediately. High-risk AI technologies are subject to strict regulations and oversight, including testing, documentation, and compliance with EU standards. The other two categories have fewer restrictions but still require adherence to transparency (Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL LAYING DOWN HARMONISED RULES ON ARTIFICIAL INTELLIGENCE (ARTIFICIAL INTELLIGENCE ACT) AND AMENDING CERTAIN UNION LEGISLATIVE ACTS, 2021).



For this thesis, the EU AI Act is analysed to see if it incorporates migrant safety within the Human Security framework. Using Atlas.TI, the document is analysed and coded according to the seven securities of the Human Security framework. Additionally, three important codes are added: 'data security,' 'notion of fundamental rights,' and 'focus on the EU system.' One key finding from the analysis is that not all securities are mentioned in the regulation. For example, food security is not mentioned once in the EU AI Act. However, personal security and data security are the most frequently mentioned. The other securities are only mentioned a couple of times. The code that appears most often in the EU AI Act is 'focus on the EU system,' which refers to articles related specifically to the EU system. For instance, the EU AI Act includes explanations of the abilities of the Commission and the actions they can take for Member States.

The analysis reveals that the securities of the Human Security framework are not frequently coded in the document.

While the EU AI Act focuses on the safety of AI technologies and their compliance with fundamental rights, it should also provide protection for migrants. The limited mention of these securities suggest that the regulation may not fully address the multifaceted aspects of migrant safety, indicating a need for more explicit inclusion of these aspects in future AI governance frameworks.

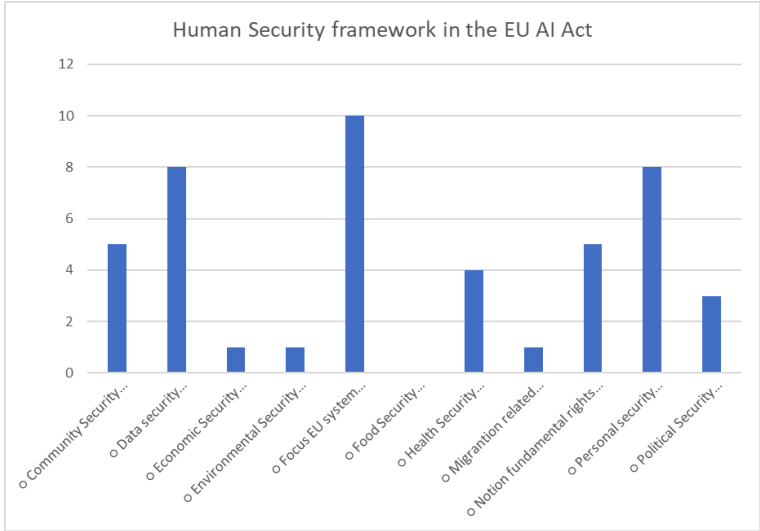


Figure 2: Bar chart EU AI Act

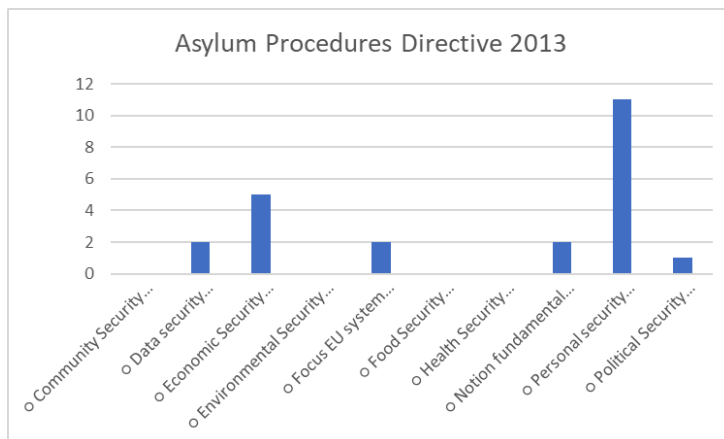
### 6.3. Migrant safety and EU regulation

In the EU, there are several policies that are for the regulation and management of migration and asylum at the external borders. This section examines how migrant safety is understood and incorporated within EU policy documents. The EU has actively been developing their policies related to asylum, borders and migration. The incorporation of migrant safety into these documents has become critical, reflecting the EU’s commitment to human security and the protection of vulnerable people.

To understand the incorporation of migrant safety in EU policies, several key documents were selected for detailed analysis. These documents include, *Asylum Procedures Directive, the Dublin regulation, Eurodac Regulation 2013, The European Border and Coast Guard Regulation 2019, Interoperability - Police and judicial cooperation, asylum and migration Regulation* and *the New Pact on Migration and Asylum*. Along with the *The Charter of Fundamental Rights of the European Union*. Each document was examined to identify specific references to migrant safety, which were categorised according to the Human Security Framework.

### *The Asylum Procedures Directive*

The Asylum Procedures Directive of 2013, or Directive 2013/32/EU is a crucial piece of legislation within the EU Common European Asylum System. Its aim is to establish common procedures for international protection. Hereby ensuring fair and efficient asylum processes across member states (*Common European Asylum System - European Commission, n.d.*). In the Directive, there are several key provisions that grant rules for the access to procedures, the examination procedure and detention. The primary objective of this directive is to harmonise the procedures across the EU. Trying to ensure that asylum seekers receive a similar standard and treatment regardless of the member state in which they apply. Preventing secondary movements of asylum seekers, while respecting the fundamental rights. This Directive has been analysed with the Human Security framework. This gave the graph below.



*Figure 3: Bar chart of the Asylum Procedure Directive 2013*

In this graph multiple observations can be made. The Asylum Procedures Directive of 2013 does not encompass all aspects of the Human Security framework. Out of the seven types of securities, only economic, political and personal security are significantly represented in the Directive. Personal security is the most prominent, which makes sense given that the directive aim is to establish harmonised and protective rules for asylum seekers. What also

stands out is that the fundamental rights are not mentioned a lot. That is remarkable, because of the aim of the regulation, namely that the procedures are harmonised, while respecting the fundamental rights.

### *The Dublin regulation*

This regulation, first established in 1990 and revised multiple times, is a cornerstone of the CEAS. Its primary purpose is to determine which EU member state is responsible for examining an asylum application submitted by a third-country national or stateless person (*Common European Asylum System - European Commission, n.d.*). By setting these criteria, it tries to prevent asylum shopping. Asylum shopping is the phenomenon that asylum seekers submit multiple applications in different countries and so ensure that they have more chances (*Asylum Shopping - European Commission, n.d.*).

The regulation assigns responsibility based on hierarchy of criteria. These criteria include the presence of family members or the recent possession of a visa. Despite its objectives, the Dublin Regulation has faced significant criticism. They argue that it places undue pressure on countries at the EU's external borders, leading to overcrowded reception facilities. Furthermore, the regulation has been criticised for not adequately considering the preferences of asylum seekers. This can lead to long periods of uncertainty and hardship for those individuals (Fratzke, n.d.).

The Human Security framework provides a comprehensive lens through which the Dublin regulation is evaluated. In the graph there is to see that from the seven securities only

personal and political security occur. All the other ones do not come up in this regulation. It is shown that personal security is still one of the most common security in the Dublin regulation.

The regulation attempts to provide protection to asylum seekers by assigning them to a specific member state, thus preventing them from being left stateless. The regulation is designed to ensure that asylum seekers' applications are processed within a structured legal framework, thus offering a degree of political security.

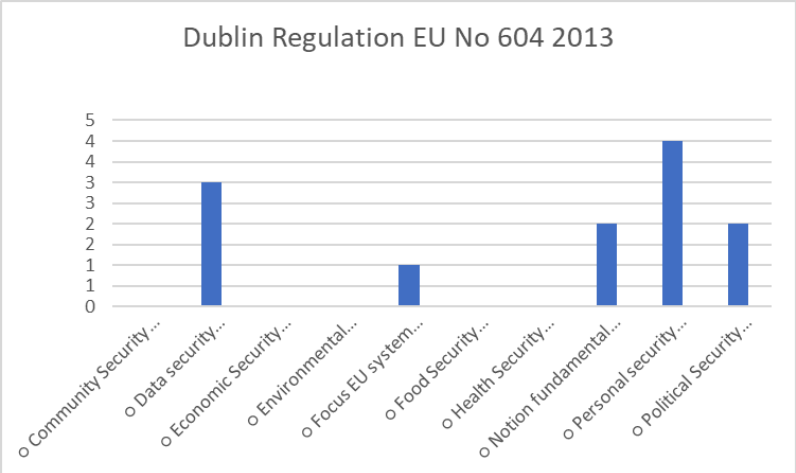


Figure 4: Bar chart Dublin Regulation EU

The lack of emphasis on economic, food, health, environmental and community security suggests that the Dublin Regulation is not fully aligned with the human security needs of asylum seekers.

In conclusion, the Dublin Regulation plays an important role in the EU’s asylum system. However, its limitations and the pressures it places on certain member states call for comprehensive reforms. These reforms should aim to address the broader human security needs of asylum seekers to create a more effective process.

*Eurodac Regulation 2013*

This regulation is another legislative measure in the European Union’s Common European Asylum System (CEAS). Eurodac, which stands for ‘European Dactyloscopy’ is a biometric database primarily used for comparing the fingerprints of asylum seekers and certain categories of illegal immigrants (*Fingerprinting Migrants: Eurodac Regulation, n.d.*). The aim of the Eurodac regulation is to support the implementation of the Duplin Regulation, which is analysed above. By comparing fingerprints stored in the Eurodac database,

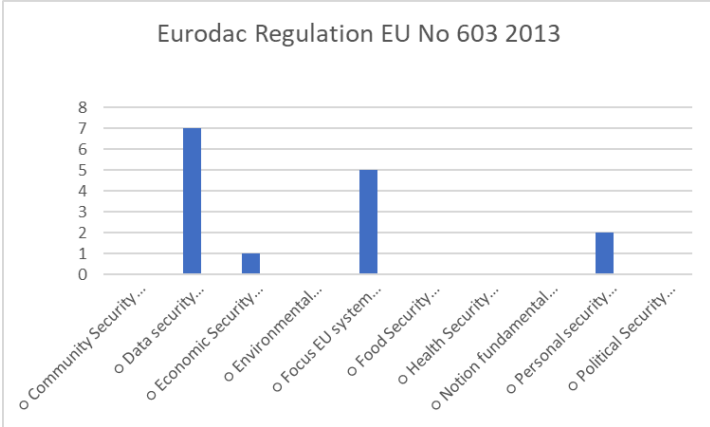


Figure 5: Bar chart Eurodac regulation

authorities can identify if an asylum seeker has previously applied for asylum in another EU country. Eurodac helps prevent individuals from applying for asylum in multiple member states. This ensures a more fair distribution of asylum seekers across the EU. Some key provisions of the regulation is that all member states are required to collect and transmit the fingerprints of asylum seekers. These fingerprints are then stored for a period of ten years.

The regulations also provisions to ensure the protection of personal data and the rights of individuals whose fingerprints are stored in Eurodac, in accordance with EU data protection laws. This regulation has been analysed with Atlas.Ti and several insights are seen. Using the

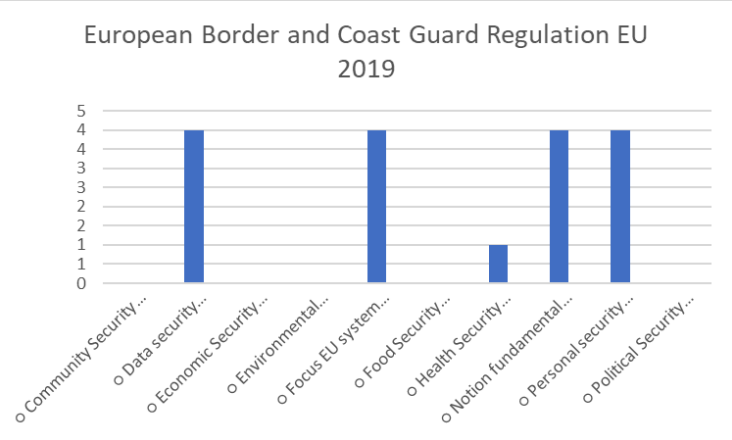
Human Security framework to assess the Eurodac Regulation reveals a mixed impact on migrant safety. It places a strong emphasis on data security, so ensuring that the biometric data of migrants is protected. Moreover, it focuses on the EU system, in the way that the regulation enhances the efficiency of managing asylum applications and tracking.

However, there is a gap in addressing the broader well-being of migrants, because of the lack of emphasis on community, environmental, food, health and political security. The aim of this Regulation is to establish a centralised fingerprint database to facilitate the identification of asylum seekers, focusing primarily on the database and technology rules. Additionally, it aims to enhance the management of asylum applications and migration control within the EU. Consequently, this regulation has less focus on migrations safety from its inception. Nonetheless, it is crucial to always ensure that migrant safety is assessed.

*The European Border and Coast Guard Regulation 2019*

This regulation sets a new step towards the enhancement of border management within the EU. The Regulation forms a framework for the European Border and Coast Guard Agency, commonly known as Frontex, to play a more active role in protecting the EU’s external borders. The aim of the Regulation, as stated in the official document is:

*"To ensure European integrated border management at the external borders with a view to managing the crossing of those external borders efficiently, addressing migratory challenges and potential future threats at those borders, thereby contributing to addressing serious crime with a cross-border dimension, and ensuring a high level of internal security within the Union, in full compliance with fundamental rights and safeguarding the free movement of persons within the Union."*



Key features are a standing corps of border guards and staff, increased technical assistance to member states and enhanced cooperation with non-EU countries (Regulation (EU) 2019/1896 of the European Parliament and of the Council of 13 November 2019 on the European Border and Coast Guard and Repealing Regulations (EU) No 1052/2013 and (EU) 2016/1624, 2019).

*Figure 6: Bar chart European Border and Coast Guard Regulation*

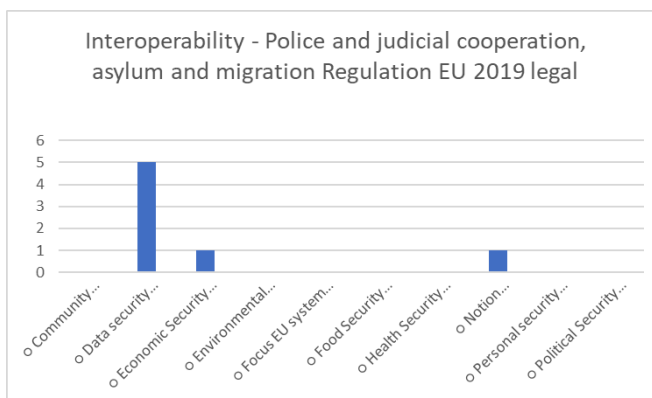
In the graph, the outcomes of the analysed Regulation is illustrated. From the seven securities of the Human Security framework by which the regulation is being analysed, only personal and health security are featured. Data security, focus EU system, notion of fundamental rights and personal security occur equally.

This suggests that while the Regulation aims for management of external borders, including full compliance with fundamental rights in its objectives, explicit provisions for migrant safety are not regulated. The absence of the rest of the aspects of Human Security underlines a broader emphasis on border management rather than on migrant safety.

### *Interoperability - Police and judicial cooperation, asylum and migration Regulation*

This regulation represents a legislative framework within the EU. It aimed at enhancing the efficiency and coordination of various systems related to policy, asylum and migration. This regulation was developed to address the complexities and challenges associated with managing vast amounts of data across different EU member states, ensuring that critical information is accessible and accurate.

The integrative approach of the Interoperability Regulation is created by linking multiple databases and information systems. These include the Schengen Information System, The Visa Information System and the Entry/Exit Systems. By facilitating seamless data exchange and interoperability among these systems, the regulation aims to enhance security, streamline asylum procedures and improve the management of migration flows (*Interoperability - European Commission, n.d.*).



*Figure 7: Bar chart Interoperability - Police and judicial cooperation, asylum and migration Regulation EU 2019*

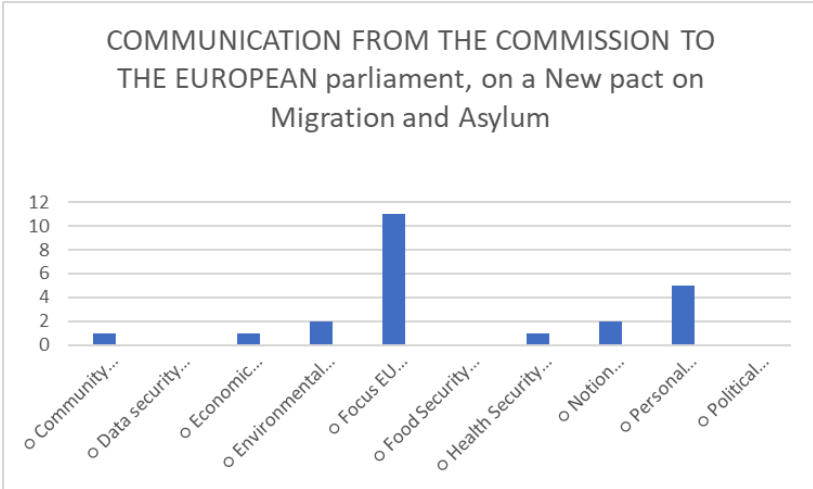
In the graph, the only aspect of the Human Security Framework addressed is economic security, while the other securities are not mentioned. Data security as code is mentioned a couple of times, which aligns with the regulations focus. However, the lack of representation of the other securities suggest that migrant safety is not comprehensively addressed in the regulation. This indicates that the regulation does not fully consider the broader spectrum of security needs for migrants.

### *The New Pact on Migration and Asylum*

The Common European Asylum System (CEAS) represents the cornerstone of the EU's approach to managing asylum. It sets common standards to ensure that asylum seekers are treated equally, fair and in accordance with human rights. The whole system is governed by five legislative instruments and one agency (*Common European Asylum System - European Commission, n.d.*). In 2020, the European Commission introduced a proposal to overhaul the migration and asylum policy system through a strategy that centred around three pillars. The first pillar is a streamlined asylum and return procedure. The second pillar is for solidarity and equitable distribution of responsibility. And the third pillar is enhanced partnership with non-EU countries. Together with these pillars multiple directives are set out and so governed to uphold all standards. Through the years, several acts are replaced or adapted with new ones. Until 2020, when the Commission adopted a New Pact on Migration and Asylum. This document includes several solutions through new legislative proposals and amendments, aiming to establish a system that is both effective and humane. This represents a significant advancement in how the Union handles migration (*Common European Asylum System - European Commission, n.d.*).

The New Pact on Migration and Asylum represents an effort to reform the EU’s migration and asylum policies. This pact aims to create a more efficient, fair and humane system for managing migration across the EU. It addresses both the immediate challenges of migration and the long-term aspects. The act aims so to build a responsive framework for managing migration in the 21st century. The Pact includes various proposed regulations and directives. For this thesis the Communication from the Commission is being analysed. This is the foundational document that introduces and explains the framework. This pact is being analysed with Atlas.TI to look how this new regulation assessed migrant safety with the Human Security framework.

In the graph below one can see that half of the securities are mentioned. The ones that are mentioned in the act are community, economic, environmental, health and personal security.



Food and political security are not mentioned in this pact. What is also seen in the graph is that the focus on EU system is most mentioned in this Act. This emphasis suggests a strong emphasis on the institutional and regulatory aspects of managing migration and asylum within the EU. Personal security is again the most mentioned security in the pact.

Figure 8: Bar chart New Pact on Migration and Asylum Communication

By prioritising personal security, the Communication seeks to create a safe environment where migrants can live without fear of harm. The absence of explicit references to food and political security highlights that these areas are underrepresented and may need further attention. Without it does not ensure the whole aspect of migrant safety being assessed.

*The Charter of Fundamental Rights of the European Union*

In every regulation that has been analysed so far, there is a notion of fundamental rights. The Charter of Fundamental Rights of the European is one of the most crucial documents in the EU. It was adopted in 2000 and legally bound since the entry into force of the Lisbon Treaty in 2009. The Charter set out the fundamental rights guaranteed by the EU. It covers a wide range of rights for civil, political, economic and social rights. It safeguards fundamental rights and

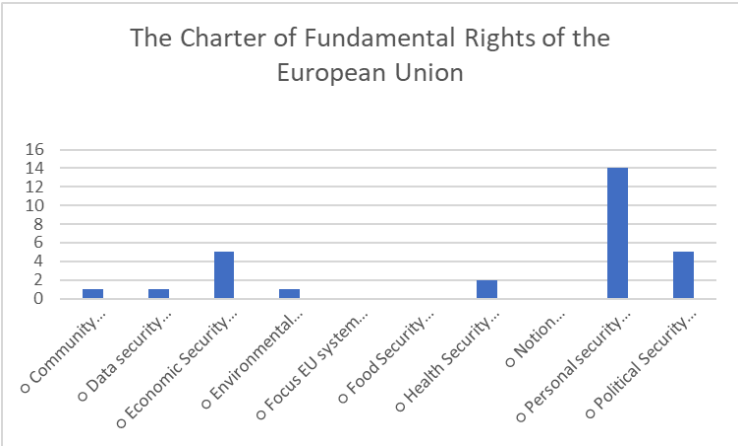


Figure 9: Bar chart Charter of the Fundamental Rights of the EU



freedom for all individuals within the EU's jurisdiction, including migrants coming to the EU (*Charter of Fundamental Rights of the European Union* | *EUR-Lex*, n.d.). This is the reason this Charter is also analysed with the Human Security framework.

In examining the graph, it is notable that almost all of the seven securities are represented at least once, with the exception of food security. In the graph the 'notion fundamental rights' code is not used, because it is the Charter of the Fundamental Rights itself. Also the code 'focus EU system' is not coded in the Charter. In conclusion, the Charter of Fundamental Rights of the EU serves as a good framework for the safety of individuals, including migrants arriving in the EU. However, the absence of explicit provisions addressing food security within the Charter highlights a potential area where it can improve to ensure compliance with migrant safety.

### *Concluding remarks*

In the EU, policies encompassing asylum, borders and migration have evolved significantly to address the challenges associated with managing migration flows, while at the same time safeguarding the rights and safety of migrants. Understanding how migrant safety is integrated into these policies is crucial.

Several key EU documents have been analysed to assess the incorporation of migrant safety. For the analysis the Human Security framework is used to categorise the way all the documents assess migrant safety.

The policies, such as the Asylum Procedures Directive, Dublin Regulation, Eurodac Regulation, European Border and Coast Guard Regulation, New Pact on Migration and Asylum, and the Charter of Fundamental Rights, collectively emphasise aspects like personal security and adherence to fundamental rights. However, they often overlook critical dimensions such as economic security, food security, health security, and environmental security.

Migrant safety has been incorporated into EU documents concerning asylum, borders and migration through several key principles. The establishment of legal frameworks ensure that asylum seekers receive fair treatment and protection throughout the process. For example, the Asylum Procedure Directive sets out such common procedures for granting international protection. Regulations like the European Border and Coast Guard Regulation establish mechanisms for managing external borders while upholding the fundamental rights and ensuring the safety of migrants.

Migrant safety is embedded in EU documents through a combination of legal standards, fundamental rights, border management measures and international partnerships. These mechanisms aim to ensure that migrants receive fair treatment and protection. In all the regulations not one encompasses all the dimensions of the Human Security framework. While personal security is often mentioned and is an important code for the protection of individuals, the other dimensions should not continually be neglected. Continued efforts to strengthen these regulations and address emerging challenges are essential, to encompass the whole concept of migrant safety.

### **6.4. New EU pact on migration and asylum**

On 14 May 2024, the European Parliament voted in favour of new rules on migration and asylum. This process, beginning in 2020, with the proposal of the 'new EU pact on migration and asylum', aimed at managing migration and establishing common systems for all EU member states. This pact includes several key provisions for migrant and asylum procedures.

The pact gives an outlined detailed procedure for screening migrants to determine their qualification for protection. This includes to ensure that those in need of international protection are identified and provided with the necessary support.

In the previous section the New EU pact on Migration and Asylum was analysed. In this section it is explained if the New pact provides a new form of policy for migrant safety.

The first new implication of the Pact is that it integrated border management and asylum procedures. The Pact proposes faster and more efficient asylum procedures, especially at the borders. This reduces the time migrants spend in uncertainty and vulnerable conditions, improving their overall safety. At these borders a standardised screening process is introduced, which ensures that migrants are properly identified and receive appropriate support from the outset (*Pact on Migration and Asylum - European Commission, 2024*).

A second new implication is the fair sharing of responsibility. Therefore a solidarity mechanism is made. Through this mechanism all member states contribute to managing migration, whether with operational support, financial contributions or help with relocation. So, the burden of the frontline states are more equal and therefore ensures a better treatment of migrants (*Pact on Migration and Asylum - European Commission, 2024*).

In third comes the stronger focus on integration measures and the expanding of opportunities for legal migration. The latter one includes labour migration and family reunification, to reduce the need for dangerous routes for irregular migrants. The former one focuses on integration measures, such as education, employment and social services, that in this way help migrants to build a stable and secure life in their new community. What also comes with this is an efficient return policy for the migrants who do not qualify for asylum. This includes better cooperation with other countries and a better focus on fundamental rights. If they have to go back, reintegration support is also being facilitating for them to improve their prospects and safety in their home countries (*Pact on Migration and Asylum - European Commission, 2024*).

At last is the partnership with third countries to manage the migration flows and address the roots of migration. Development aid and the creation of safer routes are here an example of (*Pact on Migration and Asylum - European Commission, 2024*).

With these points the EU Pact on Migration and Asylum tries in several ways to enhance the safety of migrants in the process. In the legal document it is maybe not seen directly, because of the focus on the fixed codes. However, almost all the aspects of the human security framework come up and the new implications and goals of the broad Pact come up in the Communication of the Commission to the European Parliament, on a New Pact of Migration and Asylum.

In conclusion, the New EU Pact on Migration and Asylum with all the regulations and directives provide a new form of policy for migrant safety. It involves innovative measures to ensure the protection and well-being of migrants. By addressing multiple dimensions of human security and introducing more equitable and efficient systems for managing migration, The Pact represents a substantial advancement in EU migration policy. However, ongoing adjustments will still be essential to address any gaps and ensure that all aspects of migrant safety are covered, also food and health safety.



## 7. Conclusion

### 7.1 Answer to research question and key insights

The aim of this research was to answer the research question: *“How does the EU address migrant safety in its implementation of AI at the external borders of the EU?”*

Based on the conducted analysis, the main and sub-questions can be addressed using insights from the relevant theory.

To find the conclusions it is important to summarise the findings from the sub-questions in the analysis.

First the key findings and conclusion of the first sub-question about the impact of AI on migrant safety would be spoken briefly down below. After this, the answers of the second sub-question about how migrant safety is addressed in the EU policy documents is set out. Then, the last conclusion of the third sub-question about the New EU Pact on migration and asylum is written down, to at last, end with a conclusion for this thesis.

First, answering the first sub-question: *What is the impact of AI on migrant safety?*

The impact of AI on migrant safety is very significant in both positive and negative ways. In the area of border control, AI technologies have the potential to improve the identification and registration process for migrants. Also it can improve access to different services and it helps for the protection for migrants coming at the external borders of the EU.

However, these benefits come with risks, such as potential privacy violations, biases in AI algorithms and reduced human oversight.

For this high development technology new policy is incorporated in the EU, called the EU AI Act. This Act aims to regulate AI technologies, and primarily focuses on ensuring safety and compliance with fundamental rights. However, the analysis of this regulation shows that it does not address all aspects of migrant safety as defined by the Human Security Framework. The limited focus on certain securities, such as food security, and the emphasis on the EU system suggest that there is a need for more explicit measures. It is crucial to develop regulations that not only manage the risks of AI but also actively safeguard the needs of migrants and ensure their overall well-being and security.

Secondly, the answer to the sub-question: *In which way has migrant safety been incorporated in EU documents about asylum, borders and migration?*

For this sub-question multiple regulations have been analysed. *Asylum Procedures Directive, the Dublin regulation, Eurodac Regulation 2013, The European Border and Coast Guard Regulation 2019, Interoperability - Police and judicial cooperation, asylum and migration Regulation and the New Pact on Migration and Asylum.* Along with the *The Charter of Fundamental Rights of the European Union.* Out of the analysis came that migrant safety is embedded in these documents through a combination of legal standards, fundamental rights, border management and international relationships. These principles aim to ensure that migrants receive fair treatment and protection, while upholding the EU's values. However, it is important to continue to improve migrant safety within the EU, because in no regulations all the securities are represented. Thus an regulation that specifically aims to the incorporation of migrant safety would be beneficial.

The last subquestion: *Does the new EU pact on migration and asylum provide a new form of policy for migrant safety?* Is answered in the third part of the analysis.

The adoption of the New Pact on Migration and Asylum represented an advancement in EU migration policy. This policy introduces innovative measures to protect and promote the well-being of migrants by addressing the seven dimensions of Human Security. By

incorporating more efficient and fair systems for managing migration, the Pact represents an advancement in how the EU approaches migration challenges. Nonetheless, continued coverage of all aspects of the Human Security framework in new regulation is necessary. To answer the sub-question, the new EU pact on migration and asylum provides new forms of policy, but does not fully represent all the aspects for migrant safety.

To answer the research question of this thesis, all the analysed documents have been standardised through dividing all the aspects to the document's sum of pages and multiplying by 100 to make it more clear and put in appendix C. The graph shows that personal security is the most frequently mentioned and applied in the documents. The 'focus on EU system' is also a frequently referenced code, however already significantly less than personal security. Out of this graph the conclusion can be made that from all the seven securities personal security comes out the most. It can thus be said that migrant safety is not high enough represented in the policy documents that have been analysed. Personal security is mentioned the most, which makes it a bit more clear that the policies are somewhat looking at migrant safety. Personal security is a really important code that encompasses individual safety. However the EU addresses migrant safety in its policy through focussing more on the process and the implicit consequences of the implications of the management policies than on specifically having legislation for migrant safety, making the hypothesis almost entirely right.

## **7.2 Filled knowledge gap**

In examining the implementation of AI in EU border management, this research builds upon and expands the existing body of knowledge in several ways. Numerous studies have highlighted the potential of AI at borders and its associated risk and additions. Existing studies, such as those by Md Kabir et al. (2023), have explored the transformative impact of AI on border management, focussing primarily on technological advancements and their benefits. However, they often lack an analysis of Human Security implications. This thesis bridges this gap by employing the Human Security framework to systematically evaluate the impact of AI on the diverse aspects of migrant safety. This approach provides a more nuanced understanding of the multifaceted risk and benefits associated with AI border management.

Previous research, including reports by the European Parliament (2021), has highlighted the regulatory efforts of the EU to manage AI deployment at borders. However, these analyses tend to be descriptive and offer limited critical scrutiny of how well these policies protect migrant safety. To address this gap, this improves current research by analysing key EU policy documents in detail using the Human Security framework. The findings reveal significant differences between policy intentions and practical outcomes, particularly in addressing the vulnerabilities of migrants.

The EU AI Act has been the subject of much discussion in academic and policy circles. Scholars like Molnar (2023) have emphasised its potential to regulate high-risk AI systems and protect fundamental rights. This thesis adds to the discourse by examining the Act's provisions concerning migrant safety. The analysis shows that while the Act addresses general safety and right concerns, it does not cover specific Human Security dimensions relevant to migrants. This insight underscores the need for more targeted legislative measures to safeguards the well-being of migrants in AI-regulated border environments.

By integrating the Human Security framework with AI policy analysis, this research fills a critical knowledge gap in understanding the intersection of technology, migration and Human

Security. It demonstrates how applicable this framework is in evaluating the real-world impacts of AI on vulnerable populations, providing a template for future studies in this area. The detailed content analysis of the EU policy documents offers empirical evidence on how migrant safety is conceptualised and operationalized within the EU's regulatory framework. This approach adds depth to theoretical discussions, providing concrete examples of policy strengths and weaknesses.

Future research should undertake more longitudinal studies to assess the long-term impact of AI technologies on migrant safety and the workability of the EU documents. Such studies could track changes in policy implementation and migrant experiences over time.

Comparative studies examining AI border management and migrant safety across different regions could also provide valuable insights into best practices and alternative regulatory approaches.

Future research can also entail in-depth case studies of specific AI applications at EU borders. This could offer detailed insights into the operational challenges and ethical considerations. These case studies could involve interviews with migrants and border officials to provide a view of the technology's impact.

At last, future studies should focus on developing specific policy recommendations to address the identified gaps. Collaborative research involving policymakers, NGOs and academics could facilitate the translation of research findings into practical policy reforms.

By addressing these research directions, future studies can build on the foundation laid by this thesis. Contributing to an approach to AI and migrant safety at EU borders.

### **7.3 Practical implications**

The findings and insights from this thesis have several practical implications for policymakers, border authorities and AI developers. The following section outlines what the practical implications are from this research.

First, what needs to be done is that policies need to address all aspects of Human Security. The seven dimensions of Human Security, that are coupled here with the concept of migrant safety, can also be widened to encompass basic human rights. Every individual should have access to these securities to some extent. That is why, in future policies about migration, these aspects should be incorporated. Additionally, policies should include detailed guidelines on the ethical use of AI technologies in border management. And so focussing on mitigating risks such as privacy violations and algorithmic biases.

Secondly, AI oversight and regulations can too be improved. This can be done with establishing clear accountability mechanisms. With this it can be ensured that AI systems are subject to regular inspections and that there are clear protocols for accountability in case of system failures. Such measures can also help to develop techniques to identify and correct biases in AI systems used at borders.

Third, in the process, strengthened training and capacity building would be helpful. Providing training for border officials on the ethical and effective use of AI technologies, while emphasising Human Security and migrant safety. Strengthening international cooperation is also crucial to ensure consistent and effective implementation of AI policies across different regions.

Then comes the questions, who needs to do this and how? All these recommendations require new efforts from different stakeholders. The integration of the Human Security framework within new policies and legislative documents should be integrated through policymakers. And they should develop guidelines on the ethical use of AI in border management. This can

be done with means such as government funding, expert panels, evaluation systems and international collaboration.

The border authorities should establish clear accountability mechanisms to ensure AI systems are regularly checked. These officials should have previous training on the effective use of AI technologies, while emphasising the ethical implications. New audit teams would be necessary and educational partnerships and funding for the training programs.

Another stakeholder is the AI developer, who must design AI systems with built-in safeguards. They need to work closely with policymakers and border authorities to ensure that these systems comply with all the guidelines. Collaboration with ethical oversight bodies should help to incorporate these recommendations.

The last stakeholder here are the international bodies. These bodies should facilitate cooperation among countries to ensure consistent and effective implementation across different regions. They should also support the development of global standards for the ethical use of AI in border management.

By working together, all these stakeholders can create a safer and more secure environment for migrants. So ensuring that AI technologies are used ethically and effectively in border management.

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## 9. Appendix

### A. List of key policy documents of the EU

- Dublin Regulation (EU) No.604/2013;
- Implementing Dublin Regulation (EC) No. 1560/2003 in force changed in 2014 version
- Eurodac Regulation (EU) No. 603/2013;
- Reception Conditions Directive 2013/33/EU;
- Reception Conditions Directive 2003/9/EC;
- Asylum procedure Directive 2013/32/EU
- Asylum Procedures Directive 2005/85/EC
- Qualification Directive 2011/95/EU;
- Temporary Protection Directive 2001/55/EC

#### *Borders and Schengen:*

- European Border and Coast Guard Regulation (EU) 2019/1896;
- Schengen Borders Code (Regulation (EU) No.2016/399);
- Regulation (EU) No.610/2013;
- Sea Borders Regulation (EU) No.656/2014
- Decision (EU) No. 1105/2011;
- Local Border Traffic Regulation (EC) No. 1931/2006 → changed in 2012
- Advanced Passengers Information Directive 2004/82/EC;
- Carriers Sanctions Directive 2001/51/EC;

#### *Large-scale EU IT systems*

- Interoperability - Police and judicial cooperation, asylum and migration Regulation (EU) 2019/818; → This act has been changed. Current consolidated version: 31/12/2023
- Interoperability - borders and Visa Regulation (EU) 2019/817 → changed in 2021
- ECRIS-TCN Regulation (EU) 2019/816; → consolidated version of 2021
- SIS Regulation (EU) 2018/1862; → consolidated version 2022
- SIS - Border Checks Regulation (EU) 2018/1861;
- SIS Returns Regulation (EU) 2018/1860; → consolidated version 2021
- Council Decision 2013/158/EU;
- Council Decision 2013/157/EU;
- eu-LISA Regulation (EU) 2018/1726; → consolidated version 2023
- ETIAS Regulation (EU) 2018/1240;
- Entry/Exit System Regulation (EU) 2017/2226;
- Europol Regulation (EU) 2016/794; → consolidated version 2022
- General Data Protection Regulation (EU) 2016/679;
- Data protection Directive for Police and Criminal Justice Authorities (EU) 2016/680;
- VIS Regulation (EC) No. 767/2008; → consolidated version 2023
- VIS Decision 2008/633/JHA; → consolidated version 2019

#### *From 2020 until now:*

- Proposal for a Regulation laying down harmonised rules on artificial intelligence | European Commission
- White Paper on artificial intelligence - a European approach to excellence and trust | European Commission

- Proposal for a Directive of the European Parliament and the Council on adapting non-contractual civil liability rules to artificial intelligence (AI Liability Directive) | European Commission
- COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS Fostering a European approach to Artificial Intelligence
- Coordinated plan on artificial intelligence 2021 review | European Commission
- Artificial Intelligence for Europe | European Commission ?

On the site of the European Council of the EU

- The migration and asylum pact;
- The Common Security and Defense Policy (CSDP);
- Regulation (EU) 2021/694 of the European Parliament and of the Council of 29 April 2021 establishing the Digital Europe Programme and repealing Decision (EU) 2015/2240 (Text with EEA relevance) → consolidated version 2023
- Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL LAYING DOWN HARMONISED RULES ON ARTIFICIAL INTELLIGENCE (ARTIFICIAL INTELLIGENCE ACT) AND AMENDING CERTAIN UNION LEGISLATIVE ACTS
- Regulation (EU) 2021/1134 of the European Parliament and of the Council of 7 July 2021 amending Regulations (EC) No 767/2008, (EC) No 810/2009, (EU) 2016/399, (EU) 2017/2226, (EU) 2018/1240, (EU) 2018/1860, (EU) 2018/1861, (EU) 2019/817 and (EU) 2019/1896 of the European Parliament and of the Council and repealing Council Decisions 2004/512/EC and 2008/633/JHA, for the purpose of reforming the Visa Information System → consolidated version 2021
- The Charter of Fundamental Rights of the European Union,
- the European Convention on Human Rights (ECHR),
- the EU AI Act, European Parliament Report on Protection of EU External Borders,
- Letter Advocating for Protection of People on the Move
- Revision of the Schengen Borders Code - European Parliament
- Regulation for the establishment of an Entry/Exit System
- The EU AI act

## B. Data appendix analysed documents

- Dublin Regulation (EU) No.604/2013;
- Eurodac Regulation (EU) No. 603/2013;
- Asylum procedure Directive 2013/32/EU
- European Border and Coast Guard Regulation (EU) 2019/1896;
- Schengen Borders Code (Regulation (EU) No.2016/399);
- Interoperability - Police and judicial cooperation, asylum and migration Regulation (EU) 2019/818; → This act has been changed. Current consolidated version: 31/12/2023
- Proposal for a Regulation laying down harmonised rules on artificial intelligence | European Commission
- White Paper on artificial intelligence - a European approach to excellence and trust | European Commission
- The Charter of Fundamental Rights of the European Union,
- the EU AI Act, European Parliament Report on Protection of EU External Borders,
- The new pact on migration and asylum
- Directive 2013/33/EU;

C. Analysed documents standardised

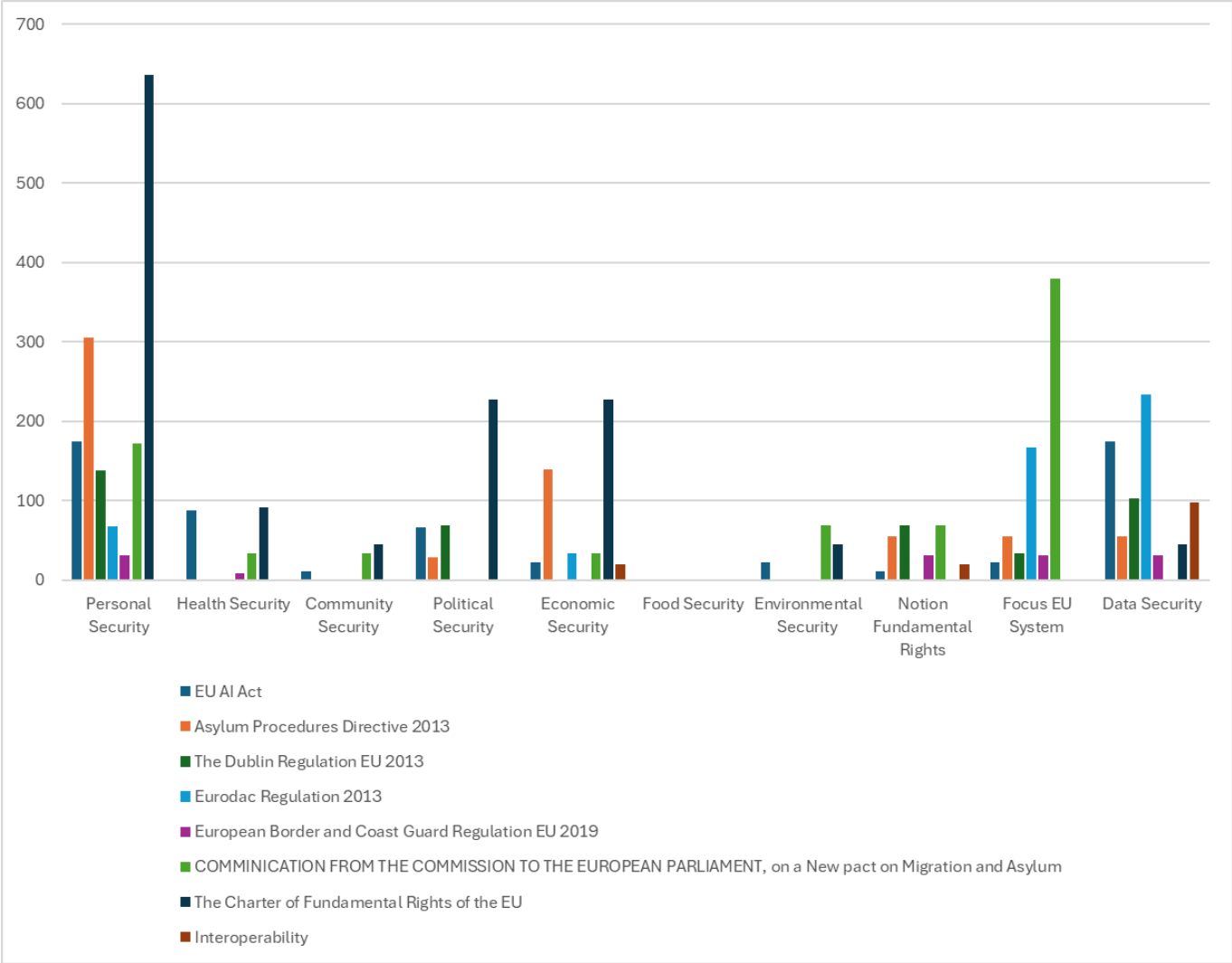


Figure 10: Bar chart all analysed documents