

Artificial intelligence in asylum procedures in the EU

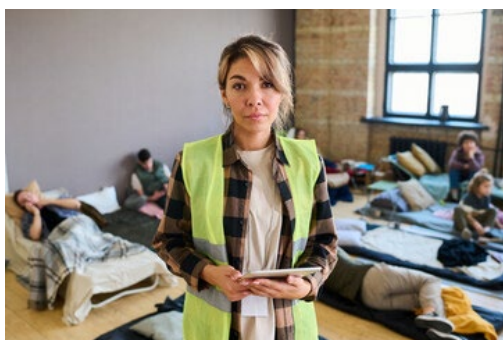
SUMMARY

Artificial intelligence (AI) technologies are increasingly used in the areas of migration and asylum. These technologies promise to increase efficiency, reduce uncertainty and improve decision-making. In the asylum context, AI applications are meant to reduce pressure on national asylum systems and contribute to fairer and more consistent asylum decisions.

Despite potential benefits, these technologies come with significant risks. Inaccurate or biased AI applications may jeopardise the right to asylum, increase or reinforce discrimination, and diminish procedural safeguards built into the asylum process. These risks depend on the type and complexity of applications used, their role in asylum procedures, and the way in which decision-makers interact with technologies.

Although the deployment of AI applications in EU asylum systems is still in the early stages, the debate about the legal, social and ethical challenges posed by these new technologies is well under way. For instance, several Member States have started using AI technologies for dialect recognition to verify information, or obtain further information, on asylum applicants' country or region of origin. There are also examples of Member States using AI applications for name transliteration, automatic transcription of speeches and case matching.

The introduction of AI technologies in EU asylum systems raises several major risks, relating to: (i) inaccuracies, bias and discrimination; (ii) undermining fairness and due process; and (iii) unlawful interference with privacy and data protection.



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Introduction

Artificial intelligence (AI) refers to a set of technologies that enable computers to perform tasks typically associated with human intelligence (see Box 1).

AI applications are gradually being tested and deployed in migration management around the world. They are believed to increase efficiency and contribute to better decision-making. These promises are particularly appealing in the area of asylum, given the increased pressure on asylum systems, budgetary constraints, and persistent disparities between asylum decisions.

AI tools could be used in different stages of the asylum process, including initial translation, information gathering tasks, data sharing, planning, analysis and decision-making.

AI chatbots could be used to register asylum applications and help with triaging and prioritising cases. AI tools can automate translating tasks, and help with organising vast quantities of documents, such as personal testimonies or legal paperwork, ensuring accuracy and consistency across multiple languages. Natural language processing algorithms may also help to understand asylum seekers' needs and identify vulnerable people.

Identity verification tools using facial and dialect recognition could be used to determine an applicant's identity. For example, facial recognition systems may be used to match applicants' faces against profiles on watchlists of people of interest or other migration databases. Such matching process typically uses AI algorithms (machine learning) to assess the probability that two images belong to the same person. Name transliteration tools can also help to standardise applicants' identities.

More powerful algorithms could be used to assist decision-makers with assessing people's claims and predicting risky behaviour. For example, advanced AI translation tools are becoming more capable of learning from context, which may facilitate greater understandings of the nuances and cultural specifics of an applicant's narrative. Algorithms analysing data from applicant's mobile devices could provide insights relevant for their identification and for the assessment of their protection claims.

Matching algorithms could help identify the best location for the placement of applicants and refugees. They could also be useful for identifying needs and for the distribution of welfare benefits and other services, such as medical or integration services.

Use of AI in asylum

The uptake of AI technologies in migration management is in full swing globally. For example, Canada has deployed an automated decision-making system for [triaging applications](#) for temporary visas. New Zealand introduced AI tools to [improve border security](#) and streamline immigration. AI tools for identity checks and biometric recognition are increasingly used at borders around the world.

Box 1 – Defining AI

The [EU Artificial Intelligence Act](#) (2021) defines an AI system as 'a machine-based system that is designed to operate with varying levels of autonomy and that may exhibit adaptiveness after deployment, and that, for explicit or implicit objectives, infers, from the input it receives, how to generate outputs such as predictions, content, recommendations, or decisions that can influence physical or virtual environments'.

AI applications typically process large amounts of data (images, text, audio, data from sensors) to recognise patterns, make inferences, engage with users, make recommendations or take decisions.

[Machine learning](#) is one of the most promising AI technologies, and it allows algorithms to learn from data without being explicitly programmed. Machine learning can be supervised, where an algorithm is trained on labelled datasets to classify data or predict outcomes, or unsupervised, where an algorithm analyses unlabelled datasets to discover hidden patterns or data groupings without the need for human intervention.

AI applications have also been introduced in asylum procedures, primarily as part of information systems and case management systems. For example, in 2024, the United Kingdom Home Office [tested](#) two AI tools for asylum: an AI case summarisation tool – used to automatically summarise interview transcripts – and the AI policy search tool – a search assistant to find relevant country policy documents quickly. However, the deployment of more advanced AI systems in the asylum process, such as automated decision-support systems or predictive analytics, is still in the early stages.

Use of AI in asylum systems in the EU

To cope with increased migration flows caused by the 2015 migration and refugee crisis and with challenges posed by the COVID-19 pandemic, EU Member States have accelerated the uptake of [digital technologies](#) for migration management and asylum. In the asylum context, [digital tools](#) have been introduced to help with the identification, security check, registration, reception and processing of asylum applications. The advent of powerful AI technologies in the past years has triggered new efforts to digitalise and automate parts of migration and asylum processes.

In 2020, the European Commission presented a [study](#) developing a roadmap to integrate AI in migration and asylum fields. The study identified five opportunities for the use of AI in asylum (see Box 2). Another 2020 [study](#) ordered by the Commission explored the feasibility of developing a forecasting and early-warning tool based on AI technology. Such a tool should provide predictions of levels of (change in and location of) asylum applications lodged in the EU and secondary movements towards destination countries within the EU. The study concluded that 'a well-performing forecasting system can be built', although its reliability could only be assessed after implementation.

In a joint [briefing](#), published in 2022, the European Migration Network (EMN) and the Organisation for Economic Co-operation and Development (OECD) identified six EU Member States that use AI application in migration and asylum (for the purposes of language identification and assessment, fraud detection, case management and communication), and 10 others that reported on specific pilot projects and planned initiatives using AI.

Box 2 – AI opportunities in asylum

In 2020, a [study](#) ordered by the Commission identified five opportunities for the use of AI in asylum:

1. **Vulnerability assessment** – provide sensory analysis of individuals to determine if the person should be further investigated by a human social worker or granted special procedural guarantees;
2. **Registration chatbot** – use an AI chatbot to facilitate the registering process by going through the steps that do not require human expertise;
3. **Abscndment risk assessment** – develop AI models to predict the risk of an applicant absconding during the review of an application and the return process;
4. **Refugee allocation** – use AI algorithms to allocate refugees to geographic regions (at regional level within countries) where they are more likely to find work and integrate smoothly;
5. **Intelligence search engine** – use intelligent search engines to assist with risk assessment of returns to origin country by locating documents, reports, and other evidence.

A 2023 [report](#), published in the framework of the Algorithmic Fairness for Asylum Seekers and Refugees (AFAR) project, mapped the use of AI technologies in migration and asylum fields in Europe. It catalogued applications for: forecasting of future mobility; risk assessments and profiling; processing of visas, travel authorisations and citizenship applications; identity verification and fraud detection (including technologies used for document verification and behaviour/emotion recognition, speech recognition, and mobile phone data extraction); categorisation of applications

according to their perceived risks or type/complexity; electronic monitoring; distribution of welfare benefits; and matching tools used for the distribution of place of residence. According to the report, so far, European countries have focused on deploying AI technologies mainly in migration management, and have been largely reluctant to automate asylum procedures.

Biometric recognition

The EU has developed a complex architecture of centralised [information systems](#) aimed at supporting the management of migration and external borders. These information systems allow the recording and checking of information on third-country nationals crossing the external borders, applying for visa or requesting international protection. For example, the European Asylum Dactyloscopy Database ([Eurodac](#)) collects and compares fingerprints and, in the future, facial images of asylum seekers and people who have crossed the external borders irregularly.

The ongoing process of updating, expanding and interconnecting the EU information systems for border management has created new opportunities to [test and deploy AI technologies](#) at the borders. For example, most EU information systems have been expanded to allow for the collection of facial images, which would enable to use [facial recognition technologies](#). Such technologies are increasingly deployed at e-gates across EU airports to verify travellers' identity automatically. The new European travel information and authorisation system ([ETIAS](#)), currently under development, [could include](#) an 'additional level of automation or analytics based on AI or machine learning' to identify suspicious applications.

Several EU-funded research projects have sought to develop AI-based emotion detection systems aimed at detecting deception during border checks. For example, the project entitled Automated Virtual Agent for Truth Assessment in Real-time ([AVATAR](#)) sought to create a virtual agent to automate screening, interviews and credibility assessments by detecting 'potential anomalous behaviour' through analysis of data streams from sensors such as cameras, microphones and eye-tracking systems. The system was tested by the EU border agency (Frontex) at a Romanian airport in 2013. Another project, Intelligent Portable Control System ([iBorderCtrl](#)), aimed to develop a decision support system for border checks that included an automated deception detection tool. The technology was tested in 2019 at several land border crossing points in Greece, Latvia and Hungary. The AI systems developed under these two projects have not been implemented at the EU borders and do not focus on asylum seekers.

Whereas these developments concern primarily border and migration management, they are [relevant](#) for the asylum process. For example, data collected from third-country nationals when crossing the external borders may be used later to verify/assess applicants' protection claims. Biometric checks in Eurodac and other information systems could play a significant role in assessing the credibility of asylum applicants. In the context of streamlining the EU migration and asylum procedures, under the [EU pact on migration and asylum](#), checks and assessments at the external borders are set to play an even [greater role](#) in the asylum process. For example, checks and data gathered during the new [screening](#) procedure could affect the way in which asylum applications are treated, including the choice of procedure and the level of procedural safeguards afforded to applicants.

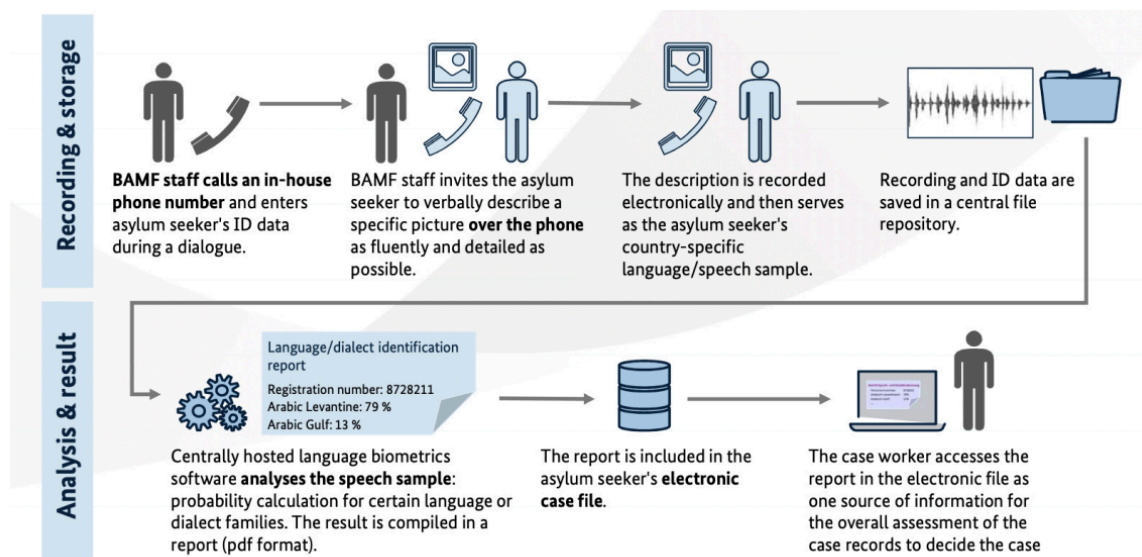
Language analysis

According to a 2022 [report](#) by the European Union Agency for Asylum (EUAA), seven Member States (Denmark, Germany, the Netherlands, Austria, Romania, Finland and Sweden) and Switzerland have used Language analysis for the determination of origin (LADO) as a tool to establish asylum seekers' country of origin. Six other Member States (Greece, Croatia, Malta, Poland, Portugal and Slovakia) were considering introducing LADO in the near future. LADO is typically carried out with the help of professional linguists. The EUAA report acknowledged that advancements in the ability of AI to assist in language and dialect identification create 'new opportunities' for LADO, although it mentioned concerns from some stakeholders over a potential lower degree of accuracy and thus poor reliability when using AI tools.

According to another [report](#), from 2023, the EUAA has been actively engaged in discussions with Member States on 'combining first-line artificial intelligence and second-line human analysis for better quality results in the field of LADO'. Between 2021 and 2022, the agency participated in a pilot project testing a hybrid language assessment model that combined analysis of voice samples by a machine and by human experts.

In Germany, the Federal Office for Migration and Refugees (BAMF) uses an AI-based dialect recognition [system](#) (Language Biometrics Assistance System – DIAS) to support decision-makers in identifying asylum seekers' country and/or region of origin. The system has been used since 2017 for certain Arabic dialects (Egyptian, Gulf, Iraqi, Levantine, Maghrebian), and since 2022 for Dari-Persian, Farsi and Pashtu. DIAS analyses phonetic patterns in applicants' speech to provide a probabilistic determination of their country or region of origin. For assessment, applicants are asked to describe a picture in their language via a phone call at the beginning of the asylum procedure (see Figure 1). In case of doubt, DIAS might be used again during the interview. According to BAMF, the DIAS report is only complementary and does not automate the identification process or the credibility assessment. Applicants have the opportunity to comment on the findings during the interview.

Figure 1 – DIAS process flow



Source: [Ozkul](#), 2023, p. 44.

DIAS is part of the integrated identity management tools, which also include tools for automatic face recognition, name transliteration, and the analysis of data devices. The name transliteration tool is used to prevent spelling mistakes and standardise the spelling of names originally written in non-Latin alphabets. The authorities claim that the tool also helps to identify applicants' country of origin and thus to assess the plausibility of applicants' statements about their place of origin. According to [BAMF](#), Germany works with several European countries 'to plan a pilot project for language and dialect recognition in which the exchange and analysis of speech recordings are to be tested.'

In Italy, authorities have been testing an AI tool (S.I.N.D.A.C.A) to transcribe the interviews with asylum seekers automatically. According to the [provider](#), 'the automatic transcription takes into account all semantic aspects, not excluding the recognition of dialects, accents, foreign terminology, and spontaneous speech, with an accuracy level of no less than 95 %'.

Between 2019 and 2021, the EU has funded a [project](#) in Türkiye piloting a language analysis system aimed at improving nationality identification procedures – focused specifically on distinguishing

between Uyghur and Uzbek nationals. According to the above-mentioned AFAR report, the Swedish Migration Agency in Sweden tested an AI tool for language recognition but did not proceed with its implementation. Several other Member States were planning to test dialect recognition technologies. Hungary conducted preliminary studies on the use of a dialect recognition technology by the asylum agencies. Croatia has announced plans to use language identification as part of its asylum procedure to establish applicants' country of origin in the future.

In the Netherlands, immigration authorities use a text mining tool ([Case Matcher](#)) that sifts through asylum applications to identify applications made on similar grounds. The purpose of the application is to help reduce the time caseworkers need to spend on new cases and to ensure consistency across decisions. The tool could provide decision-makers with a deeper understanding of prevalent risks in the applicant's country of origin. However, it [might also influence](#) the credibility assessment of applications, as applicants with similar narratives could be suspected of lying.

Mobile data analysis

Many countries oblige asylum seekers to provide access to their mobile devices to extract data that could be used to verify their statements. Although the automatic extraction of mobile data does not constitute automated decision-making, the insights obtained from that data may be instrumental for the identity determination and/or the assessment of applicant's claims. A 2024 EMN [ad-hoc query](#) found that the search and examination of mobile devices carried by individuals applying for international protection was possible in Belgium, Germany, Estonia, Greece, Croatia, Cyprus, Luxembourg, Hungary, the Netherlands, Austria and Portugal. Plans to make this possible were ongoing in Finland and Sweden.

According to the AFAR report, mobile phone data analysis has been implemented in Germany, the Netherlands, Norway and – to some extent – in Denmark. In Germany, applicants without a valid passport or recognised documents are obliged to hand over their device or have their application disregarded in the case of refusal. If applicants give their consent, a computer system will be used to extract mobile data that could help verify their country of origin (country codes of contacts stored on the phone; country codes relating to incoming and outgoing calls and messages; languages that were used in incoming and outgoing messages; country endings of the browsing history; login names and addresses that were used in applications such as Facebook; and location data obtained from saved photos and applications). The resulting report may be used by case workers, with the permission of a lawyer working at BAMF who examines its necessity and proportionality for the case, to ask clarifications from applicants regarding their identity and country of origin. In the Netherlands, the police authorities scan through all data carriers and extract all the available data on some of the selected carriers. In Denmark, the police typically seize asylum seekers' mobile phones, and the immigration service can ask asylum applicants to share their Facebook profiles. In Belgium, the practice of analysing mobile data has been challenged before the Belgian Constitutional Court, which [imposed limits](#) on the asylum authorities' discretion.

Forecasting asylum trends

In 2012, the EUAA developed an Early Warning and Forecasting System ([EPS](#)) to monitor the situation in third countries and to forecast the number of asylum applications EU Member States can expect. The EPS [forecasts](#) the number of such applications up to three weeks in advance. This is done on the basis of monitoring and forecasting crises in third countries, whereby events in third countries are fed into scenarios based on correlations between the occurrence of similar prior events and the number of asylum applications in the EU. The project was supposed to be finalised in 2017. According to a 2020 EUAA [report](#), the agency 'uses machine learning to analyse big data on conflict and disruptive events in countries of origin and transit in order to clarify the root causes of individual displacement events'. The aim is 'to understand and predict arrivals of third-country nationals that might exert particular pressure on national asylum and reception authorities'.

The EU-funded IT Tools and Methods for Managing Migration Flows ([ITFLOWS](#)) project (2020–2023) developed an IT tool ([EUMigraTool](#)) to predict the arrivals of asylum seekers and detect attitudes and potential tensions relating to migration and asylum. The tool has two components: a small-scale model that predicts the distribution of asylum seekers arriving to countries neighbouring conflict areas, and a large-scale model that produces monthly predictions of asylum applications in the EU for various bilateral cases. According to the official description, the tool uses state of the art machine learning approaches, including neural network architectures and time series analysis.

Potential benefits

Asylum procedures are complex, lengthy and resource intensive. Increased pressure caused by a significant number of new applications and accumulating backlogs adds to this challenge. AI tools may help to improve efficiency, reduce uncertainty and reduce bias and inconsistency.

Improve efficiency

The number of applications for international protection in the EU has risen again after 2020, reaching [1.1 million](#) (first-time applicants) in 2023 (see Figure 2). By the end of March 2025, there were about [955 000 pending cases](#) in the EU+ (EU and associated countries) awaiting a first-instance decision. Increased pressure on the asylum systems means asylum procedures take longer, which increases reception needs and overall cost. For example, in [Belgium](#), the average processing time for applications for international protection was about 14 months (430 days) in 2024; about 15 % of applicants were waiting longer than two years for a decision. The average duration of the asylum procedure at first instance in [Austria](#) amounted to 5.5 months in 2023, compared with 3.5 months in 2022 and 3.2 months in 2021.

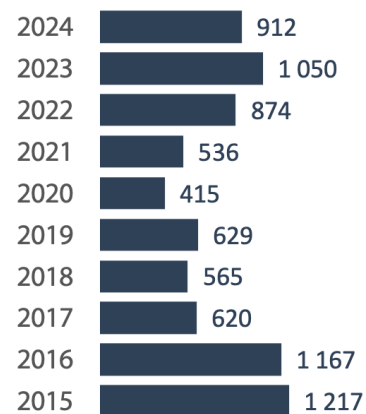
Owing to their capacity to quickly process large amounts of data, identify patterns and generate insights, AI tools promise to bring significant efficiency gains in various fields. In asylum, AI tools could reduce complexity and workload by [automating](#) certain steps and streamlining the asylum process. For example, registration chatbots could help to verify identity, triage applications, and gather and organise information to help caseworkers reach accurate and timely decisions. This could reduce the time needed to process applications, allowing case workers to focus on higher value tasks.

As stated in the 2023 EUAA [strategy](#) on digital innovation in asylum:

Case officers should benefit from the assistance of innovative tools which could eliminate burdensome tasks, thus sparing capacity for high added-value targets. A digital casework assistant could be helpful in several aspects, such as: extracting case relevant COI [country of origin] and case-law from large amount of data, supporting risk analysis, filtering open source intelligence or applicants' mobile devices.

Improved efficiency could also be achieved by developing tools to predict migration and asylum trends, such as early warning systems, forecasting, and scenario-building exercises. This could allow for better anticipation of needs, planning and resource allocation in order to deal with crises.

Figure 2 – First-time applicants for international protection in EU-27 (in millions)



Data source: Eurostat ([migr_asyappctza](#)), 2025.

Reduce uncertainty

Assessing asylum applications often requires striking a balance in the context of limited information, uncertainty and time constraints. Asylum applicants often do not have proper identity documents and may struggle to provide accurate or coherent information about their circumstances. This creates [challenges](#) for asylum officials to assess the credibility of asylum seekers' claims in order to determine their eligibility for a protection status.

AI could be used to provide analytics for assessing elements of asylum applications or to predict individual behaviour during the procedure. For example, an AI tool might be used to help determine the age of an applicant or to predict the risk of an applicant absconding during the procedure. Unlike other – administrative – tasks, such AI-based analytics and risk assessments (e.g. security risks) are likely to have a more significant impact on the outcome of an application. For example, insights provided by dialect recognition or credibility assessment tools may play a crucial role in a caseworker's overall assessment of a case, and thus significantly affect the final decision.

Reduce bias and inconsistency

Research has shown that human decision-making is affected by cognitive biases and external circumstances (as far off as the [time of the day](#) when a decision is taken). In the context of asylum procedures, officials need to cope with the lack of information and uncertainty by relying on [assumptions](#) and [heuristics](#) (mental shortcuts). For example, to ascertain the credibility of an asylum claim, officials may assume that discrepancies in claimants' accounts indicate attempts to deceive. However, this assumption disregards the fact that traumatic experiences often affect applicants' capacity to recall events and remain coherent. Differences of interpretation and circumstances, including administrative contexts, lead to significant [differences in recognition rates](#) across countries, regions and even individual decision-makers – a situation that has been described as a '[refugee roulette](#)'.

In the EU, the recognition rate can vary greatly depending on the nationality of applicants and the Member State where the application is examined. For example, according to the [EUAA](#), the recognition rate for Venezuelans and Turkish nationals varied significantly across the EU between 2022 and 2023. Differential recognition may drive new asylum seekers to travel to those countries perceived as more generous (known as 'secondary movements').

AI systems may help address the [flaws inherent in human assessments](#). Data-mining algorithms could be used to analyse information about countries of origin or to assist decision-makers in identifying relevant information and corroborating applicants' claims. By improving the evidentiary base and reducing bias and discretion, AI could lead to more consistent and fairer asylum decisions, where similar asylum claims receive similar decisions.

Key risks

The use of AI in asylum contexts generates significant fundamental rights risks. Inaccurate algorithms can lead to the rejection of asylum applications and the return of third-country nationals with protection needs ('*refoulement*'). Biased AI application can lead to or reinforce unlawful discrimination. Over-reliance on opaque systems can affect fairness and due process.

In its 2020 [report](#) on artificial intelligence and fundamental rights, the EU Agency for Fundamental Rights (FRA) identified several fundamental rights at risk when using AI. These include the right to human dignity (Article 1 of the [EU Charter of Fundamental Rights](#)); the right to private and family life (Article 7); the protection of personal data (Article 8); equality and non-discrimination (Articles 20–21); access to justice (Article 47); and the right to good administration (Article 41).

Inaccuracies, bias and discrimination

Although AI systems have made major progress over the last decade, they are still at risk of inaccuracy and bias. Inaccurate and/or biased AI assessments or recommendations on important aspects of asylum applications can lead to serious violations of fundamental rights. For example, an AI algorithm may accidentally [misidentify](#) a migrant as a terrorist or miscalculate the risk of ill-treatment on deportation to their country of origin.

Because AI systems are developed by training on large-scale data, the quality of these data is essential to guarantee those systems' accuracy and reliability. Poor training data result in poor outcomes. As underlined by the FRA, '[errors in data analysis or interpretation](#) could result in incorrect conclusions about an applicant's origin, leading to unfair decisions with potentially life-threatening consequences for the individual concerned'. The lack of sufficient and representative data can create additional issues. For example, a dialect recognition tool trained on a data set that does not include dialects of a specific region may misrecognise the dialects from those regions. In the case of languages, the training data may also become incomplete, as languages and dialects evolve over time.

Although AI is sometimes heralded as a tool to reduce bias and discrimination (by reducing human discretion), there are concerns that it may reproduce or [displace](#) unlawful discrimination in the asylum procedures. AI algorithms trained on data from past decisions could reproduce for the future whatever bias was embedded in those decisions. This could lead to harmful feedback loops, where the output produced by an algorithm, which contains bias and discrimination, is [fed back](#) into the system as input or training data. For example, [research](#) on AI applications used in migration procedures in Australia and Canada uncovered that these systems reinforce pre-existing disparities in immigration outcomes.

Another problem is that AI systems could rely on proxy data and misguided assumptions about the relevance of these data. For example, dialect recognition tools are used to ascertain applicants' country of origin and nationality. However, dialect recognition tools may not account for an individual's regional socialisation, either within their country of origin or during their journey. Moreover, linguistic proficiency is not a good indicator for nationality. Nationality is a legal status, which [may or may not correspond](#) to a person's main country of socialisation.

Problems may also arise when data is not distributed evenly, for instance when asylum applications are highly skewed towards certain nationalities and specific types of persecution. This can create a [class imbalance problem](#), where the characteristics of a majority class (e.g. Syrian asylum applicants fleeing civil war) are over-represented in the model, leading to [biased predictions](#) and reduced performance on minority classes (e.g. applicants from other regions and seeking protection on other grounds).

The way in which users interpret and use the outcomes of AI applications may also be problematic. AI systems typically provide probabilistic statements, which means their results cannot imply certainty. They also have error rates that need to be considered. For example, the DIAS used in Germany is reported to have an error rate of between 15 % and 20 % for Arabic dialects, and of 27 % for Persian dialects. The success rate of the name transliteration tool is [as low as 35 %](#) for applicants from Maghreb countries. Among Arabic names that were tested, 39 % of references to the country of origin were unverifiable. The risk is that inaccurate or inconclusive results may reinforce suspicion about applicants' claims. The opacity of these algorithms makes it difficult to identify the problem and challenge the outcomes, which creates an environment [ripe for algorithmic discrimination](#).

Undermining fairness and due process

Asylum procedures are complex and often require striking a fair balance between the applicant's position and the need for accurate decision-making. Automating some steps in the asylum process, such as registration, information gathering and translation tasks, may help gain time and release

resources for more complex tasks. However, using AI tools for sensitive tasks, even in an assistive role, raises the risk of undue influence on the outcome of an application.

Fair asylum procedures or due process safeguards are essential to guarantee the right to asylum and to ensure trust in the asylum system. According to different [theories of fairness](#) in the asylum process, fair asylum procedures would require 'a correct application of the law to the facts, while ensuring the opportunity for ... applicants for international protection to represent their interests and influence the decision-making process'. The use of AI systems may jeopardise fairness in several ways.

Firstly, AI systems may interfere with the authorities' obligation to carry out an individualised assessment of applications for international protection. EU law requires that applications are examined, and decisions are taken 'individually, objectively and impartially' (Article 10(3) of [Directive 2013/32/EU](#)). This requirement constitutes a [primary safeguard](#) against mistakes and discrimination. Using AI systems to assess individual applications based on historical data about previous applications may undermine this safeguard. Concerns are particularly high in the case of AI systems aimed at predicting the likelihood of success and the strengths or weaknesses of an application.

AI systems (such as machine learning) are based on inductive reasoning (drawing general conclusions from specific observations or data). However, according to [research](#), this type of reasoning is inadequate for determining protection needs. To cope with uncertainty, asylum decision-makers have to rely on abductive reasoning, which focuses on finding the simplest and most likely explanation from the available evidence by combining new information with background knowledge. This reasoning enables decision-makers to reach a plausible conclusion or an 'intelligent guess' by considering competing hypotheses and using their imagination, association and intuition. The use of AI systems could compromise the abductive reasoning at the heart of asylum determination process.

There are also concerns that AI systems may not be able to deal with the [prospective nature of a well-founded fear](#). An AI system trained on data about past persecution may not be able to determine the existence of a well-founded fear of future persecution. This is also because evidence from past persecution cannot provide insight into a claimant's subjective fear. AI systems designed to assess a person's subjective experience, such as emotion-recognition technology, are deemed highly [problematic](#).

Secondly, AI systems may affect the principle of the shared burden of proof between applicants and authorities ('the duty of the Member State, in cooperation with the applicant, to assess the relevant elements that the applicant has presented' – Article 4(1) of [Directive 2011/95/EU](#)) and the principle of the benefit of the doubt (Article 4(5)). These safeguards allow applicants to state their case even in the absence of hard evidence. Because asylum claims rely heavily on personal accounts, it is crucial for asylum authorities to [assess the credibility](#) of applicants based on their statements and performance during the interview. Adopting AI systems to assist in various stages of the asylum procedure may affect the credibility assessment directly or indirectly. For example, dialect recognition tools may be used to cast doubts about an applicant's declared place of origin. In the case of the Dutch Case Matcher, there are [concerns](#) that the system may be used not only to better understand the prevalent risks in a country of origin but also to cast a doubt on the credibility of applicants (e.g. if their narratives are deemed fabricated because they are too similar to past claims). When authorities [rely too heavily](#) on AI outputs, they may undervalue other evidence or ignore the 'benefit of the doubt' principle that is essential in cases where documentary proof is lacking.

In an increasingly automatised asylum process, asylum seekers may also find it [more difficult to challenge](#) a decision based on AI. By shifting the decision-making toward a more data-driven – and possibly less human-centred – approach, the deployment of AI tools could [disrupt the procedural balance](#) of the asylum process. Overall, this could increase the complexity and opacity of the asylum process, which would result in the weakening of asylum seekers' position in the system. As the AFAR

[report](#) warns, AI technologies are often 'designed to support migration controls or benefit state administrations' needs rather than address migrants' and refugees' needs'. This reflects a general viewpoint that [technologies are not neutral](#) and that, despite their claims to objectivity and truth, they serve specific interests and seek to alter the distribution of power and opportunities.

Box 3 – EU AI Act

The [AI Act](#) (applicable from 2026) establishes a risk-based approach to AI deployment. It classifies AI systems into four categories based on their potential harm: (i) unacceptable risk; (ii) high risk; (iii) limited risk; and (iv) minimal risk. AI systems used in asylum, migration and border management are classified as high-risk. High-risk AI systems are subject to strict regulatory requirements, such as mandatory risk management processes, transparency measures, human oversight, and fundamental rights impact assessments.

Annex II of the AI Act refers to 'AI systems intended to be used by or on behalf of competent public authorities or by Union institutions, bodies, offices or agencies to assist competent public authorities for the examination of applications for asylum, visa or residence permits and for associated complaints with regard to the eligibility of the natural persons applying for a status, including related assessments of the reliability of evidence' (Article 7(c)).

Critics have pointed out that the act contains several [exceptions and loopholes](#) that could limit the effectiveness of the established safeguards when deploying AI in the areas of migration and asylum. These exceptions and loopholes include limited transparency (registration of AI systems must be in a secure, non-public database) and more relaxed human oversight requirements. For example, AI tools designated for mobile data extraction or for dialect and language recognition may not fall under the category of high-risk AI systems, despite significant concerns about their reliability and negative impact on fundamental

The use of AI system may also undermine the right to remedy. Asylum authorities have the obligation to provide a reason for any decision denying protection, which allows applicants to understand the decision and to seek an effective remedy before a court or a tribunal. However, relying on AI may jeopardise this safeguard if decisions based on algorithmic assessments cannot be fully explained. The idea of 'human-in-the-loop' is regarded as a key safeguard for deploying AI systems. The EU AI Act (see Box 3) established requirements of human oversight for AI systems to prevent or minimise potential risks to health, safety or fundamental rights (Article 14 of [Regulation \(EU\) 2024/1689](#)). As stated by the [EUAA](#), all applicants have the right to have their asylum application heard and decided on by a qualified human being, regardless of whatever AI systems are used in different stages of the process.

The challenge is that AI systems may have an undue influence on asylum decisions even when these systems are used in a supportive role. This has to do with the general tendency in humans to accept a computer-generated outcome uncritically, even when they have suspicions about an outcome and when they are faced with contradictory evidence (known as [automation bias](#)).

Unlawful interference with privacy and data protection

The digitalisation of asylum procedures, including the collection of large amounts of personal data and the use of AI tools, raises serious concerns about privacy and data protection. The rights to respect for private life and the protection of personal data (Articles 7 and 8 of the Charter) can be subject to limitations. These limitations must comply with the general principles of data protection set out in EU law (Article 5 of the [General Data Protection Regulation](#) (GDPR) and Article 4 of the [Law Enforcement Directive](#) (LED)); must be established by law; and must respect the essence of these rights and the principle of proportionality, as established in Article 52 of the Charter. The processing of personal data must be lawful, fair and transparent; follow a specific, explicit and legitimate purpose; and comply with the requirements of data minimisation, data accuracy, storage limitation, data security and accountability.

Asylum procedures typically involve the processing of special categories of personal data, such as biometric data and data revealing racial or ethnic origin, political opinions, religious or philosophical beliefs. The processing of these special categories is subject to stricter requirements and additional safeguards (Article 9 GDPR). The large-scale processing of such data or the use of AI may trigger the requirement for a data protection impact assessment (Article 35 GDPR).

The automation of tasks in the asylum process raises concerns about automated decision-making, which refers to any 'decision based solely on automated processing, including profiling, which produces legal effects concerning him or her or similarly significantly affects him or her'. EU law generally forbids automated decision-making (Article 22 GDPR and Article 11 LED). Such decisions can be lawful if the subject expresses their explicit consent (under the GDPR) and if it is authorised by EU or national law (under the LED). For a decision not to be considered automated, it must be reviewed by a human. However, the [review should not amount to a mere signing off](#), it 'must be carried out by someone who has the appropriate authority and capability to change the decision' and who can 'undertake a thorough assessment of all the relevant data, including any additional information provided by the data subject'.

An additional concern relates to the fact that asylum seekers are in a particularly vulnerable situation. The processing of their personal data carries the risk that such data could be transmitted to an asylum seeker's country of origin, thus [jeopardising](#) the very safety and protection they are seeking.

MAIN REFERENCES

Beirens, H., [Rebooting the asylum system? The role of digital tools in international protection](#), Migration Policy Institute, 2022.

European Commission, [Opportunities and challenges for the use of artificial intelligence in border control, migration and security](#), 2020.

European Migration Network, [The use of digitalisation and artificial intelligence in migration management](#), EMN-OECD inform, 2022.

Forster, M., [Refugee protection in the artificial intelligence era: A test case for rights](#), Chatham House, 2022.

Memon, A, Given-Wilson, Z., Ozkul, D. et al., [Artificial Intelligence \(AI\) in the asylum system](#), *Medicine, Science and the Law*, Vol. 64(2), 2024, pp. 87–90.

Ozkul, D., [Automating immigration and asylum: The uses of new technologies in migration and asylum governance in Europe](#), Refugee Studies Centre, University of Oxford, 2023.

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