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THE ROLE OF NON-STATE ACTORS IN DIGITISED MIGRATION MANAGEMENT. THE IMPACT AND LIMITS OF DIGITALISATION ON THE EU'S EXTERNALISED MIGRATION CONTROL IN THE MEDITERRANEAN

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Linking digitalisation and migration management in the Mediterranean

Today, a decade after the outbreak of the Arab uprisings and the shift of various regimes on the southern shore of the Mediterranean Sea – putting hundreds of thousands of people on the move both within their own countries and across borders –, migration remains at the core of the European Union (EU)'s relations with the countries of its Southern Neighbourhood. The New Agenda for the Mediterranean put forward by the European Commission (EC) in February 2021 calls for more mutually-beneficial initiatives in this field and stresses the need for more cooperation at international and regional level[1] via a "whole of route" approach.[2]

Within this renewed framework of cooperation, digitalisation features – alongside the green transition – among the EU's favoured axes of action to move toward a "resilient" and, through that, more stable Mediterranean, via an externalisation of the EU's digital agenda and its expansion across various

[1] The New Agenda for the Mediterranean highlights triangular and South-South cooperation. Although the latter type is rather self-explanatory, the former is not clearly defined. According to United Nations (UN) international development cooperation "jargon", triangular cooperation refers to partnerships between two or more developing countries, supported by a developed country or multilateral organization" (see https://developmentfinance.un.org/south-south-and-triangular-cooperation). States would then remain the main interlocutors of the EU, alongside intergovernmental organisations such as the African Union, as cited in the New Agenda.

[2] The "whole of route" approach refers to the EU's stated willingness to address the root causes of migration, its inclination to fight against smuggling and in favour of "legal pathways" and to work on return, readmission and reintegration through the New Agenda for the Mediterranean.

policy realms. With regards to migration and border management in particular, the EU dwells largely on digital technologies and their application to Automated Decision Making (ADM) to control its borders in the years to come.[3] The EU has already been using advanced digital technologies via the European Border Control System (EUROSUR) to monitor movements and flows on its external borders via sophisticated exchanges of information collected by drones, unmanned vessels and other high-tech tools among EU member states. Nevertheless, this narrative will most probably take shape in the coming years. For instance, the New Pact on Migration and Asylum advances digitalisation as a means to strengthen borders and curb irregular migration to the EU via the interoperability of the information systems, the digitalisation of visa procedures by 2025 and the opening of new opportunities through digitalisation in order to fight the root causes of irregular migration (EC, 2020a). The Screening Regulation proposed in the New Pact relies on digital techniques such as cross-database searches and biometric data registration (EC, 2020b) in support of the implementation of the Entry/Exit System (EP & Council of the EU, 2017; EC, 2016). In this light, the Mediterranean serves as the EU's test lab with, for example, €4.5 million spent on the three-year trial of facial recognition lie detectors[4] at the Greek border until late 2019 (Ahmed & Tondo, 2021). As of October 2020, the EU supported 38 projects affiliated to Horizon 2020 under its objective to "Strengthen security through border management" (Penner & Chiusi, 2020). The deployment of these so-called cutting-edge technologies raises significant concerns even at the core of the EU policy-making institutions, as shown by Case T-158/19 brought by Patrick Breyer, a member of the European Parliament and activist, to the European Court of Justice in 2019. In this lawsuit, he asked for the release of secret documents on the ethical justifiability, legality and results of the technology related to the facial recognition lie detector tried in the framework of the iBorderCtrl project.

Moreover, the renewed EU action plan against migrant smuggling aims to reinforce cooperation through digital monitoring and forecasting of migration flows on social media and new technologies for communication (NTCs) (EC, 2021a) through the interstate and inter-agency level of law enforcement. Thus, the EU seeks an enhanced control exercised by states and their law enforcement systems in the migration management sphere after three decades marked by the increasing involvement of non-state actors (NSAs). Through the outsourcing of border management tasks (Lopez-Sala & Godenau, 2020; Privacy International, 2020), NSAs are delegated by European states to exercise "remote border control"[5] and complement the work of substituting states' organs and agencies (Menz, 2009), making migration management not the sole prerogative of the state (Gammeltoft-Hansen, 2017). In this process of externalisation, complemented by significant political instability on the southern shore of the Mediterranean, NSAs operating outside EU territory have been making the most of the game, with low or often absent accountability. The famous case of Abd al-Rahman Milad (or Al Bija) demonstrated the extent to which a variety of NSAs – including criminal ones – with different interests and agendas participate in migration management policy-making and activities today.[6]

[3] An ADM system can be defined as a "socio-technological framework that encompasses a decision-making model, an algorithm that translates this model into computable code, the data this code uses as an input – either to 'learn' from it or to analyse it by applying the model – and the entire political and economic environment surrounding its use" (Spielkamp et al., 2019).

[4] As part of the Horizon 2020 project iBorderCtrl, "the Automatic Deception Detection System (ADDS) performs, controls and assesses the pre-registration interview by sequencing a series of questions posed to travellers by an Avatar. ADDS quantifies the probability of deceit in interviews by analysing interviewees' non-verbal micro-gestures" (see the webpage of the project: https://www.iborderctrl.eu/Technical-Framework). It thus aims to identify and warn about deception risks directly at the EU's external border.

[5] The concept of "remote border control" was first introduced by Aristide Zolberg in 1997 to characterise the transatlantic visas issued by consulates abroad, thus describing the phenomenon whereby many tasks and aspects of migration and border enforcement are moved beyond state's territory.

[6] In 2019, journalists provided evidence that "Al Bija", a notorious human trafficker operating in the north-west of Libya, attended a meeting with the Libyan Coastguard and Italian officials in Sicily in May 2017 – only a few months after the signing of the Italy-Libya Memorandum of Understanding, enhancing cooperation between Italy and the Libyan coastguard and expanding the Libyan coastguard training programme (Tondo, 2019).

In a field as politicised and overly scrutinised as migration management, is an ADM possible in the Mediterranean? This policy brief seeks to highlight the limits of a digitised approach to migration management to help improve the EU's externalised border and migration management apparatus. Part of its objective is to analyse how digitised migration management may impact the agency of NSAs in migration-management-related processes and it intends to verify if digitalisation is an effective way to pre-empt movement and generate accurate forecasts of migration in this multi-stakeholder framework. It does not address internal digitised techniques applied within EU territory after the crossing of the border.

It first explains the ambiguous expectations related to digitalisation applied to border and migration management and what is at stake with regards to NSAs. Based on the literature analysed, it then argues that in the Euro-Mediterranean region, digitalisation cannot be the main way for the EU to forecast migration in its territory and may create more uncertainties about NSAs' agency in management processes. Finally, the brief provides policy recommendations for the EU to avoid identified side effects of digitalisation and to have a rational understanding of the new space for NSAs' action.

The puzzling impact of digitalisation on the migration management policy realm and the threat caused by NSAs

The digital transformation – which can be defined as the integration of digital technologies in the public and private spheres and the subsequent impact – is fast evolving and triggers curiosity at both academic and policy levels. The literature reveals that it is, in fact, a double-edged sword with identifiable benefits and, similarly as for the impact of the NSAs, worries about its possibly detrimental influence, particularly in the migration management policy realm.

Through a security-oriented point of view, a strand of literature lauds the merits of the use of new digital technologies and methods for the purpose of achieving certain policy goals in the area of migration. At first glance, existing literature on the topic draws attention to the potential of the process of digitalisation – whereby physical information and evidence is converted into a digital format – to allow for more efficiency, in quantitative and qualitative terms. This underpins the EU building its "smart" borders based on the possibility offered by digital technologies to foster the interoperability of information systems (EC, 2016) and of law enforcement systems at the EU's border (EC, 2021a). Indeed, digital technologies can process large amounts of data via algorithms allowing inferences to be made about migration flows on the spot. In this way, they open new avenues for predictions of future and actual patterns and behaviours related to migration flows (Beduschi, 2020). In addition to the enhancement of pre-emptive capabilities, the use of digital technologies also enabled the development of fully-fledged digital identities,[7] allowing the humanitarian system "to respond more efficiently, faster, and at less expense to the complex and growing numbers of people on the move or in vulnerable situation" (Bither & Ziebarth, 2020). Therefore, in spite of the transnational logic brought forward by digital technologies, digitalisation provides tools for the Westphalian state to fulfil regalian functions (Leiser & Murray, 2017) and maintain its ability to act at the borders as a still relevant security actor.

Reconquering agency and legitimacy is of particular importance for states and supranational actors such as the EU. The process of externalisation and remote border control granted space and agency to NSAs, sometimes claiming they are filling the role that state authorities are incapable of fulfilling (Gammeltoft-Hansen, 2017). Many private companies among them are also making profits out of activities related to migration and border management (Gammeltoft-Hansen & Nyberg Sørensen, 2013). These activities also gave momentum to

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[7] Biometrics are not only used for registering refugees and displaced persons for international organisations, but has expanded towards the building of digital platforms comprising biographies. The use of digital identities has thus become more sophisticated and far-reaching in spite of many related concerns such as privacy and consent.

other NSAs of a more controversial nature, including militia members as in the famous case of Al Bija (Tondo, 2019). Such actors being directly involved in the political destabilisation and security issues of Southern Mediterranean countries, their role in the activities related to remote border control makes the EU's ethic legitimacy and credibility in its relations with Southern Mediterranean countries more complex. All in all, the involvement of NSAs in policy-making and activities related to migration and border management raises a lot of concerns about accountability for violations of human rights in the process, given that states remain the primary subjects of humanitarian law (Davitti 2019; 2020) although they have worked towards an externalisation and, to some extent, a privatisation of border operations. This mismatch and the corresponding legal – political – limbo it fosters is all the more worrying as the digital transition adds a layer of opacity as it makes the chain of decision-making beyond the level of human beings' sole rationality more complex.

In that regard, digitalisation applied to the field of migration and border management also fuels a lot of doubts as to its possible downsides. Digital technologies "reconfigure the rationales, techniques and practices of border security and management" (Glouftsios & Scheel, 2021). The potentially negative impacts of digitalisation in the migration and border management policy realm thus cannot be overlooked. New power relations – between authorities and mobile individuals (Gloutsios & Scheel, 2021) but also those with NSAs in particular – should be assessed in order to counter their adverse outcomes. The next section argues, based on many pitfalls related to digitalisation and the uncertainty it fosters about the role of NSAs, that the EU should not rely too heavily on ADM while managing migration flows in the Mediterranean region.

The adverse effects of digitalisation on NSAs' agency in the Mediterranean

Petra Molnar warns that "technology is not inherently democratic" (2019). Such a statement puts in perspective the ideals of democracy and justice that the EU aims to promote through its policies and their externalisation in the Southern Neighbourhood. Through ADM and related digital technologies applied to the field of migration and border management, many questions are left unanswered about the ethical and legal scope of the use of data from individuals. In the realm of migration, the European Data Protection Supervisor (EDPS) warns in particular about the lack of a legal basis and regulation for the European Asylum Support Office (EASO)'s use of social media monitoring (SMM),[8] which comprises a strong risk to use the data beyond its original purpose and to undermine individuals' control over their own personal data because of profiling (EDPS, 2018). Nevertheless, such worries are cross-cutting to many different policy areas where digital techniques are used. In relation to the digitalisation in the realm of migration and border management, however, much interrelated aspects alert about negative impacts on the processes of management and the increasing uncertainty about, and dependency on, the role played by NSAs in this area.

Firstly, a recurring caveat points to the challenges posed by the data used to run algorithms for migration and border management, in particular concerning its quality. In the Mediterranean context particularly, there are sufficient grounds to fear that the data used to run algorithms for cross-Mediterranean migration management ensures neither quality nor efficiency. For instance, according to the measurements of the International Telecommunications Union (ITU), the Arab states – and by extension the EU's Southern Neighbourhood – show, together with Africa as a whole, a particularly

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[8] Since 2017, the EASO has been using SMM projects targeting persons of specific language groups and using specific keywords inside their posts on social media. This data is collected for the EASO to produce reports containing no personal data and addressed to the United Nations High Commissioner for Refugees (UNHCR), the International Organization for Migration (IOM), Intergovernmental Consultations on Migration, Asylum and Refugees (IGC) and Interpol. This processing aims to provide relevant stakeholders – particularly states and EU agencies – with information in the latest changes in migration routes and smuggling offers (EDPS, 2018).

high discrepancy in households' access to the Internet: 74% of urban households have access in these states against 38% in rural ones (ITU, 2020). Therefore, a whole range of data on Internet searches used before or at the early stages of the migration journey, or event for SMM, cannot be collected. This is likely to have a negative impact on the reliability of algorithms run to forecast migration routes and for the immediate updates on and anticipation of migrants' journeys and practices, both due to the uncertain quantity of collected data and to its quality. Meanwhile, local NSAs operate as community glue and often penetrate at levels, such as for the tribes in Libya, where national or supranational authorities cannot, therefore detaining information that may not be collected digitally. Consequently, the authorities' difficulty in accessing information and collecting it efficiently gives momentum to NSAs – even criminal ones – to gain more agency and to position themselves as key informants. Against this backdrop, they are often hard to dismiss as part of migration and border management decision-making.

Furthermore, digitalisation is likely to lead to a significant divide between the North and the South of the Mediterranean and to severely impede cooperation between the two shores. The asymmetry of access and capacities in relation to the Internet and digital technologies, as depicted by the ITU, can, in a context of digitalisation of border and migration management decisions and processes, create further imbalances (Beduschi, 2020). From a policy and technical standpoint, the digitalisation further crystalises a North-South paradigm whereby the North is empowered and has the capacity to dictate the agenda because it has the technology, the access and the resources to set the agenda based on its own data. In this case, the lack of agency of the authorities in the Southern Mediterranean can further legitimise the action of NSAs, particularly the most radical and violent ones, which thrive through the development of counter-narratives criticising the lack of a decisive role taken by their respective governments vis-à-vis northern partners. The asymmetries instigate a perception of downgrading on which radical actors largely capitalise. As a consequence, there is much uncertainty as to their role in the future of the countries where they operate and specifically in migration and border management.

Another important pitfall related to digitalisation applied to migration and border management is that the technologies involved foster or strengthen existing biases and generate discrimination in the migration process, which, at the same time, reinforces the grip of NSAs on certain communities in the Southern Mediterranean. Returning to Molnar's statement, technologies involved in digitised border and migration management bear significant bias precisely because they are built through a security-oriented lens (Molnar, 2019). In the "socio-technical complex" created by digitalisation in the field of migration management (Glouftsios & Scheel, 2021), and replicated via the iBorderctrl project, digital technologies are precisely designed and programmed to detect risks and pre-empt them. However, algorithms and modelisations developed are not exempt from political orientations. The overly-securitised rationale and orientation pertaining to the field of migration in Europe processes migrants based on a modelised risk scale and thus opens new probabilities for discrimination via ADM systems[9] (Akhmetova, 2020). Tuba Bircan and Emre Eren Korkmaz explain that "during the design and testing of algorithmic tools, migrants are often portrayed as a security threat instead of human beings with fundamental rights and liberties" (2021). Therefore, algorithms may replicate ethnic, cultural and other biases. Such discrimination is problematic and affects the EU and its partners' credibility vis-à-vis the respect for basic human rights and values in their management of migration. Therefore, paradoxically, as the EU and its partners adopt a securitised approach to convey a sense of responsibility and action-oriented attitudes towards migration to their citizens, the tradeoffs of over-politicised and discriminatory algorithms contribute to weakening the EU's ethos from outside. Given the dangers inherent to the discriminatory risks of ADM, individuals may thus turn their back on "legal pathways" and find alternative routes via NSAs who operate on the margin of this system.

[9] This is a possibility that the EC acknowledges in the *White paper on Artificial Intelligence - A European approach to excellence and trust* (2020), retrieved from https://ec.europa.eu/info/sites/default/files/commission-white-paper-artificial-intelligence-feb2020_en.pdf

In brief, the use of digital technologies in the field of migration management comprises many tradeoffs and risks. On this basis, we can argue that digitised migration management gives way to an overly-securitised, potentially biased and inaccurate decision-making. It strengthens the grip of NSAs involved in the migration routes in the Mediterranean in such a way that it creates more uncertainties and opacity.

Conclusions and recommendations

The digitalisation of processes and practices of migration and border management is a new prominent and strategic feature of the EU's policy and, through processes of border externalisation, of its cooperation with its Southern Neighbourhood. As such, digitised border and migration management generates many hopes in a context where security and migration are often amalgamated and intermingled in debates across Europe. However, in the Mediterranean, particularly, it does not fall short of adverse consequences, affecting both the quality and efficiency of the decision-making and the people on the move targeted by the scrutiny of the digital technologies involved. Therefore, given the dual potential of digitalisation in the migration policy realm, avenues for improvement and anticipation have to be explored by actors involved in related processes in the Mediterranean region.

1. In the framework of migration and border management in the Mediterranean region, the EU should overcome its securitisation approach to migration. The confusion between migration and transborder crime is often misleading and leads to the migrants being amalgamated as risks. In the current context, where algorithms are to be increasingly involved in decision-making, the bias induced by securitisation is particularly problematic and can lead to increasingly and rigidly discriminatory decisions at the border. In the digital era, algorithms can thus enhance institutional racism and put migrants and refugees' rights at risk. In turn, it gives levers for the most violent and radical NSAs on the southern shore to shape narratives pushing people to imperil their life on their way to Europe. The EU should build a stronger rationale with a nuanced approach in line with the multifaceted nature of the migration phenomenon and avoid feeding into the over-securitised approach to the issue.

2. To avoid the discriminatory repercussions of ill-designed algorithms and unlock the potential fairness and comparability which can be generated by ADM systems (Chiusi, 2020), national and supranational authorities both within the EU and in Southern Mediterranean countries need to involve a more diverse pool of actors to create models and to monitor algorithms used for ADM. Among the interdisciplinary pool of actors, North African governments should be involving reliable NSAs which could, in this endeavour, facilitate access to the production of grounded data, which is currently rare due to patchy Internet access in the southern shore of the Mediterranean. Through such advances, they would neutralise the uncertainty deriving from insufficient data and would get data that is reflective of the reality of the ground, which would thus limit significant tradeoffs and reposition them as credible actors for security, protection and law enforcement.

3. In such a process, Northern and Southern Mediterranean governmental actors and the EU would prevent an overreliance and dependency on NSAs – and not only the private firms – in relation to data. Thus, transparency and trust can be re-conquered with regards to digitised policy-making, and particularly in the field of migration and border management. To do so, public agencies will be equipped with interdisciplinary data centres with data authenticity and contextualisation abilities. Contextualising the data will, in turn, reinforce the ensuing capacity of algorithms to compare fairly and allow for less dependency on NSAs to get contextual data on the ground.

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