Beyond borders: Exploring the impact on aviation workers as Romania joins Schengen's aeronautical dimension

Alexandra-Dorina Miron[1], Gabriela Ţigu[2], Olimpia State[3] and Adrian Cioranu[4]

[1)2)3)4)]*Bucharest University of Economic Studies, Bucharest Romania.*
E-mail: alexandra.miron17@icloud.com; E-mail: gabriela.tigu@com.ase.ro; E-mail:
state.olimpia@com.ase.ro; E-mail: acioranu@me.com

Abstract

From the beginning of the integration process, one of the most important components of the functional framework of the European Union was to ensure the free movement of goods and factors of production. In this context, the freedom of movement, namely that of people and thus also of human resources, was the subject of an intergovernmental agreement that laid the foundations for a special integration, the Schengen area. The development went from a network of intergovernmental agreements to an ever better structured acquis communautaire. Over time, the Schengen area has faced a number of challenges that have tested its resilience. In recent years, the accession of Romania and Bulgaria to this area of complete freedom of movement has been one of the topics of great interest, both for academics and policy makers. From 31 March 2024, an innovation was implemented at the level of the free movement regime, as accession to the air and sea dimension of the Schengen area became functional for Romania.

By overcoming traditional boundaries, this development promises to reshape the landscape of aviation employment, operational logistics and regulatory compliance. The focus of this study is on the changes in workforce mobility, workforce training requirements and the harmonisation of safety standards. The authors of this paper use a mixed methods approach that utilises quantitative data on employment trends and qualitative insights from aviation professionals to highlight some of the key implications of this paradigm shift. The findings are intended to provide stakeholders with a comprehensive understanding of the impact of change on the aviation workforce and offer strategic recommendations for navigating the shifting operational terrain. We offer a unique perspective and guidance for the optimum preparation of airports prior to implementing Schengen Area processes to avoid disruptions, improve communication amongst stakeholders, and increase operational readiness and resilience.

Keywords

Introduction

Although it is not fully compatible with the values of the communitarian method of integration (the philosophy of neofunctionalism), the Schengen Area represents an important driver in the European integration process, establishing itself as one of the most significant area for the intergovernmental main logic (Karstens, 2020). This atypical form of implementing the principle of free movement of commodities and some production factors constitutes the world's largest "borderless space," with significant economic, social, and symbolic importance (Böhmer et al., 2016).

The Schengen Area involve a kaleidoscope of countries where different types of border control have been abolished. This allows for unrestricted movement of people within this area, much like traveling between

departments within a single country. Whether we agree or not that the European Union (EU) is using a "myth of Schengen" as a cornerstone of European integration using narratives and imagery to bolster its identity and legitimacy (Zaiotti, 2011), the Schengen Agreement clearly facilitates easy travel for tourists and businesses. With over 3 trillion EUR worth of intra-Schengen flow of goods, the significant benefits stemming from this area encompass trade, consumer and commuter cost savings, and border control facilitation and cost optimization (Auf dem Brinke, 2016).

The Schengen Agreement also represents a regulatory framework for police cooperation and sharing of visa information among the authorities from member countries to ensure security while maintaining freedom of movement. Temporary border controls may still be applied under exceptional circumstances. Whereas decision-making at the policy level may lead to reinstating border checks, the actual impact at the street-level border guards is a matter that allows for more flexibility than one might think, as checks may be directed on third-party nationals and thus affect to a lesser extent the border crossings (Casella Colombeau, 2020). The authors of this paper agree with other scholars that the Schengen Area should be preserved, as the benefits outweigh the potential security risks (Coon, 2021).

The authors present the conclusions of the qualitative research performed and first-hand experience in relation to Romanian airports' entry into the Schengen Area, focusing on the case study of Bucharest "Henry Coanda" International Airport (hereinafter referred to as OTP airport). Among the aspects that will be discussed are the rationale and benefits of full entering the Schengen Area, specific considerations regarding the external EU border protection (Piechowicz, 2024), and operational considerations regarding preparation for, and implementation of, changes in customs and border control measures at OTP airport. The authors analysed how entering the Schengen Area with the air borders impacted the personnel at OTP airport, both the national authorities and the private companies providing services at the airport, such as ground handling and passenger services. We analysed the impact based on entity and type of job, whether the number of jobs has been affected, as well as from a training and procedures perspective. Based on a multi-parameter analysis we observed passenger facilitation standards and recommended practices (SARPs) contained in Annex 9 to the 1944 Chicago Convention establishing the International Civil Aviation Organization (ICAO). As the highest forum in the civil aviation, ICAO sets the mandatory SARPs in various areas of activity, spanning from safety to environment, and from security to facilitation. We note that by virtue of being a member of ICAO, states must implement the standards by transposing them into the national regulations. This process enables operators to have a national standard to comply with, since SARPs are not directly applicable to them. With no prejudice to the readiness of Romania from a technical and political perspective to join the Schengen Area, considering the context at OTP airport before and after Romanian joined the Schengen Area, we question the readiness of the all the personnel concerned to adjust swiftly to the new reality, which brings into question both training and operational aspects.

1. Review of the scientific literature

The Schengen Agreement facilitates easy travel for tourism and businesses but also has provisions for police cooperation and sharing of visa information among the member countries to ensure security while maintaining freedom of movement. Yet, temporary border controls can still be established by countries within the Schengen Area in response to security threats or extraordinary circumstances, such as during large-scale sporting events or in response to political crises.

Over the past decade, the emphasis regarding the Schengen Area moved towards an increased cooperation in the field of Home Affairs and Justice, with the desire of governments to uphold a framework for freedom, security, and justice (Piechowicz, 2017). Although this theme has not stirred much interest among researchers from the academic and scientific community, there are some authors that investigated primarily the effects of membership or non-membership of a European Union country in this type of intergovernmental integration (Prakoso et al., 2021). Focusing on the contribution of the Schengen Area to economic growth and increased welfare in the EU, Cieślik and Turgut (2021) estimated that joining the Schengen Area could lead to an average increase of $2,313 per year in gross domestic product (GDP) per capita for EU countries, during the period 2004-2012. For Romania, joining the Schengen Area has the potential to contribute an additional 0.5 percentage points to the country's annual GDP growth (Banila, 2022).

Finotelli and Ponzo (2023), who analysed the effectiveness of control policies, visa policies, asylum systems, etc., highlighted the role of various societal actors involved in the European integration equation

and the need to consider external contexts and internal constraints in understanding migration control outcomes. Other authors have found that joining the Schengen area creates more favourable conditions for service flows, especially tourism services, and promotes accessibility at the border for tourists. Xie et al. (2021) demonstrated that tourist transactions between member states have become increasingly tight, leading to increased stability of the network.

More and more analysts are focused on the impact of (new) security threats and the use of technology such as e-gates as automated border check points. Kulju et al., (2019) looked at human capital stressing the need to revaluate the skills of border control personnel and processes in the new context. Other scholars (Ortega Del Campo et al., 2017) looked at how to strengthen the system by increasing the reliability and security of the Automatic Border Control (ABC) system in the context of the Schengen Area. Linked to facial recognition in the similar context, Sanchez del Rio et al., 2016 underlined some specificities. We need to mention that the discussion about facial recognition took place before the expansion of Artificial Intelligence capabilities which raises further ethical questions to the technical ones when talking about the capabilities and use of AI for security purposes.

We found helpful for our analysis to note the practical approach regarding the impact of building new facilities at Zurich Airport (Kunze, 2013). Whereas the author takes an engineering approach, exploring design and structural elements, what was considered by us as relevant is that he highlights the operational constraints that had been taken into consideration when building the infrastructure, namely the goal that the terminal accommodates both Schengen and non-Schengen traffic, with its two components: passengers and aircraft.

Obviously, most approaches to this topic are to be found in the political sphere, and they are also occasionally referred to in academic literature. For example, Ștefănel et al., (2023) analyse in detail the way in which the postponement of Romania and Bulgaria's inclusion in the Schengen area was reflected in the mass media, through an interesting qualitative and quantitative study that shows how mainstream media discourses took up the issue while promoting the European integration project by minimizing Euroscepticism.

2. Research methodology

The authors faced the challenge of overcoming the barrier presented by the atypical nature of some countries' relationship with the Schengen area, which, in this instance, is limited to only two axes, namely the aviation and maritime sectors. Furthermore, the exceptionally brief period since the onset of this challenge has meant that no studies addressing this thematic area could be identified.

Following the two components mentioned in the previous section, passengers and aircraft, we will draw the attention first to the aircraft component. For optimum operational considerations, flexible use of gates should be emphasized when designing flights to and from Schengen and non-Schengen destinations.

Similarly, passenger flows should be weighted not only against security, but also facilitation principles. Facilitation ensures that passengers enjoy a positive experience within the airport terminal, including the processes regarding customs and immigration and any public health protocols applicable, being able to find their way around with ease from the moment they arrive at the airport until they board the aircraft.

Turning to the human resources, one of the primary challenges for human capital in Romania's aviation industry post-Schengen integration lies in navigating the intricate web of regulatory requirements and standards imposed by Schengen agreement. From safety protocols to operational procedures, compliance with Schengen aviation regulations demands rigorous adaptation and adherence. This necessitates significant training and upskilling efforts among aviation personnel to ensure alignment with Schengen standards, posing a substantial challenge for industry stakeholders.

Noting the way, the switch from non-Schengen to Schengen occurred at OTP airport, we are confident to state that in the event a study was conducted at the national level, no conclusions and active implementation plans were communicated to the entities concerned at the management or operational level. In addition to reviewing the framework applicable and the literature that covers Schengen-related topics, we base our analysis on observations, interviews, and hands-on experience of the authors that have been directly or indirectly involved in the activity on OTP airport before and after 31 March 2024, the date on which the Schengen Area procedures entered into force.

At this stage of our research, primary emphasis has been placed on the phenomenological component, with the application of the defining methodology for positivist research to be undertaken subsequently. The latter phase will commence once we have completed the necessary dynamic series of data, selected, and operationalized the appropriate econometric algorithms. Our initial steps are based on some of the earliest case studies conducted by public institutions responsible for this sensitive subject.

In 2011, OTP Airport initiated a comprehensive redesign of its passenger terminal, segregating areas dedicated to Schengen and non-Schengen flights. This foresight became particularly pivotal when Romania was confirmed for Schengen area aeronautical membership, prompting an exhaustive analysis of flight and passenger data. The airport leveraged insights from its busiest month, August 2023, to optimize the terminal layout to better serve the evolving needs of its travellers. Based on information received from the specialized departments and also the monthly flight plan for the peak month (August 2023), two-thirds of the passengers transiting through OTP Airport (totalling 14,630,715 in 2023) were traveling to or from Schengen destinations. Despite these relevant operational adjustments, the airport's capacity remained unchanged, though enhancements were made to the security protocols affecting passenger, personnel, and crew movements within the terminal. The infrastructure division of the airport delineates specific zones for Schengen and non-Schengen operations, with the latter occupying a considerably smaller footprint, the new design includes 9 air bridges and 26 boarding gates for remote stands dedicated to Schengen flights, contrasted with 5 air bridges and 6 gates for non-Schengen flights. Provisions were also made for flexible gate allocation based on fluctuating demand for non-Schengen access.

3. Results and discussion

From a *border security* perspective, entering to Schengen area has led to a transition from an airport equipped with 20 manned check-in points and 6 Automated Border Control (ABC) systems for departures, alongside 24 checkpoints for arrivals, to one having 12 desks for non-Schengen departures, supplemented by 6 self-check-in kiosks, and 10 desks for arrivals, tailored to the airport's operational capacity and the proportion of non-Schengen flights. Although border police presence will persist for an interim six-month period to conduct random checks based on risk assessments and Advanced Passenger Information data, together with the Frontex partners (IATA, 2022), a subsequent redeployment is planned. Officers may be reassigned to manage borders with non-EU countries or retrained for different roles, potentially impacting their employment status. As Romania gains access to the Schengen Information System or SIS (The Schengen Information System - SIS - SchengenVisaInfo), a comprehensive database shared among Schengen countries, border police are now equipped to perform more nuanced security checks. This integration has necessitated specialized training for border police to effectively utilize SIS for identifying wanted persons, managing re-entry of barred individuals, and confiscating stolen documents. The roles and responsibilities of border police have evolved beyond mere document checks and departure clearances. They now encompass broader security duties within the airport, managing situations involving deportees, inadmissible passengers, and disruptive individuals. With Romania's air entry into Schengen, these responsibilities have largely shifted to the transportation police, prompting the recruitment and training of new personnel to assume these critical functions.

The *operational dynamics* within the airport have also undergone changes, particularly in ground handling and passenger services. Despite a modest 6% increase in passenger traffic in early 2024 (AAR, 2024), the number of passenger handling employees remained stable. While OTP airport has designated specific areas for Schengen and non-Schengen flights, the parking positions can flexibly serve both types of flights, irrespective of their location within the Schengen-designated zones of the airport. This operational flexibility means that the boarding and disembarkation of passengers may often be conducted via bus transfer rather than through fixed air bridges. This arrangement significantly influences the demand for bus drivers, expanding both the scope of their responsibilities and the necessity for precise coordination to manage these movements effectively. Such a setup underscores the importance of a robust and responsive ground handling operation, particularly in managing logistical complexities and ensuring a smooth transition between terminals and aircraft. The transition to Schengen has also imposed new challenges in managing the flow of passengers and airport capacity, particularly during peak times. This has necessitated swift procedural adjustments to prevent congestion and ensure passenger comfort.

Ground handling companies, encompassing both passenger and ramp handling sectors, were confronted with new challenges, necessitating stringent training protocols and operational adjustments at short notice. Passenger handling personnel underwent training to enhance their document verification skills, a critical

function given the high stakes of ensuring document authenticity without technical support, relying solely on visual inspection. The border police training department spearheaded an initiative requiring all passenger handling personnel to undergo rigorous training focused on document control verification and visa checks. The gravitas of ensuring the authenticity of travel documents places a significant burden on passenger service personnel, particularly given the absence of technological support, relegating verifications to manual and visual inspections. Prior to joining the Schengen area, passenger service personnel at OTP airport were responsible for initial document and visa checks. However, if travellers were found to lack the necessary travel permissions, they would be intercepted by border police upon arrival. Following Romania's integration into Schengen, and the subsequent absence of border police at the point of arrival, the entire responsibility for ensuring travellers have the appropriate documentation now rests solely with the passenger services employees. This shift places a greater emphasis on the accuracy and thoroughness of the checks performed by these employees prior to boarding. This situation underscores the imperative for robust human resources management systems that encompass substantial enhancements in staff recruitment and training methodologies, by equipping employees with the necessary skills through intensive training programs to bolster the efficiency and professionalism of service delivery, while continuing the daily operations.

The requirements to adapt to new operational protocols within the airport infrastructure required considerable time for development and approval. Despite the official confirmation of Schengen membership at the end of 2023, the timeframe allotted for airport staff to familiarize themselves with the new regulations remained constrained, posing significant challenges for on-ground adaptation.

For example, prior to Schengen membership, the oversight of minors travelling internationally fell under the jurisdiction of the border police, necessitating a comprehensive suite of documents to authorize travel. The initial phase of Schengen integration lacked a definitive legal framework addressing the procedure of minors or delineating the responsibilities of airline and passenger services personnel. It wasn't until the week of joining the Schengen Area that the border police relinquished passenger services employees from the responsibility of document verification, mitigating the risk of penalties for non-compliance. This delay induced considerable anxiety among employees, uncertain of their procedural obligations and potential liabilities for infractions involving undocumented minor travel.

Ramp agents, particularly bus drivers, underwent specialized training to accurately identify flight origins and ensure passengers were directed to the appropriate arrivals' terminal. The management team was tasked with developing a training program that was both accessible and effective, ensuring retention and comprehension among staff. Despite these efforts, the first week of Schengen membership witnessed a significant oversight when passengers from non-Schengen flight were inadvertently disembarked in a Schengen-designated area, without the requisite border check, resulting in a criminal case being filed against the responsible driver.

These operational challenges illustrate the complexities involved in transitioning airport operations to comply with the Schengen standards, highlighting the critical role of targeted training and the rapid adaptation of internal procedures to accommodate new regulatory landscapes. This scenario also reflects the broader implications for airport personnel and air crew, who must navigate the dual demands of compliance and service efficiency within a dynamically changing operational environment.

Conclusions

The very large range of implications of entering the Schengen Area obliged all Romanian institutions and companies to improve the utilization of the airport capacity, considering that the average occupancy time for Schengen flights tends to be 5 minutes shorter than for non-Schengen flights.

OTP airport's transition into the Schengen Area represents a significant overhaul of operational, security and personnel management practices. This case study not only highlights the complexities involved in such a transition, but also serves a blueprint for similar adaptations by other airports facing comparable regulatory changes.

The transition to Schengen membership introduced significant challenges at OTP Airport for ground handling and passenger services personnel, specifically regarding training and procedure compliance. The sudden shift in operational requirements, particularly around document verification and the handling of minors, led to substantial confusion and stress among employees.

The lack of technological support for document checks and the late dissemination of procedural guidelines further complicated these challenges. Moreover, the incident involving the misrouting of non-Schengen passengers highlighted the critical need for precise operational execution and training.

The most pressing challenges an airport is confronted with underscore the importance of proactive management strategies best practices requiring robust training programs to ensure a seamless adaptation to new regulatory frameworks such as the Schengen Agreement.

It is evident that effective training, clear communication, and operational adaptability are paramount in minimizing disruptions and enhancing compliance.

The management of specialized organizations needs to prepare and implement comprehensive training program well in advance of operational changes to ensure all staff are fully informed and prepared for new procedures. As part of the training program, a recurrent training of personnel should also be implemented.

In this new landscape, all economic and institutional actors are obliged to establish strategies, policies and operational programs that focus on foreseeing potential challenges and developing contingency protocols to create flexible work roles where employees are trained across multiple competencies to seamlessly adjust to different operational needs, as they arise.

Based on our analysis, we consider it is urgent for all the stakeholders concerned by the new Schengen Area procedure at OTP airport to prepare and implement specific follow-up mechanisms, allowing employees to report back on challenges faced in the field, providing insights that can be used to refine training and operations.

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