What Role Could Digital Technologies Play in the New EU Pact on Migration and Asylum?

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Executive Summary

In Brussels, all eyes are on the New Pact on Migration and Asylum. After years of arduous debate over reforms to the EU asylum and migration acquis, the pact has entered the last stages of negotiations. Policymakers are working quickly to approve the new pact before the agreed deadline of June 2024, when EU citizens will be called to vote in the European elections. What seemed close to impossible in recent years—an EU-wide agreement on migration—is now likely to become reality.

The stakes could not be higher. Pressure on EU migration and asylum systems has grown continuously over the years, with the number of spontaneous arrivals of asylum seekers and other migrants and of asylum applications approaching those that threw the European Union into disarray in 2015—16. Conflict at Europe's doorstep has led to the arrival of more than 4 million displaced Ukrainians, which has challenged already-strained reception and integration systems. And migration has become a flashpoint for political tensions and dominated electoral debates across Europe. But those who hope the approval of the new pact will immediately solve these challenges are likely setting themselves up for disappointment; translating a complex legal framework into practice will require both time and sufficient capacity, funding, and substantial operational changes

in how asylum and migration systems are run. In short, operationalising the pact will be far from an easy task.

From border management to asylum processing to integration service delivery, digitalisation is leaving no area untouched.

To support implementation, policymakers could leverage one growing trend in the migration field: the use of digital technologies. While the migration field as a whole has traditionally been slow and hesitant to adopt digital technologies, tools such as online case management systems, biometrics, artificial intelligence (AI), and machine learning are increasingly being used in European migration and asylum systems. From border management to asylum processing to integration service delivery, digitalisation is leaving no area untouched. Such technologies hold the potential to make systems more efficient, improve service delivery, and free up (much needed) staff capacity. Yet there is a need to temper this growing enthusiasm: digital technologies also bring new harms and risks, such as unchecked errors in decision-making caused by biases engrained in algorithms, risks to data security and protection for refugees and asylum seekers, and overreliance on tech providers, which often have their own agendas.

Moreover, the development or adoption of new technologies in the migration field is often scattered and not backed by a clear political vision, which only magnifies these risks.

The New Pact on Migration and Asylum offers an opportunity for European policymakers to more fully tap into the potential of digital technologies when implementing the new legal framework and, more broadly, to rethink the growing use of technology in asylum and migration systems. Digital tools could be used, for instance, to facilitate the relocation of asylum seekers and refugees among Member States as envisioned by the pact (e.g., a digital case management system for information sharing among national authorities, mobile app to allow displaced individuals to carry key documents with them across borders, and matching algorithm to improve the fit between asylum seekers/refugees and receiving communities). Digital technologies could also support the return and reintegration of those determined not to have a right to stay. Investing in digital case management platforms, for instance, could improve tracking of migrants' cases from the return decision to travel to their origin country, facilitate cooperation between EU and non-EU actors involved in return and reintegration, and support more tailored reintegration assistance. And digital tools could play a part in one of the pact's most complex and hotly debated elements: the screening of new arrivals and the processing of (some) asylum claims at the border. This could be done, for instance, through tools that fully or partly automate the screening of new arrivals to appropriate procedures (e.g., regular asylum procedure, border procedure, return) or the use of language assessment software to help authorities determine asylum applicants' origins when authorities have doubts about their identity.

However, rather than embracing the use of digital technologies as something intrinsically good, policymakers will need to test any new tools carefully and weigh the potential benefits and risks. To ensure the responsible use of new technologies in European migration systems, policymakers, civil servants, and others involved in digitalisation efforts will need to judiciously steer their adoption and course correct as needed. Recommendations include:

▶ **Developing appropriate governance frameworks to regulate aspects such as data protection, oversight, and accountability as well as access to resource for those affected by new technologies.** The European Union's AI Act, which is still to be approved and would increase safeguards over the use of AI in European migration systems, would be a first step in this direction.

▶ **Creating a strategic vision for the use of new technologies in migration and asylum systems.** Such a strategy could help policymakers identify priority areas for the use of new technologies and lay out principles behind the development of any digital tool, such as the protection of personal data or interoperability with existing tools.

▶ **Fostering co-creation and partnerships between migration and digital experts.** This approach would help create a resilient digital infrastructure, and avoid a situation in which private companies and tech providers are steering digitalisation efforts in migration systems. Including end users in the design and monitoring of new tools can also help ensure that they are responding to needs on the ground.

▶ **Allocating sufficient funding for digitalisation efforts.** This should include funding to design, test, and monitor new tools, as well as for the creation of a digital infrastructure and training of new users.

▶ **Striking the right balance between standardisation and flexibility.** This will

be particularly important when a tool will be used by several Member States within different legal and operational contexts.

▶ **Piloting new tools, conducting risks assessments, and embedding monitoring and evaluation mechanisms into digitalisation plans.** These steps are critical to regularly measuring impact, detecting risks, and monitoring user experience.

▶ **Investing in the digital savviness of actors charged with using new tools.** Building users' knowledge of how to appropriately and effectively use new tools is important to ensure, for example, that caseworkers using decision-making support tools are aware of their limitations and can give them the correct weight in decisions.

The European Union is at a crossroads. Pressure on EU migration and asylum systems is growing, as are calls from some political groups for restrictions on access to territorial asylum. Thus, many have pinned their hopes on the New Pact on Migration and Asylum. But operationalising the pact, once approved, will be highly challenging in a context of widespread capacity constraints. Digital technologies could ease this process. But for their promise to become reality, policymakers will need to actively guide their development and build in strong safeguards to mitigate the risks associated with their use—or they could end up doing more harm than good for both EU migration and asylum systems and people on the move.

1   Introduction

In September 2020, the European Commission announced the New Pact on Migration and Asylum, a series of legislative proposals aimed at revamping EU migration and asylum systems and unblocking negotiations on the reform of the Common Euro-

pean Asylum System that had stalled since 2016. Agreements were reached in 2021 and 2022 on some pieces of legislation, but other proposals became increasingly stuck, particularly those related to asylum procedures and responsibility-sharing among Member States. While fears that negotiations would once again fail grew over the past year, Member States reached a historic political agreement at the Justice and Home Affairs Council in June 2023 on the Asylum Procedures Regulation and the Asylum and Migration Management Regulation, two of the most contentious pieces in the new pact.[1] As the Council starts negotiations with the European Parliament on these pieces of legislation, the pact's long-awaited approval now seems closer than ever.

Yet even if the pact is approved, it has to pass another test before policymakers can claim victory: translating a complex legal construct into something that works in practice and that withstands spikes in arrivals and other challenges. Pressure is mounting at EU external borders, and national asylum and migration systems are increasingly overstretched, so expectations are high among European governments and publics that the pact will make a difference on the ground. Council negotiators have acknowledged the importance of successful implementation and added a new article to both the Asylum Procedures Regulation and the Asylum and Migration Management Regulation tasking the European Commission, together with EU agencies and Member States, to design a common implementation plan within three months of the adoption of each regulation to assess gaps and determine operational steps. The article also mandates that Member States establish a national implementation plan six months after each regulation enters into force, which the European Commission will monitor.[2]

Past endeavours have shown, however, that implementing a complex legal acquis in 27 different Member States is a formidable challenge.[3] The use of digital technologies, which are increasingly permeating

European migration and asylum systems, could play a key role in easing this process. The last decade has borne witness to a flurry of EU and Member State initiatives to introduce new technologies such as artificial intelligence (AI), blockchain, biometrics, and machine learning in several aspects of migration and asylum systems, including border surveillance, identification, registration, decision-making, and service delivery.[4] The COVID-19 pandemic accelerated this trend and became a catalyst for further digital innovation. And in 2022, faced with the arrival of roughly 4 million people fleeing war in Ukraine,[5] digital tools cushioned the impact of these arrivals on already-strained registration and reception systems.[6] The New Pact on Migration and Asylum presents a renewed opportunity to leverage the potential of digital tools.

> *Without a conscious and deliberate effort from policymakers to steer digitalisation, emerging risks can outweigh benefits and endanger migrants and refugees—and the credibility of asylum and migration systems.*

Importantly, digitalisation extends well beyond simply transforming paper files into online ones (that is, digitisation); it refers to a transformation of entire processes using digital tools, and could thus reshape European asylum and migration systems. New technologies hold great potential to, among other things, increase efficiency in processing and improve information sharing and service delivery, but they also carry new risks that can erode fundamental rights and protection. For instance, automated decision-making that relies on AI can widen the margin of error and lead to incorrect decisions. Growing use of online case management and digital identification systems also carry increased risks of data breaches. Moreover, although a few governments

have developed digital strategies for their migration agencies,[7] many technological developments in the field do not have a clear vision behind them. Without a conscious and deliberate effort from policymakers to steer digitalisation, emerging risks can outweigh benefits and endanger migrants and refugees—and the credibility of asylum and migration systems.

Against this backdrop, this policy brief explores how digital technologies could support the implementation of the New Pact on Migration and Asylum and where caution is merited. It examines the role that new digital tools could play in three areas: decision-making at the border, relocation of asylum seekers/refugees among Member States, and return and reintegration. It also discusses the broader implications of digitalisation in migration and asylum systems and reflects on how policymakers can set appropriate governance models and safeguards to ensure responsible use of new technologies.

2 The Promise and Perils of Using Digital Technologies to Support the Pact's Implementation

The rising number of migrant arrivals and irregular border crossings has strained EU border management systems and capacity in reception centres and resulted in growing asylum backlogs. The stakes are thus high for the new pact. Many policymakers and stakeholders have pinned their hopes on the pact for more efficient migration and asylum systems that can more quickly process new arrivals, decide on asylum applications, and return those with no right to stay. But high expectations mean greater chances of disappointment, especially if people expect the pact to have an *immediate* impact, without acknowl-

edging that building the necessary infrastructure to realise those ambitions will take time, sufficient capacity, and careful planning. A failure to implement the new pact swiftly and successfully will likely only add fuel to calls from some political parties for a radically different take on asylum and migration—one that involves significantly restricting or even completely removing access to territorial asylum.

Translating the new legislation into something that works on the ground will not be an easy task, given it requires significantly changing how national and cross-national asylum and migration systems are run. First, the pact envisages the clustering of some operations and of related resources (e.g., staff, materials, and infrastructure). The proposed Screening Regulation, for instance, would require the pre-entry screening of migrants crossing the border irregularly, those who disembarked through search and rescue operations, and those applying for international protection at external borders.[8] The new Asylum Procedures Regulation will also expand the use of accelerated border procedures and make it mandatory for several types of cases, such as applicants whose nationality has a recognition rate for asylum decisions of 20 per cent or less across the European Union (see Box 1). Although the recent text the Council agreed to would also allow for border procedures to be conducted at facilities farther inland,[9] the procedures' increased use will likely lead to the clustering of processing operations at or near the border.[10] Thus, when facing an influx of arrivals, authorities will need to quickly and efficiently step up capacity at the border or other designated sites. However, considering that capacity crunches are common in EU migration and asylum systems, increasing capacity on short notice will be challenging, especially in remote border areas. Insufficient or slow resource

mobilisation, in turn, can increase backlogs in asylum procedures or lead to overcrowded reception centres, straining asylum systems further. And this will not be the only challenge. The new system aims to return migrants with no right to stay more swiftly to their countries of origin, but enforcing return decisions has proved slow and cumbersome to date. Additionally, the new mechanism for sharing responsibility among Member States, which includes relocation of asylum seekers and refugees from one country to another, will require efficient procedures and transfers across the European Union—something the current system has still not achieved.

Even if processes are not fully automated, digital tools can make some tasks easier to complete.

In this context, digital technologies could enable more efficient processing and quicker mobilisation of resources. For instance, digital tools can automate some tasks and free up capacity for frontline authorities or support service delivery in remote areas (e.g., through online legal aid for asylum seekers or the virtual presence of asylum officers during interviews). And even if processes are not fully automated, digital tools can make some tasks easier to complete (e.g., through online case management systems that facilitate information sharing among different actors, or by using tools that support decision-making). The sections that follow focus on three areas: decision-making at the border, relocation, and return and reintegration. Each discusses how new technologies could support the implementation of the new pact as well as the questions and potential risks of embedding such tools into migration and asylum processes.

BOX 1
The use of border procedures in the European Union

In the European Union, the Asylum Procedures Directive (the reform of which is currently being negotiated) allows Member State to examine asylum applications directly at the border or in transit zones under certain conditions, which generally concern situations in which the application seems to have less merit (e.g., if the applicant comes from a safe third country) or when the applicant has not cooperated with authorities (e.g., by destroying identity documents, refusing to have fingerprints taken, or attempting to mislead authorities). The border procedures can consist of either examining the admissibility of the application to the asylum procedure or undertaking a full, accelerated examination of the application and can last a maximum of four weeks. In 2020, 15 EU+ countries used border procedures in their asylum systems, and Finland is preparing legislative amendments to introduce a border procedure in its national system.

The proposed Asylum Procedures Regulation, which would replace the current directive, would provide for an increase in the use of border procedures to quickly assess asylum applications likely to be rejected and more swiftly return those with no right to stay. The European Commission's proposal includes making the use of border procedures mandatory if the applicant poses a risk to national security or public order, has misled authorities, or is from a country with a recognition rate for asylum decisions of 20 per cent or less, but with exemptions for unaccompanied minors and for children under age 12 and their family members. The Commission proposal also increases the duration of the procedure from 4 to 12 weeks, although Member States in the Council have recently suggested increasing it further to 16 weeks in exceptional circumstances. Importantly, the Council has also proposed conducting the border procedure at designated sites within Member States' territory. With negotiations still ongoing with the European Parliament, the final form of the new border procedure is still to be decided.

The use of mandatory border procedures has become a hotly debated subject in discussions of reforming the EU asylum acquis. It has faced strong opposition from civil-society organisations and other stakeholders who fear that the growing use of border procedures will lower protection standards, given the shortened timelines and what some have called the 'fiction of non-entry' (because the proposal would allow Member States to process applications without formally authorising applicants' entry into their territory, potentially allowing authorities to disregard certain legal standards). Some national authorities have also raised concerns over the operational capacity that border procedures will require from countries at the external borders, which the solidarity mechanism in the new pact partly intends to mitigate.

Sources: European Asylum Support Office (EASO), *Border Procedures for Asylum Applications in EU+ Countries* (Valletta, Malta: EASO, 2020); Council of the European Union, 'Amended Proposal for a Regulation of the European Parliament and of the Council Establishing a Common Procedure for International Protection in the Union and Repealing Directive 2013/32/EU' (2016/0224 [COD], 13 June 2023); Ministry of the Interior of Finland, 'Ministry of the Interior to Continue Preparations to Introduce Border Procedure' (press release, 28 July 2023); European Council on Refugees and Exiles, 'Relying on a Fiction: New Amendments to the Asylum Procedures Regulation' (policy note 29, European Council on Refugees and Exiles, Brussels, 2020).

A. *Matching algorithms, digital identity wallets, and exchange platforms to smooth the relocation process*

One of the cornerstones of the pact is the new mechanism for sharing responsibility for asylum seekers among Member States. After arduous negotiations between Member States, the Council reached an agreement on 8 June 2023 to set new rules for responsibility sharing. While the new system would allow Member States to choose the modality of contribution (relocation, financial contribution, or alternative solidarity measures such as capacity building), relocation would be a key component of solidarity. The Council agreed to relocate a minimum of 30,000 asylum seekers or beneficiaries of international protection per year to ease pressure on Member States facing sudden or disproportionate arrivals—a number that could be raised if circumstances deteriorate further.[11] However, relocation mechanisms applied to date, such as those set up for Malta (2009–13), for Greece and Italy (2015–17), and the Voluntary Solidarity Mechanism (2023–Present), have been slow to materialise and struggled to meet their targets. Relocation processes have also often been administratively burdensome and time consuming for Member States. Additionally, existing relocation mechanisms—including when operating within a single state—are often driven by the location of available housing, leaving aspects such as employment and education opportunities, social connections, or access to support services out of the equation, even though they can have sweeping consequences for longer-term integration.

As policymakers work to improve the relocation process and increase the changes of successful matching (for both asylum seekers or refugees and receiving communities), they could draw inspiration from recent efforts to digitalise matching processes in other aspects of the migration space. Pilot proj-ects have emerged in recent years that integrate algorithm-based matching mechanisms into migration management, particularly in the resettlement and community sponsorship fields. These tools often use past data to recommend an optimal placement for refugees based on certain criteria, such as local capacity or job opportunities.[12] This way, instead of manually allocating refugees or asylum seekers to specific locations, caseworkers receive allocation suggestions, which they then vet. For instance, in the United States, the resettlement agency HIAS uses a machine-learning software called Annie MOORE (Matching and Outcome Optimization for Refugee Empowerment). This software draws on data from the agency's refugee placements over the last decade to recommend localities where refugees are more likely to find employment, while considering local capacity and support services. Since its launch in 2019, the software has improved refugees' employment outcomes by about 30 per cent.[13] A similar tool used in the United States and Switzerland, GeoMatch, was predicted to increase refugees' employment outcomes by 40 to 70 per cent when the algorithm was tested using historical registry data.[14] Finally, the Berlin Governance Platform, Canada-based organisation Pairity, and Krakow-based Salam Lab have developed the Re:Match programme, which uses the Pairity matching algorithm to help assign and relocate Ukrainians to different municipalities in Germany.[15]

However, there are important considerations when developing and using such tools. First, matching software tools are not 'neutral'; they are based on political decisions regarding which criteria should be used (and prioritised) when making matches.[16] While the relocation of asylum seekers has traditionally prioritised local reception capacity, policymakers should consider other factors if they want to foster the longer-term integration of protection beneficiaries, such as education and employment opportunities, access to services, or social connections. In addition, caseworkers and broader supporting

or overseeing organisations should note that these algorithms only make recommendations, and that those should be vetted by trained staff members. The danger lies in actors relying blindly on algorithm recommendations, raising the risk of unnoticed machine errors. Critics have also argued that these algorithms may perpetuate inequality if refugees who have less promising profiles are matched with locations where they might face worse employment outcomes, and that they may undermine refugees' and asylum seekers' agency if their preferences are not taken into account.[17] Lastly, as with other technologies, certain key questions should be front and centre, including what datasets are used to train algorithms, how to securely store data, and how to ensure that people in the relocation process are informed about and consent to the use of their personal data.

Another technological development that is gaining ground in the migration field could also help facilitate relocation and integration: the use of digital identity systems (e.g., digital case management systems and digital IDs that can help people on the move access services without a physical identity document) and digital wallets (e.g., mobile apps to store and manage personal documents). International organisations such as the World Food Programme and the United Nations High Commissioner for Refugees have used digital registration and identity management in displacement situations around the world.[18] To address capacity constraints caused by the arrival of large numbers of displaced Ukrainians, several countries such as Estonia, Lithuania, and Poland have also provided digital identities to Ukrainian newcomers, allowing them to access services.[19] In addition, attempts to create digital wallets are increasing. While these phone-based apps were developed to facilitate the exchange of money, they have been increasingly used to store and manage identity credentials.[20] The private sector has created many of these tools, which aim to increase users' sovereignty over their own data,[21] but governments

are also increasingly using these systems. One key example is Ukraine's Diia wallet. Launched in 2020 during the pandemic, this phone-based digital wallet allows Ukrainians to store, manage, and share identity credentials such as passports, licences, or health records. Although the app was initially developed to facilitate access to public services, the platform has allowed many Ukrainians fleeing the conflict to have their documents at hand without having to compile physical copies.[22] Through bilateral agreements with the Ukrainian government, some countries, such as Moldova and Poland, are accepting these digitalised documents instead of paper documents.[23]

Digital wallet systems could facilitate access to and uptake of education, employment, and health services.

By allowing refugees to store and carry key documents (such as identity documents and education certificates), such digital wallet systems could facilitate access to and uptake of education, employment, and health services. For instance, they could allow for better continuity of care if asylum seekers or refugees have access to their health records on their phone, or help overcome the barriers many displaced individuals face to having their employment or educational qualifications recognised in a new country. The same applies to those who return if conditions in their home country improve. However, more evidence is needed on the use of digital wallets in the migration field to carefully weigh their benefits and risks, as well as on users' experiences with these tools.[24] For example, digital wallets might lead to the exclusion of individuals with limited digital skills or access to a phone or the internet.[25] Moreover, some stakeholders have raised concerns that a failure in the system could leave refugees without means of identification, and that centralised digital wallets could lead to policing of asylum seekers or

refugees.[26] Given these populations' greater vulnerability to data privacy breaches, identity wallets also require strong data protections and security mechanisms to prevent hacking and identity theft and to ensure that identity credentials cannot be traced.[27] This includes, for example, thinking carefully about where data are stored (such as in the cloud or on the phone).[28]

In the context of the relocation mechanism envisaged under the new pact, a digital wallet system—which the European Union is already developing for EU citizens[29]—could be considered for relocated asylum seekers, beneficiaries of international protection, or both. In considering their use, an important question is how to strike the right balance between a centralised system (which requires authorities to manage the identity information of asylum seekers and refugees) and semi- or fully decentralised systems (which would give users more control over their personal data).[30] While beneficial in terms of personal data management, a decentralised system would require a third party to verify the information—for instance, a university when refugees present their educational records—which could generate administrative challenges and time lags. These and other tradeoffs would have to be analysed before launching such a system.

B.   *Online case management systems to improve the uptake of return and quality of reintegration assistance*

Increasing the return rate[31] continues to be a priority in the EU migration agenda. Building on the proposed recast Return Directive in 2019, one of the aims of new pact is to facilitate return and to link asylum and return processes more closely. The Asylum Procedures Regulation, for instance, establishes that Member States should issue a return decision immediately after rejecting an asylum application.

Moreover, the mandatory border procedure aims to swiftly assess inadmissible or unfounded applications at external borders to quickly return those with no right to stay.[32] The pact also introduced the figure of the EU return coordinator, who was appointed in March 2022, to harmonise return policies at the EU level.[33]

Despite these procedural changes to speed up return decisions, Member States will still face issues with enforcing those decisions. To incentivise returns, national and EU authorities have stepped up investments in assisted voluntary return and reintegration programmes, which provide migrants with reintegration assistance upon return. These programmes also incentivise cooperation with third countries and are considered more humane and less costly than forced returns. Successful reintegration is not easy, however, and many returnees still struggle to find a job, reconnect with the community to which they return, and access services.[34] Lack of successful reintegration, in turn, can lead some people to remigrate, and disappointment with a reintegration programme may be shared with migrants' networks in Europe, increasing others' reluctance to return.

While successful reintegration depends on many factors, a crucial ingredient is smooth coordination and information exchange between the actors in Europe who prepare migrants for return and partners in charge of implementing reintegration programmes in countries of origin. Traditionally, stakeholders in the field have relied on email and written documentation to exchange information about returnees—for example, about their characteristics, vulnerabilities, and reintegration support needs. But digital case management systems have taken sudden flight, valued for their ability to coordinate stakeholders and ensure a smooth transition between the pre-departure and post-arrival stages. The European Commission, in cooperation with Fedasil (Belgium's federal agency for the reception of asylum seekers)

and the former European Return and Reintegration Network, launched in 2019 the Reintegration Assistance Tool (RIAT), a digital case management platform that aims to facilitate information sharing between national authorities and service providers in origin countries. Initially tested in France, Belgium, Germany, and Austria, RIAT has expanded quickly in the last years, and most Member States now use it.[35] Moreover, there are ambitious plans to develop this tool further so it can recommend the best programme for each returnee and, by 2024, include data visualisation software that Member States can use to quickly visualise data and obtain reports related to their return caseload.[36] Meanwhile, the International Organisation for Migration (IOM), one of the main entities providing reintegration services, also relies on their global case management system, the Migrant Management Operational System Application (MiMOSA), to exchange information about returnees between IOM offices in Europe and IOM missions implementing reintegration programmes in origin countries.

These digital case management tools have multiple benefits. First, having all case information in one platform instead of sending it via email allows faster and more efficient information exchange between actors in origin and destination countries. This, in turn, can improve returnees' reintegration prospects because service partners in origin countries can more easily receive relevant information about returnees (e.g., regarding immediate needs such as emergency accommodation, or a specific business plan) and deliver the assistance swiftly following return. These platforms can also provide better data protection because they can create different levels of access—for instance, IOM's MiMOSA has a higher level of protection for medical records, which only authorised personnel can access. Given the amount of data collected in these platforms, these tools can also facilitate better monitoring and evaluation of assisted voluntary return and reintegration programmes. However, these tools also bring challeng-

es, such as their reliance on internet connectivity, which is limited in some origin countries; the need to train new users (especially as RIAT expands into new Member States); and the sometimes poor quality of information entered into the systems. Moreover, the existing case management tools in the field are not yet interoperable, which can hinder monitoring and evaluation and data comparability.[37] Last but not least, any large case management system raises important questions of data protection and security.

With these considerations in mind, policymakers could explore how to tap into the potential of these digital tools to enhance reintegration outcomes and fulfil the pact's ambitions to improve the return system. This could involve, for instance, continuing to develop RIAT to improve the information available to both partners on the ground and counsellors in Europe, addressing gaps in the quality of information submitted to the system, and leveraging the tool to strengthen data collection and monitoring and evaluation, which could in turn help Member States improve reintegration programming.

C.   *Screening and language assessment tools to improve and scale up decision-making at the border*

After a period of slowed migration during the pandemic, pressure at EU external borders has grown steadily over the past two years. In 2022, the number of irregular crossings at EU external borders reached 330,000, one of the highest figures since 2016 (though it should be noted that border crossing numbers may count the same person multiple times).[38] Meanwhile, political instability and conflict in countries such as Afghanistan, Somalia, and Ukraine, coupled with increasingly common climate shocks, have increased forced displacement. Almost 1 million asylum applications were lodged in the

European Union in 2022, and pending asylum cases reached almost 600,000 that year, the highest number since early 2017.[39] Rising arrivals and asylum applications have put border management and asylum and reception systems under strain, leading to political crises and political shifts in countries such as Italy and the Netherlands, where migration has increasingly come into the spotlight.[40]

The flexibility and safeguarding of the human component in this procedure enables the Finnish Immigration Service to alter cases' allocation to specific tracks or reprioritise cases as needed.

The pre-entry screening and mandatory border procedures proposed in the new pact aim to make the system more efficient and better able to cope with pressure, but they will also have important operational impacts. Apart from the clustering of certain operations at border and other designated sites, this will lead to a substantial increase of decisions at the border because frontline staff will have to screen and channel new arrivals into the appropriate procedure (regular asylum procedure, border procedure, relocation, or return).[41] Rapid decision-making at the border, however, will be a hard goal to achieve. For instance, in the United States over the last year, many irregular arrivals subject to a removal procedure could not be returned or screened for credible fear (the first step in the asylum process) at the border because of insufficient capacity and have had to be admitted into U.S. territory with a notice to appear before an immigration court—hearings that can take place years later.[42] EU Member States' capacities at the border will be tested when the Asylum Procedures Regulation and the Screening Regulation enter into force, and authorities should be prepared for an increase in decisions made at or near the border and step up capacity accordingly.

Digital technologies could help facilitate this shift. For example, a growing number of countries are testing such tools' ability to support authorities with the allocation of incoming asylum claims to specific asylum tracks or procedures (e.g., based on whether they are subject to the Dublin Regulation, or whether an application is likely to obtain a positive or negative decision). The Finnish Immigration Service, for instance, has replaced manual prescreening of asylum claims with automated prescreening since 2016. Information collected when asylum seekers register their claims is entered into the online case management system for immigration affairs. The system automatically checks the cases against different databases (such as the European Union's fingerprint database, Eurodac) and generates specific tags based on the data entered, such as age, nationality, or status as a member of a family travelling together. The system then uses these checks and tags to automatically channel cases into different work 'baskets', some of which require prioritisation.[43] The online case management system also allows case officers to manually add new tags to case files at any stage of the asylum procedure, including on aspects the system does not capture automatically, such as protection grounds or identified vulnerabilities. The flexibility and safeguarding of the human component in this procedure enables the Finnish Immigration Service to alter cases' allocation to specific tracks or reprioritise cases as needed. The agency reports that the case management system has improved the efficiency of the asylum procedure.[44] Similarly, the United Kingdom is investing in a case prioritisation and allocation tool that automatically assigns cases to specific teams based on the data entered during the registration of an asylum claim and that shortens procedural steps for straightforward cases.[45] Although still rare in asylum systems, automatic categorisation of applications has been used more widely for visa processing, including in countries such as the United Kingdom and Canada. For example, Canada uses a machine learning tool to automatically triage visa applications into different

categories based on their complexity, and the most straightforward ones are processed automatically as well.[46]

In the context of the new pact, authorities would need to explore if a similar tool could be developed to enable faster screening of arrivals at EU external borders, while taking into account that semi- or fully automated decision-making also carries important risks. For instance, even though technology is often perceived as neutral, human biases can become engrained in algorithms, which can then lead to discriminatory outcomes against certain (groups of) migrants.[47] The opaqueness surrounding the use of digital tools in migration systems and the perception of neutrality can leave these biases unchecked without careful testing and monitoring. If national or EU authorities envisage adopting a tool of this kind to support screening, another important question is whether such a system would take a 'human-in-the-loop' approach (with trained individuals vetting the triaging decisions) or whether, for instance, automatic screening could be done for the most straightforward cases while leaving complex cases for asylum officers to review. Policymakers would also need to consider whether such a screening tool could be piloted and by whom, as well as how to introduce quality review mechanisms to test the tool and embed flexibility to allow asylum officers to modify initial allocations and reroute cases based on needs.[48]

Apart from screening, digital technologies could also play a larger role in improving the identification of asylum seekers and other migrants at the border. Difficulty in establishing identity is a common problem in EU migration and asylum systems when third-country nationals arrive without documents.[49] This can slow asylum decisions, negatively affecting both asylum systems and asylum seekers who live in limbo while awaiting a decision on their cases. It can also hinder the return procedure. National authorities already use some EU digital tools (such as Euro-

dac, the Visa Information System, and the Schengen Information System) to collect the biometric information of new arrivals and facilitate identification and information exchange among Member States.[50] But identity can still be difficult to establish in the case of asylum seekers or migrants arriving irregularly who are not in existing databases and have no reliable identification documents. That is why, in the last five years, several Member States have invested in language assessment for the determination of origin (LADO) tools, which aim to assist authorities in cases where an individual lacks reliable identity documents and the police and/or asylum officers have doubts about the person's proclaimed country of origin or ethnicity.[51] As part of the procedure, officers usually ask asylum applicants to describe a picture or discuss topics not related to their asylum case, and that speech sample is then analysed. In many countries, professional linguists analyse the samples, but in Germany, speech samples are automatically analysed using language recognition software.[52] By providing officers with supplementary evidence, language analysis and dialect recognition tools can make it easier to make a decision on the application.

However, the use of these linguistic tools is not without risks: the Dialect Identification Assistance System in Germany, for example, has a 70–85 per cent recognition rate for different Arabic, Persian, and Pashto dialects.[53] Critics have also voiced concerns about the reliability of these tools because the speech of multilingual asylum applicants or those who have been on the move for a long time may sound different, and dialects in origin countries often change over time. If case officers are not aware of the tools' margins of error and other limitations, they may give too much weight to the evidence these systems produce, resulting in incorrect outcomes.[54] Therefore, if these tools are to be used at the national or EU level to facilitate identification at the border, authorities will need to test them carefully and build sufficient safeguards, including training staff so they can vet

the tool's results and give those results the correct weight in the decision-making process.

3 Towards a Responsible Digitalisation of EU Migration and Asylum Systems

As pressure grows on European migration and asylum systems, all eyes are on the New Pact on Migration and Asylum. If it reaches the finish line, its success or failure will depend largely on the Member States' ability to scale up (and down) resources quickly at specific locations—a tall order in a context where EU migration and asylum system resources are already stretched thin. The use of new technologies holds potential to ease the pact's implementation and increase its chances of success. Digital technologies could improve information sharing, support decision-making, make processes more efficient, and improve service delivery, making it easier for Member States to swiftly mobilise resources and step up capacity. Yet digital tools are not a panacea: they can also lead to new potential harms, such as risks to asylum seekers' privacy and protection, or discriminatory outcomes if human biases are engrained in algorithms. It also brings into relief the potential role of the private sector and other tech providers in the use of AI and other digital technologies, given authorities' often-limited capacity to develop these tools themselves.

European authorities need to adopt a deliberate and conscious approach to mobilise new technologies while mitigating the associated risks. This vision could increase the pact's chances of success and, more broadly, steer the growing digitalisation of EU

migration and asylum systems. The following recommendations could guide authorities in this process:

▶ **Developing appropriate governance frameworks.** As new technologies rapidly enter the migration field, it is crucial to develop appropriate governance frameworks to regulate issues such as data protection, oversight or accountability, and access to recourse in the case of potential discriminatory outcomes or wrongful decisions caused by new technologies, particularly as authorities increasingly rely on the private sector to develop digital solutions.[55] The General Data Protection Regulation and proposed AI Act already provide a first step in this direction. The AI Act uses a risk-based approach for AI technologies, with higher levels of risk requiring stronger safeguards. It categorises the use of AI in migration and asylum systems as high risk, which will ensure that AI-based technologies used in these systems are subject to risk assessment, that results can be traced, and that there is human oversight to minimise risk, among other things.[56] Yet governance frameworks are still needed to regulate other kinds of technology and to ensure sufficient safeguards and monitoring.

▶ **Creating a strategy to guide digitalisation efforts.** Technological developments have the potential to affect all areas of migration and asylum systems. But with limited resources, policymakers will need to choose which to prioritise. Digitalisation strategies can help authorities map priority actions or identify areas in which digital tools can be most useful or where digitalisation carries less risk. Moreover, these strategies can help authorities carefully craft a vision and outline

underlying principles (such as protection of personal data or interoperability with other relevant tools) that should underpin all digitalisation efforts. For example, countries such as Germany and the United Kingdom have developed digital transformation strategies for their migration departments,[57] and the European Union Agency for Asylum is about to adopt such a strategy.

► **Nurturing trusted partnerships between migration and digital experts and fostering co-creation.** Public authorities in charge of migration and asylum policies often lack technical expertise in new technologies. This creates a window of opportunity for private companies that might have other goals in mind, such as security-focused defence companies, to guide digitalisation efforts.[58] It can also lead to overreliance on tech companies to generate new solutions. To bridge this gap, authorities should foster trusted partnerships between migration and digital experts—for instance, through dedicated teams or working groups that promote regular interactions. In addition, involving end users and organisations working on the ground can help ensure that tools are adequate to meet existing needs. For example, the United Kingdom's Digital, Data, and Technology unit at the Home Office includes the CoLab team of designers, researchers, and technologists who design digital solutions that bring users together with policy, operations, and technology experts.[59] Policymakers could also tap into existing living labs, innovation platforms sometimes used in other policy areas that bring together different actors such as private companies, public institutions, academia, and citizens to foster the co-creation of innovative solutions.[60]

► **Earmarking sufficient funding to test, develop, and adapt new digital tools.** Digital technologies hold the potential to address capacity crunches by helping processes become faster and more efficient. But they also require significant investments, including in digital infrastructure, technical experts, and training caseworkers.[61] Piloting and evaluating new tools before rollout, and monitoring and evaluation for tools under use, also require sufficient, devoted funding.

► **Striking the right balance between standardisation and flexibility.** Digital technologies developed or rolled out at the EU level will need to work with essential building blocks that allow a certain degree of standardisation across all Member States while accounting for the different legal and operational structures in each country. In addition, once developed, policymakers should consider how to ensure that these tools can be tweaked and adapted based on needs and users' experience. For instance, the Finnish Immigration Service's prescreening tool is enabled by a 'rule configuration engine' that allows staff to reconfigure the system's rules based on changing needs,[62] which also reduces the agency's reliance on tech providers for this kind of update.

► **Piloting digital tools and conducting risks assessments.** Digital tools can exacerbate the vulnerabilities of asylum seekers and expose them to new harms, such as breaches in personal data or discriminatory decisions that can erode their right to protection. Because the risks are high, it is crucial that authorities carefully pilot new tools, conduct risk assessments, and weigh the tools' benefits with potential risks. This could be done by developing research programmes to pilot new tools in different scenarios and evaluate

their impact. If the evaluation uncovers relevant risks or shows that the tool does not deliver the expected results, developers could correct these issues before rolling the tool out, or if the risks are too high, authorities could decide to stop its development altogether. Thus, developing new digital tools will not be a quick process—it will require months or more to develop, test, and review new tools before they are ready for rollout.

► **Embedding monitoring and evaluation mechanisms into digitalised operations to regularly measure impact, detect risks, and monitor user experience.** Authorities should regularly monitor existing digital tools to measure their impact on the ground, detect any emerging risks or flaws, and track user experience (e.g., for migration staff or refugees). Monitoring could be performed by a tool's developers, who know its ins and outs, or third-party monitors and academic researchers to ensure greater independence. Importantly, monitoring exercises will require authorities to determine which are the markers of failure or success for each tool.

► **Investing in the digital savviness of the actors using new tools, including awareness of those tools' limitations.** For example, caseworkers using decision-making support tools (such as matching algorithms or technologies to facilitate screening at the border) should be aware that these tools can entrench discriminatory outcomes or produce inaccurate decisions, with stark implications for asylum seekers and refugees. Most times, a caseworker vets the outputs of these decision-making support tools (the 'human-in-the-loop' model), but caseworkers may nonetheless end up relying too much on the algorithm's recommendations. To guarantee adequate human oversight, authorities should ensure that staff working with these types of tools are aware of their limitations so that they can vet their results carefully.

The potential benefits of new technologies for EU migration and asylum systems are numerous, but so are the risks. For the benefits to outweigh those risks, policymakers must carefully steer digitalisation efforts. The New Pact on Migration and Asylum offers a golden opportunity to create a more strategic vision for this process, now already well underway in many corners of the migration field, and to ensure responsible use of digital technologies going forward. The alternative could harm not only the migrants and refugees with whom these technologies are used but also the credibility of European asylum and migration systems.

The New Pact on Migration and Asylum offers a golden opportunity to create a more strategic vision for this process ... and to ensure responsible use of digital technologies going forward.

Endnotes

1   European Council, 'Migration Policy: Council Reaches Agreement on Key Asylum and Migration Laws' (press release, 8 June 2023).

2   The requirement of an implementation plan was codified in article 74 of the Asylum and Migration Management Regulation and in article 59(a) of the Asylum Procedures Regulation.

3   For instance, a 2020 implementation assessment conducted by the European Parliament on the current Dublin Regulation (in force since 2013) found that because of implementation gaps, such as lengthy procedures, 'the very purpose of the Regulation… is in practice defeated'. See European Parliamentary Research Service (EPRS), *Dublin Regulation on International Protection Applications. European Implementation Assessment* (Brussels: EPRS, 2020), 1. See also Elena Jurado et al., *Evaluation of the Implementation of the Dublin III Regulation: Final Report* (Brussels: European Commission, 2016).

4   For an overview of the use of digital technologies in European migration and asylum systems, see Derya Ozkul, *Automating Immigration and Asylum: The Uses of New Technologies in Migration and Asylum Governance in Europe* (Oxford: Refugee Studies Centre, University of Oxford, 2023); European Migration Network (EMN), 'The Use of Digitalisation and Artificial Intelligence in Migration Management' (EMN-OECD Inform, Brussels, February 2022); Hanne Beirens, *Rebooting the Asylum System? The Role of Digital Tools in International Protection* (Washington, DC: Migration Policy Institute, 2022).

5   According to Eurostat, there were 3.8 million displaced Ukrainians benefiting from temporary protection in the European Union as of December 2022. In August 2023, the number had increased to 4.1 million. See Eurostat, 'Beneficiaries of Temporary Protection at the End of the Month by Citizenship, Age and Sex – Monthly Data', updated 1 December 2023.

6   Lauren Burke, Catherine Nzuki, Erol Yayboke, and Anastasia Strouboulis, *Ukrainian Refugees: Forced Displacement Response Goes Fully Digital* (Washington, DC: Centre for Strategic and International Studies, 2022).

7   Germany's Federal Office for Migration and Refugees, for instance, developed the Digitisation Agenda 2020 and 2022, explaining how the agency has integrated digital tools into its operations and outlining future steps. See German Federal Office for Migration and Refugees, *Digitisation Agenda 2022. Digital Initiatives in the Federal Office for Migration and Refugees* (Nuremberg: German Federal Office for Migration and Refugees, 2022).

8   This pre-entry screening, which will be conducted mostly at the border, will include a preliminary health and vulnerability check, identification and security check, the registration of biometric data, and referral to the appropriate procedure. European Commission, 'Proposal for a Regulation of the European Parliament and of the Council Introducing a Screening of Third Country Nationals at the External Borders and Amending Regulations (EC) No 767/2008, (EU) 2017/2226, (EU) 2018/1240 and (EU) 2019/817' (COM [2020] 612 final, 23 September 2020).

9   Council of the European Union, 'Amended Proposal for a Regulation of the European Parliament and of the Council Establishing a Common Procedure for International Protection in the Union and Repealing Directive 2013/32/EU' (2016/0224 [COD], 13 June 2023).

10   For instance, as per the AnkER centres established in 2016 in Germany and more proposals to that effect by the German government in September 2023. See German Federal Office for Migration and Refugees, 'Arrival Centres and AnkER Facilities', updated 18 September 2023.

11   In case the number of pledges is not fulfilled, the agreement also envisages a 'responsibility offset' mechanism, by which the contributing Member States would take responsibility for examining the asylum claim made by persons who would have been relocated. The scheme would become mandatory if relocation pledges fall short of 60 per cent of 30,000 relocations or the needs set by the Council. For more information, see Council of the European Union, 'Migration Policy'.

12   Craig Damian Smith, with Emma Ugolini, *Why Matching Matters: Improving Outcomes in Refugee Sponsorship and Complementary Pathways* (Brussels: Migration Policy Institute Europe, 2023).

13   Observatory of Public Sector Innovation, 'Annie MOORE (Matching for Outcome Optimization and Refugee Empowerment)', accessed 28 August 2023; University of Oxford, 'Boosting Life Chances for Resettled Refugees', University of Oxford, 28 August 2023.

14   Kirk Bansak et al., 'Improving Refugee Integration through Data-Driven Algorithmic Assignment', *Science* 359, no. 6373 (2018): 325–29.

15   Pairity's preference-matching algorithm uses biographical and preference-ranking data from beneficiaries and data provided by cities, including on available services, labour markets, diaspora organisations, and availability in refugee reception centres. The algorithm makes the best possible matches given cities' resources and the beneficiaries' preferences (for example, whether they assign more importance to work opportunities in given sectors, higher education opportunities, schools for children, or medical care). Authors' conversation Craig Damian Smith, Co-Founder, Executive Director, and Principal Investigator, Pairity, September 2023.

16   Ozkul, *Automating Immigration and Asylum*.

17   Ozkul, *Automating Immigration and Asylum*.

18   Margie Cheesman, 'Digital Wallets and Migration Policy: A Critical Intersection (fact sheet, German Marshall Fund of the United States, Washington, DC, 2022).

19   See, for instance, Nannie Sköld, 'UNHCR Strengthens Efforts on Digital Identity for Refugees with Estonian Support', United Nations High Commissioner for Refugees, 6 December 2021.

20   Cheesman, 'Digital Wallets and Migration Policy'.

21   This has often been done through the use of distributed ledger technology such as blockchain or federated systems with varying degrees of centralisation.

22   Burke, Nzuki, Yayboke, and Strouboulis, *Ukrainian Refugees*.

23   Alexander Iosad and Oliver Large, 'State of Resilience: How Ukraine's Digital Government Is Supporting Its Citizens during the War', Tony Blair Institute for Global Change, 18 March 2022.

24   Cheesman, 'Digital Wallets and Migration Policy'.

25   Jessica Bither and Astrid Ziebarth, *AI, Digital Identities, Biometrics, Blockchain: A Primer on the Use of Technology in Migration Management* (Washington, DC: German Marshall Fund of the United States, 2020).

26   Cheesman, 'Digital Wallets and Migration Policy'.

27   Cheesman, 'Digital Wallets and Migration Policy'; Wojciech Wiewiórowski, 'Where Are We Heading with Digital Identities?' (remarks at the Cybersecurity Standardisation Conference 2023, Brussels, 7 February 2023).

28   Cheesman, 'Digital Wallets and Migration Policy'.

29   European Commission, 'Digital Identity for All Europeans: A Personal Digital Wallet for EU Citizens and Residents', accessed 29 August 2023.

30   Jessica Bither, 'The Emerging Digital Nervous System', Mixed Migration Centre, 6 December 2022.

31   In the last decade, the return rate has tended to be about one-third of those ordered to leave. See Maria Díaz Crego and Eulalia Clarós, 'Data on Return of Irregular Migrants' (infographic, European Parliamentary Research Service, 2021); European Commission, 'Statistics on Migration to Europe', accessed 29 August 2023.

32   Council of the European Union, 'Amended Proposal…Establishing a Common Procedure for International Protection in the Union and Repealing Directive 2013/32/EU'.

33   European Commission, 'New Pact on Migration and Asylum: Questions and Answers', updated 23 September 2020.

34   Lucía Salgado, Radu-Mihai Triculescu, Camille Le Coz, and Hanne Beirens, *Putting Migrant Reintegration Programmes to the Test: A Road Map to a Monitoring System* (Brussels: Migration Policy Institute Europe, 2022).

35   Lucía Salgado, *Leveraging Predeparture Counselling to Support Returning Migrants' Sustainable Reintegration* (Brussels, Migration Policy Institute Europe, 2022).

36   Salgado, *Leveraging Predeparture Counselling*.

37   Salgado, *Leveraging Predeparture Counselling*.

38   Frontex, 'EU's External Borders in 2022: Number of Irregular Border Crossings Highest since 2016' (news release, 13 January 2023).

39   European Union Agency for Asylum (EUAA), *Asylum Report 2023: Annual Report on the Situation of Asylum in the European Union, Executive Summary* (Luxembourg: Publications Office of the European Union, 2023).

40   France 24, 'Dutch Ruling Coalition Collapses over Migration Row, PM Resigns', France 24, 7 July 2023.

41   European Commission, 'Proposal for a Regulation of the European Parliament and of the Council Introducing a Screening of Third Country Nationals at the External Borders and amending Regulations (EC) No 767/2008, (EU) 2017/2226, (EU) 2018/1240 and (EU) 2019/817' (COM [2020] 612 final), Article 14.

42   Muzaffar Chishti and Kathleen Bush-Joseph, 'U.S. Border Asylum Policy Enters New Territory Post-Title 42', *Migration Information Source*, 25 May 2023.

43   Johanna Väänänen and Kielo Brewis, 'Data Management in the Asylum Procedure: National Report of Finland' (EMN Study 1/2020, EMN, Brussels, 2020).

44   Authors' conversation with Susanna Laine, Chief Specialist, and Elisa Ockenström, Senior Adviser, Finnish Immigration Service, 11 September 2023.

45   David Neal, *An Inspection of Asylum Casework (August 2020–May 2021)* (London: Independent Chief Inspector of Borders and Immigration, 2021); National Audit Office, *The Asylum and Protection Transformation Programme* (London: National Audit Office, 2023); authors' conversation with a representative from the UK Home Office, 9 October 2023.

46   Bither, 'The Emerging Digital Nervous System'.

47   Jessica Bither and Astrid Ziebarth, *Automating Decision-Making in Migration Policy: A Navigation Guide* (Washington, DC: German Marshall Fund of the United States, 2021); Madeleine Forster, 'Refugee Protection in the Artificial Intelligence Era: A Test Case for Rights' (research paper, Royal Institute of International Affairs, London, September 2022).

48   Feedback from the Swedish authorities (who introduced a multitrack asylum system following the many arrivals in 2015–16) emphasised that the system needs to be flexible enough to allow switching tracks for asylum cases where warranted. See Hanne Beirens, *Chasing Efficiency: Can Operational Changes Fix European Asylum Systems?* (Brussels: Migration Policy Institute Europe, 2020).

49   EMN, *EMN Synthesis Report for the EMN Focussed Study 2017: Challenges and Practices for Establishing the Identity of Third-Country Nationals in Migration Procedures* (Brussels: EMN, 2017).

50   The Eurodac database, the reform of which is part of the negotiations of the new pact, collects fingerprints of asylum seekers in the European Union. The Visa Information System allows authorities in the European Union to exchange information on visa data, and the Schengen Information System allows allows authorities in the European Union (such as border guards and police authorities) to exchange information on persons who may have been involved in a serious crime. For more information, see EMN, *EMN Synthesis Report*.

51   These tools include those that provide a preliminary assessment to confirm the country of origin or suggest further analysis, and those that provide a full language analysis. See EUAA, *Study on Language Assessment for Determination of Origin of Applicants for International Protection, Executive Summary* (Luxembourg: Publications Office of the European Union, 2022).

52   EMN, 'The Use of Digitalisation and Artificial Intelligence'; EUAA, *Study on Language Assessment*.

53   Ozkul, *Automating Immigration and Asylum*.

54   Ozkul, *Automating Immigration and Asylum*.

55   Ozkul, *Automating Immigration and Asylum*.

56   European Parliament, 'EU AI Act: First Regulation on Artificial Intelligence', European Parliament, 14 June 2023.

57   See, for instance, UK Home Office, *Home Office DDaT Strategy 2024* (London: UK Home Office, 2021); German Federal Office for Migration and Refugees, *Digitisation Agenda 2022*.

58   Authors' conversation with Emre Eren Korkmaz, Research Affiliate at the Centre on Migration, Policy, and Society (COMPAS), University of Oxford, 28 March 2023.

59   Rob Thompson, 'Digital Transformation at the Home Office', UK Home Office Digital, Data, and Technology, 12 July 2023.

60   European Network of Living Labs (ENoLL), 'What Is ENoLL?', accessed 13 October 2023; Mila Gascó, 'Living Labs: Implementing Open Innovation in the Public Sector', *Government Information Quarterly* 34 no. 1 (2017): 90–8.

61   For instance, Germany has spent about 4 million euros since 2017 in purchasing and adapting its dialect recognition software. See Ozkul, *Automating Immigration and Asylum*.

62   Authors' conversation with Susanna Laine and Elisa Ockenström.

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Migration Policy Institute Europe is a nonprofit, independent research institute that aims to provide a better understanding of migration in Europe and thus promote effective policymaking. MPI Europe provides authoritative research and practical policy design to governmental and nongovernmental stakeholders who seek more effective management of immigration, immigrant integration, and asylum systems as well as successful outcomes for newcomers, families of immigrant background, and receiving communities throughout Europe.

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