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Challenges and opportunities in rapid situational awareness of Ukrainian displacement to the European Union: Some methodological insights

**Petros Gkotsis, Sara Henriques, Evangelos Koukournesis, Elena Leleki,
Constantinos Melachrinou, Maria Papaioannou and Teddy Wilkin**

European Union Agency for Asylum

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Publisher: International Organization for Migration
17 route des Morillons
P.O. Box 17
1211 Geneva 19
Switzerland
Tel.: +41 22 717 9111
Fax: +41 22 798 6150
Email: hq@iom.int
Website: www.iom.int

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Introduction

Since the Russian Federation's invasion of Ukraine on 24 February 2022, there have been 11.3 million entries from Ukraine into the four neighbouring European Union Member States, Poland, Slovakia, Hungary and Romania (EUAA, 2022a, 2022b; UNHCR, 2022). At the same time, IOM has been observing significant returns to and within Ukraine, either back to areas not affected by the war, to conflict-affected areas or to recently liberated territories. Exact numbers are hard to come by, but estimates suggest that by the end of October 2022, some 16 per cent of the population has been internally displaced in Ukraine (IOM, 2022), in addition to the roughly 7.8 million refugees that have been recorded across Europe (UNHCR, 2022).¹ Most travelled into Western Ukraine and onwards into the European Union, to where Ukrainians have been able to travel freely since they were granted visa-free status in the European Union (Regulation 2018/1806). Recognizing the scale of the crisis, on 4 March 2022 the Council of the European Union issued an Implementing Decision (2022/382) activating the Temporary Protection Directive (2001/55/EC) to offer quick and effective assistance to people fleeing Ukraine and to provide a clear legal framework for convergence in operational responses and relevant procedures.

Mostly in neighbouring Poland, but also elsewhere the European Union's borderless Schengen Area, by the beginning of November 2022, some 4.7 million newly arrived Ukrainians had registered for temporary protection (EUAA, 2022b). Inevitably, asylum reception centres, schools and other services were stretched to their limits, prompting the leaders of many European Union Member States² to ask the international community for support in their efforts in dealing with the crisis.

The European Union Agency for Asylum (EUAA) is an agency of the European Union mandated (by Regulation 2021/2303) to support Member States in applying the package of European Union laws that governs asylum and reception conditions, known as the Common European Asylum System (CEAS). In response to the crisis, the EUAA promptly launched new operations to deploy experts to several of the most affected European Union Member States, and further developed existing knowledge tools in response to information needs.

This paper describes four research projects that seek to understand displacement from Ukraine to the European Union, and outlines their main results, the challenges they had to overcome and the lessons learned for future waves of similar research.

Project 1. Emergency measures adopted by Member States

The EUAA is mandated to harmonize asylum practices in all European Union Member States, such that all applications for asylum (or registrations for temporary protection) are processed in the same way and under the same conditions, no matter where they take place. In line with this aim, the EUAA partners with European Union Member States to gather and analyse up-to-date information on the organization of asylum and reception systems across the European Union, as well as national policies, practices, legislation and jurisprudence in order to highlight policy discrepancies in support of convergence with the CEAS.

During the first two months of displacement from Ukraine, the EUAA published six situational updates (EUAA, 2022c) on emergency measures adopted by Member States to manage the influx of displaced persons from Ukraine and related challenges within the asylum and reception systems. In addition, an analytical report on the initial crisis responses and the implementation of the temporary protection framework was published on 6 July 2022 (EUAA, 2022d).

¹ Includes countries outside of the European Union, such as the Russian Federation (2.9 million).

² For the purpose of this paper, the term European Union Member States includes Norway and Switzerland.

This body of work shows how Member States implemented initial response measures to manage the sudden inflows of people fleeing Ukraine. Most immediately activated their existing crisis mechanisms to allocate resources in a flexible manner, including the rapid deployment of staff to assist with reception and entry procedures at the borders, the use of emergency funding for urgent support measures, and coordination between stakeholders to ensure the availability of housing. In some countries, the processing of asylum applications by Ukrainian nationals was suspended, Ukraine was removed from national lists of safe countries of origin, and Dublin transfers were suspended to border countries affected by the wave of displaced persons from Ukraine.

New reception and emergency structures were created as temporary shelters and rest areas for people newly arrived from Ukraine. One-stop service points facilitated the short stay of arriving people before their referral to accommodation. Private hosts and households across Europe provided housing for new arrivals, increasing the general reception capacity in countries of destination and giving authorities time to adapt.

To ensure access to rights, European Union countries boosted the provision of services facilitating access to the labour market, medical care (including psychological support), social welfare services and means of subsistence, education and transportation. Some procedures for this group were simplified, such as those regarding importing pets, and those recognizing driving licences, education credentials and work qualifications.

As the war approaches the end of its first year, challenges for the Member States continue and are exacerbated by record numbers of asylum applications from other nationalities (EUAA, 2022e).

Project 2. New indicator on registrations for temporary protection

Since 2011, the EUAA has been working with Member States to develop a set of harmonized statistical indicators that depict the practical functioning of the CEAS. The system, known as the Early Warning and Preparedness System (EPS), currently comprises more than 20 comparable indicators, ranging from the number of applications lodged, withdrawn, or pending, through decisions issued or appealed against, to the number of persons in reception centres across the European Union. These indicators are designed and overseen by a dedicated network of Member State experts, and they enable the EUAA to provide national authorities and the European Commission with European Union situational awareness, including in situations of sudden influxes of third-country nationals that may exert disproportionate pressure on national asylum and reception systems (for example, see EUAA, 2022f).

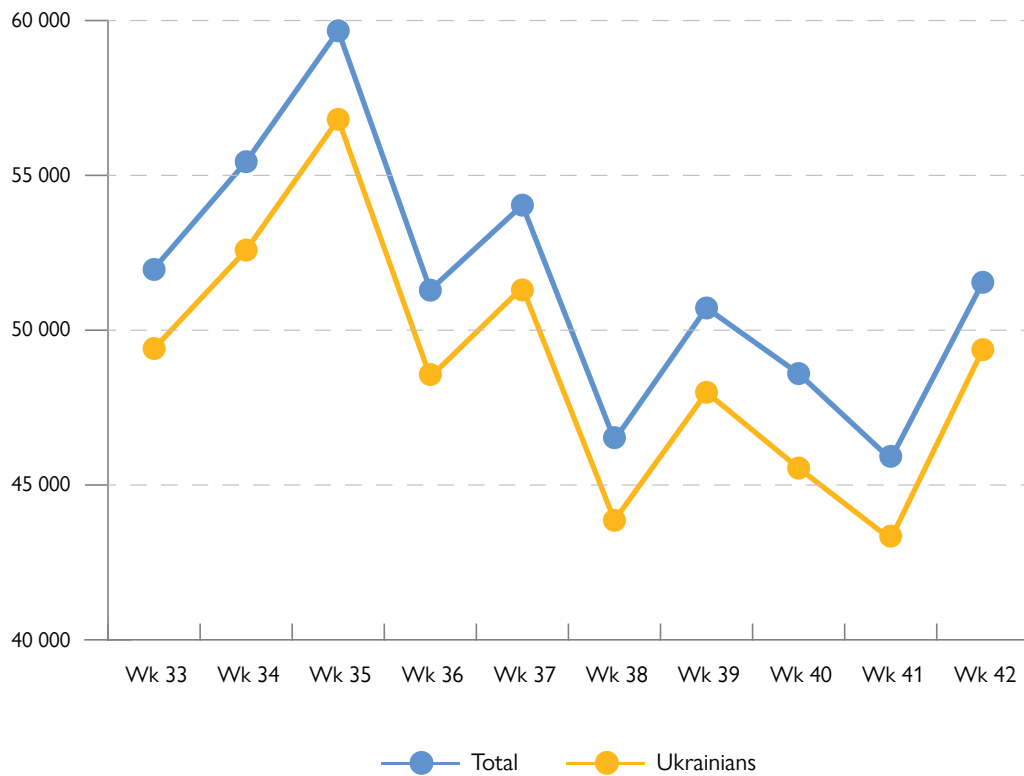
Typically, new EPS indicators are developed rather meticulously over extended periods, but crisis situations call for urgent responses and so, following the Russian invasion of Ukraine, the EUAA was called upon to deliver extremely rapid situational awareness regarding the mass displacement of people from Ukraine with urgent protection needs. In response, on 8 March 2022 (four days after the European Union Council decided to implement the Temporary Protection Directive) the EUAA launched a new emergency information exchange enabling Member States to share standardized information registrations for temporary protection.

The registrations themselves were implemented rapidly and effectively across Member States. However, the speed of deployment plus the fact that registrations were in many cases supported by several different national authorities, meant that data collection was especially challenging to put in place, so some Member States were not immediately able to share comparable data.

Despite the challenges, completeness gradually increased to the extent that useful analyses could be performed three weeks after the launch, and almost full European Union situational awareness was achieved after seven weeks.

Based on this new indicator, current estimates suggest that from the beginning of the invasion to 23 October 2022, almost 4.7 million registrations for temporary protection of persons fleeing Ukraine took place in the Member States plus Norway and Switzerland (EUAA, 2022b).³ Trend analysis for week 42 shows that there were some 51,546 registrations for temporary protection (Figure 1), 95 per cent of which were from Ukrainian nationals⁴ (other nationalities – Russian, Moroccan and Azerbaijani – were rare), and 60 per cent of which were from women⁵ (EUAA, 2022a).

Figure 1. Weekly registrations for temporary protection in the European Union, 2022



Source: EUAA, 2022a.

Note: Total for all nationalities indicated by the blue line; total for Ukrainians indicated by the yellow line.

³ Data for some countries are not fully available and may include duplicated registrations within or across countries.

⁴ Note that 3 per cent of all registrations were reported without the citizenship breakdown.

⁵ Note that 3 per cent of all registrations were reported without the sex breakdown.

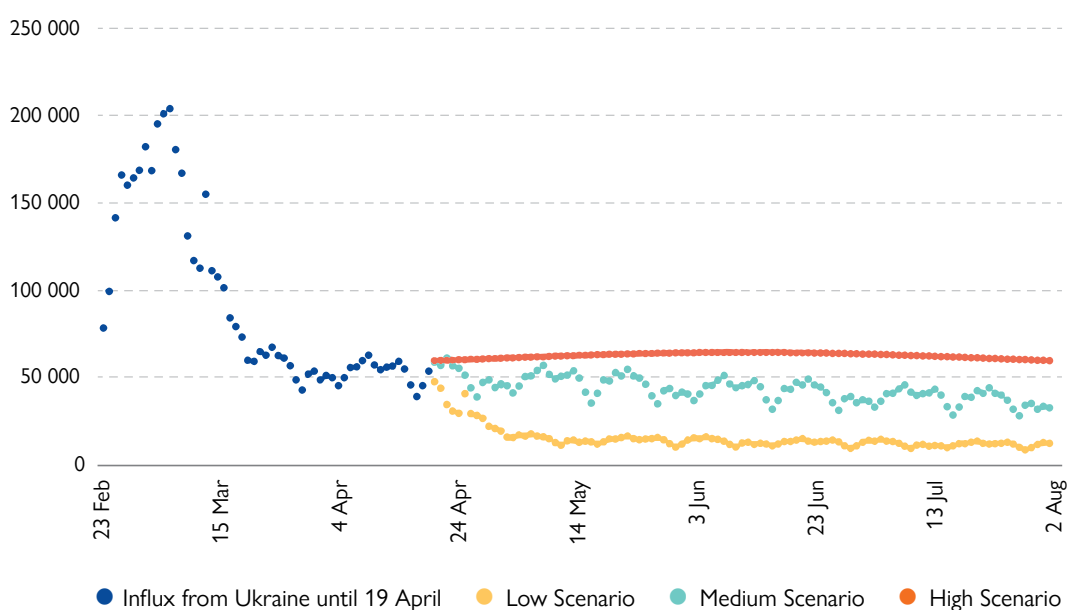
Project 3. Joint forecasting

Major displacement events are unique, their drivers are often context dependent “shocks” to the system unlikely to be replicated elsewhere and with little or no persistence over time (EASO et al., 2017). For this reason, the number of people who have been displaced and who are in search of international protection is notoriously difficult both to measure with data and to predict with any reliability. Nonetheless, forecasting displacement is important if countries of destination are to be prepared to receive and rapidly accommodate persons seeking protection.

Despite these challenges, there is a growing body of work exploring methods to produce scenarios and short-term forecasts of migration (Sohst et al., 2020) and displacement (Muttarak, 2021, and references therein). Although not a research institution specifically, EUAA has also developed forecasting methodologies to support the short-term preparedness of Member States (Albertinelli et al., 2020; Melachrinou et al., 2020; Carammia et al., 2022; Napierala et al., 2022).

Forecasts of complex systems tend to benefit from collaborative approaches that tweak results according to local knowledge, while also liberating isolated pockets of expertise. With this in mind, a month after the Russian Federation's invasion of Ukraine, the EUAA called a meeting of its Advisory Group on Early Warning and Forecasting, at which twenty experts from fifteen Member States agreed to produce a joint forecast of Ukrainian displacement to the European Union. Experts from Austria, Belgium, Czechia, the Netherlands, Sweden, Switzerland and Poland contributed their own forecasts, while the EUAA produced its own forecast plus a conflict analysis using data from the Armed Conflict Location and Event Data Project (ACLED; Raleigh et al., 2010). The end result was a high, medium and low forecast for displacements from Ukraine to neighbouring Member States over the next three months (Figure 2). The high scenario assumes that the 7.7 million internally displaced Ukrainians (at the time) would be further displaced across international borders, with 85 per cent (based on previous observations) coming to the European Union. This was achieved by fitting a gaussian distribution on top of the average 55,000 daily crossings taking place in April. The middle scenario maintains mean values of border crossing and replicates the same pattern of variation around the mean, while the lower scenario assumes that daily crossings continue to decline at the same rate as in March to a new and reduced low level of 12,000 per day.

Figure 2. European Union Agency for Asylum scenarios on the daily influx of Ukrainian citizens to neighbouring countries



Source: UNHCR border crossings (blue) and EUAA forecasts (others).

A major challenge was to forecast not only the total number of arrivals (as in Figure 2) and registrations in the European Union as a whole, but also the expected distribution of displaced people from Ukraine among individual Member States. This analysis was particularly challenging because at the beginning of the crisis some Member States were not yet able to share baseline data on the number of registrations they were receiving (see Project 2). Linear regression models (LMM) were used to understand historical trends in 2014 when Ukrainians, displaced by the Russian Federation's illegal annexation of Crimea, applied for asylum mostly in Member States with larger Ukrainian diaspora (Eurostat, n.d.) or in Member States contiguous with Ukraine.⁶ Assuming that migration drivers would remain constant between 2014 and 2022, we then applied these independent variables to the joint forecast of total numbers of displaced Ukrainians, thereby generating a proportional forecast for registrations in each Member State.

“Black swan” events or tipping points inevitably impact the efficacy of forecasts, and so in this joint analysis we listed possible such events: the fall of Kyiv; the exile of the Ukrainian Government; long-term humanitarian corridors; the withdrawal of the United Nations (UNHCR, IOM) from Western Ukraine; the military involvement of other countries; cyberattacks on critical infrastructure; and major political upheaval in the Russian Federation.

As it happens, infrastructure has indeed become the new target for Russian forces, but registrations for temporary protection remained much reduced from April onwards, implying far fewer new arrivals from Ukraine (alongside sustained back-and-forth movements between the European Union and Ukraine), and so at the present time, it is the lower of the three forecasts that has come to fruition.

Project 4. Online survey of displaced Ukrainians

Migrant and refugee populations are often highly mobile and hard to reach, and so conducting surveys of affected populations can be extremely challenging. Online surveys have become more common, not least because increasing numbers of people on the move now have access to smart phones (Kaufman, 2020), but also because online surveys can be cost effective (Vecino-Ortiz et al., 2021), highly scalable (Duffy et al., 2005), longitudinal (Hiskey and Troop, 2002), and offer powerful possibilities to deepen near-real-time situational awareness.

Surveys of Arriving Migrants from Ukraine (SAM-UKR) is an EUAA online survey project, conceived in March 2022 and launched a couple of weeks later, on 11 April, in collaboration with the OECD. The project invites persons in Member States who were recently displaced from Ukraine to complete an anonymous online survey, using their mobile phones. Its aim is to generate situational awareness in support of policy and operational responses and preparedness, thereby ensuring that recently arrived people from Ukraine are availed of their rights quickly and efficiently.

⁶ We also tested for GDP per capita in each Member State, but this was not a significant predictor of the distribution of Ukrainian asylum applications in 2014.

Figure 3. Posters used by Member States to invite displaced Ukrainians to participate in the survey



Source: EUAA, provided by the authors.

The survey is hosted on Limesurvey,⁷ and poses questions in four sections: demographics (age, gender, education), country of origin and journey (oblast, internal displacements, mode of transport, travelling companions), country of destination (access to services), and future aspirations (onward movements, return home). Questions were selected based on earlier work with Member States in preparation for a face-to-face survey project that did not materialize because of COVID-19 (EASO, 2016; EASO et al., 2017) and were refined by senior experts in the EUAA and the OECD to reflect the Ukrainian situation.

Several national asylum authorities promoted the survey at the time of registration for temporary protection, plus social media campaigns were launched on Facebook, Twitter and Instagram and posts were shared on Facebook groups used by persons displaced from Ukraine. Finally, the EUAA currently deploys around 1,000 asylum experts to 12 Member States to support with tasks such as processing asylum applications and registrations for temporary protection, and so work was undertaken to embed the survey in some of their operational workflows. The questionnaire, along with promotional materials (flyers and posters) were translated, reviewed, and proofread by native speakers (Figure 3).

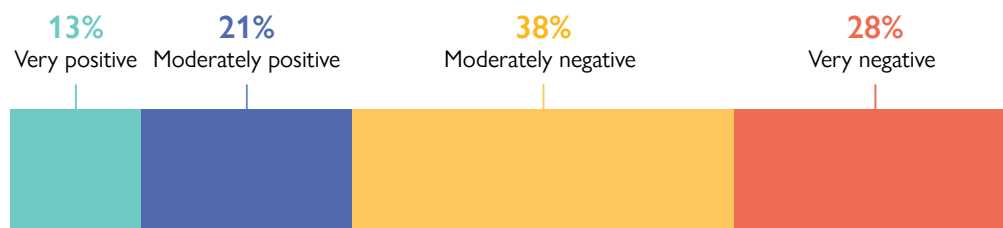
Outputs from the survey (n = 4000) were threefold:

1. Dashboards for survey experts in EUAA and participating Member States, updated weekly.
2. Factsheets published on the EUAA website (EUAA, 2022g).
3. A joint in-depth report by the EUAA, IOM and the OECD (EUAA et al., 2022).

Overall, results confirmed that joining family and friends was among the top reasons to choose a destination country, which tallies with the statistical modelling of Project 3. New arrivals had certain immediate needs that stabilized over time into more permanent requirements such as long-term accommodation, employment, financial support, language learning support, health support and education for children, among other needs for stable social integration.

⁷ The survey is available [here](https://tellusyourstorysurvey.eu).

Figure 4. Sentiment analysis applied to 866 references provided by 500 respondents (of 4,000) who chose to also leave open ended text

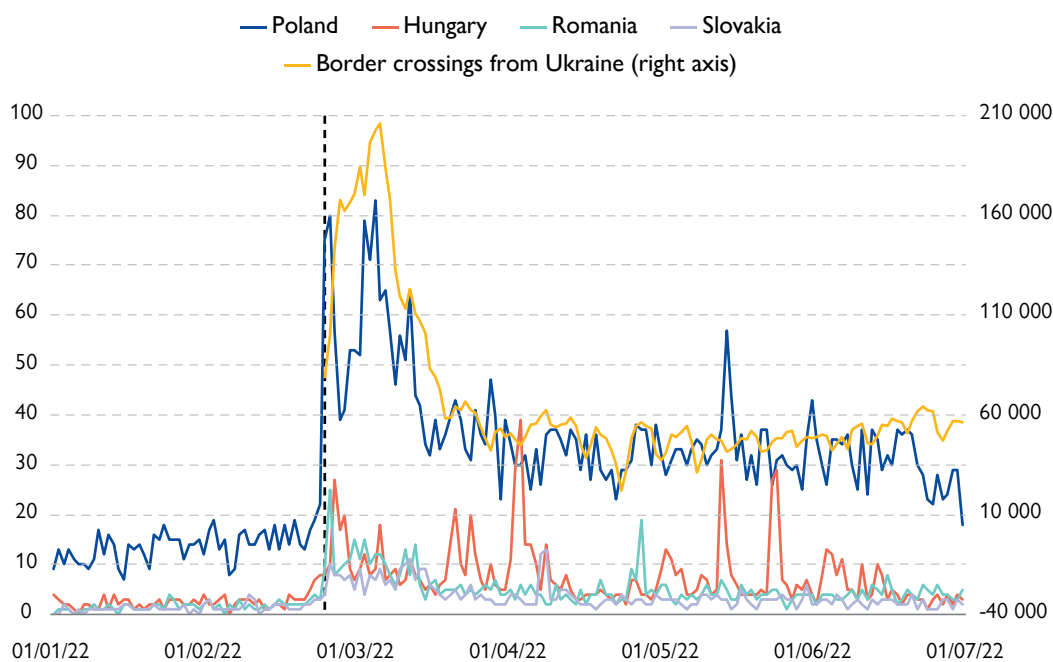


Source: EUAA et al., 2022.

The joint analysis (EUAA et al., 2022) included several innovative analyses that shed light on the plight of the displaced communities. For example, sentiment analysis of Ukrainian testimonies suggested a tendency for more negative than positive sentiments (Figure 4), which would not be unexpected for displaced and conflict affected families. However, the analysis also provided some nuance: positive references referred to host families, allocations of school places and kindness shown by volunteers; on the other hand, a negative tone was used to describe overly bureaucratic procedures in applying for accommodation, possibly exacerbated by suboptimal information provision and language support.

Importantly for novel research techniques, an analysis by the OECD fused remote data (Google Trends) with field data (border crossings) to show that internet searches for destination countries can help understand displacement events in a crisis situation (Figure 5). This particular analysis could be used to monitor which topics are of utmost concern in Ukraine, but not when there are power outages.

Figure 5. Google searches in Ukraine for neighbouring European Union countries (Hungary, Poland, Romania and Slovakia) correlated with daily border crossings exiting the Ukrainian land border



Source: Google Trends, UNHCR; adapted from EUAA et al., 2022.

Finally, analyses provided by the IOM Displacement Tracking Matrix confirmed that nearly 16 per cent of the Ukrainian population had fled their places of residence in Ukraine due to deterioration in security. A third of the households of internally displaced persons (IDPs) included someone who was chronically ill; a quarter included persons with disabilities; and many have been displaced more than once.

Lessons learned

Built on the shoulders of giants

These research activities were necessarily launched at breakneck speed, but they were in each case based heavily on experience slowly and meticulously accrued in times of non-crisis. For example, it has been a decade since the EUAA started working closely with Member States to collect information on their asylum policies, practices and legislation, and therefore there were no technical or procedural hurdles to overcome in duplicating the same desk research for temporary (rather than international) protection. Similarly, the EUAA had already partnered with Member States to develop 20 or so asylum indicators, and so designing one more on temporary protection was a natural, albeit rapid, extension of this area of expertise.

The design of the joint analysis and forecast also benefitted from previous experience in terms of EUAA methodologies already validated and published in the academic literature, and so resources were already in place to replicate a similar approach for a Ukrainian forecast. Finally, the online survey project was built upon several years of preparatory work for a face-to-face survey which was eventually suspended because of COVID-19, plus an earlier trial of an online survey in EUAA operational areas in Lesvos in 2021, and so the technical infrastructure and methodological understanding were already in place for a quick launch of an online survey targeted at displaced Ukrainians.

Hence, the rapid deployment of this cluster of knowledge tools relied heavily on foundational work, and so the plethora of new programmes being set up to focus on the Ukrainian crisis may choose to be risk averse by importing established skills and methodologies, rather than indulging in over-innovation.

Challenges

Three major challenges emerged in trying to respond rapidly to the Ukrainian displacement crisis, and a lesson can be taken from each:

1. **Timeline.** Displacement from Ukraine was extremely rapid (yellow line, Figure 5), and as a consequence the information needs of major stakeholders were correspondingly urgent, especially as many of the displaced were vulnerable and in need of coordinated support. However, national authorities were quickly overwhelmed with new arrivals from Ukraine, and so during the first few weeks following the invasion fewer Member States were able to share standardized information than would normally be the case. Data collection in the field will often suffer during times of sudden crisis and it is not unreasonable to assume that new data collections in the future might also suffer from similar delays, even from countries with high statistical capacity (IOM, 2016).

2. Interdisciplinarity. Each project was implemented by different teams in the EUAA Situational Awareness Unit, each with different backgrounds, expertise and crucially with different counterparts in the Member States. There was therefore a risk that the projects would be launched in isolation from each other, and would fail to exploit opportunities for cross-pollination of ideas and preliminary findings. This risk would be exacerbated in larger organizations. To mitigate this “silo” risk, which was magnified by the urgency of the crisis, the researchers met regularly to update each other on progress, topics of interest and preliminary results that could be built upon by successive waves of project development.

The new indicator collected in Project 2 was used for modelling purposes in Project 3 and was interpreted with the help of information collected by Project 1 in terms of different policies and practices in place across the Member States. The profile of the registrants was the most triangulated topic, reflecting the most pressing questions being posed by stakeholders who clearly needed to understand more about the demographic profiles of newly arrived Ukrainians as a proxy for their needs in terms of school places, language classes and access to health care and labour markets.

3. Involvement of Member State experts. As a first principle, EUAA research projects do not normally proceed without input and feedback from Member State experts who simultaneously act as “suppliers” of information and “users” of results. However, in this case the involvement of key Member State experts was a challenge, not through a lack of willingness on their part, but because in the early days of the crisis information needs coincided with the influx of displaced Ukrainians, and so fewer staff were available to support data collection projects. Sudden crises might often be accompanied by redeployments away from data collection towards operational support; however, in this case, most Member States were quickly able to accommodate both needs.

Conclusion

The speed and scale of the Ukrainian crisis makes it the biggest and fastest displacement of people in Europe since World War II, with a third of the entire Ukrainian population finding themselves displaced internally or externally. The nature of Russian aggression has already passed through several phases and so the final outcome remains highly unpredictable except that recovery is widely expected to take decades to accomplish. When it comes to displacement, as well as winterization and food insecurity, countless families are currently separated; so when family reunification becomes possible, families will either relocate back to their homes in newly liberated areas, or their family members currently in Ukraine will join them in the European Union or elsewhere. Which of these processes will be dominant remains to be seen, but will shape not only displacement trends but also many aspects of Ukraine society itself. Efforts to support families displaced by Russian aggression should be evidenced based and underpinned by next generation projects that build on those presented here.

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Petros Gkotsis is an experienced researcher with a background in physics and a PhD in material science. He has held various research positions in Greece, the United Kingdom and Belgium, coordinating, managing and supporting complex research projects before joining European Union institutions in 2014. At the JRC, Petros worked as an analyst, conducting research and managing projects that focused on innovation, investigating the emergence of new disruptive technologies and providing content to policymakers based on scientific assessment of relevant data and information. A newcomer to the EUAA research programme, he supports research projects on early warning and forecasting asylum related migration.

Sara Henriques is an EUAA researcher and data analyst. Sara holds a bachelor's and master's in psychology and is finalizing her PhD in communication sciences. Previously a researcher and lecturer at Lusofona University, she participated in several national and international research and business projects, dealing with a broad range of topics. She is the author of several scientific publications in national and international peer-reviewed journals and books.

Evangelos Koukournesis has been working in the field of migration and international protection for the last ten years, specializing in the development of information exchanges and data analysis. Currently in the EUAA Data Hub, Evangelos is responsible for coordinating the operational data portfolio of the agency as well as contributing to data exchange under EUAA Early Warning and Preparedness System (EPS). Before joining the EUAA in 2016, Evangelos worked for the Greek Asylum Service, where he supported the development of the national asylum information system and acted as the reporting and analysis coordinator of the Authority.

Elena Leleki is a project assistant within the EUAA Research Programme, where her work focuses on supporting the design and implementation of a large-scale survey project. She was previously an EUAA case worker working on refugee status determination in Greece (Lesvos) and Cyprus (Nicosia). Other professional experiences include the European Commission (DG CNECT) and MADRE (a women's rights NGO based in New York City). She holds an MSc in anthropology and development management from the London School of Economics and an MA in human rights studies from Columbia University.

Constantinos Melachrinou leads the EUAA Research Programme and coordinates projects aimed at better understanding the root causes of asylum-related migration. In addition, he develops deeply quantitative methods using big data for early warning and forecasting. Having graduated from MIT and the University of Chicago, Constantinos trained as a particle physicist at CERN, where he obtained his PhD for work with the ATLAS experiment, performed postdoctoral research in computational neuroscience and worked as data scientist in the insurance sector before joining EUAA in 2019.

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Maria Papaioannou coordinates the EUAA Situational Updates System portfolio aimed at raising awareness and enabling informed decision-making. Previously, she was a lawyer (Athens Bar Association), and worked in NGOs, the European Commission, and in academia. In 2013–2015, she presided over one of the international protection appeal committees in Greece. Maria Papaioannou holds a PhD in international law and has published research papers on international law and human rights.

Teddy Wilkin, previously a research fellow at Oxford, has spent the last 12 years helping European Union institutions understand mixed migration flows, with a focus on international protection, irregular migration, people smuggling and fraudulent documents. He has published academic papers in the fields of behavioural ecology, evolutionary biology and forecasting migration.



International Organization for Migration
17 route des Morillons, P.O. Box 17, 1211 Geneva 19, Switzerland
Tel.: +41 22 717 9111 • Fax: +41 22 798 6150
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