



**WORKING PAPER**

**ASSEMBLY — 41<sup>ST</sup> SESSION**

**EXECUTIVE COMMITTEE**

**Agenda Item 14: Aviation Security — Policy**

**HUMAN FACTORS IN THE AVIATION SECURITY DOMAIN**

(Presented by Czechia on behalf of the European Union and its Member States<sup>1</sup>, the other Member States of the European Civil Aviation Conference<sup>2</sup>, by Argentina, Brazil, Kingdom of Saudi Arabia, New Zealand, Singapore, South Africa, United States of America, International Air Transport Association and International Federation of Air Line Pilots' Associations)

**EXECUTIVE SUMMARY**

This paper addresses the need to utilise the current workforce challenges in the aviation security domain, that results from severe shortage of staff seeking to work in aviation security roles, including staff displaced by the COVID-19 pandemic and those, who have chosen not to return, as an opportunity to implement a long-term plan ensuring a sustainable approach to recruiting and retaining aviation security professionals.

A concerted effort is needed to recognise the ‘new normal/situation’ and to find solutions that support our workforce and make aviation security roles an attractive and professional career choices. Human factors and the impact they have in the performance on the aviation security workforce should be a centrepiece that must result in realistic actions at State and industry level, including bolder approaches to the retention of existing and attraction of new aviation security professionals.

<sup>1</sup> Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxemburg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, and Sweden.

<sup>2</sup> Albania, Armenia, Azerbaijan, Bosnia and Herzegovina, Georgia, Iceland, Moldova, Monaco, Montenegro, North Macedonia, Norway, San Marino, Serbia, Switzerland, Türkiye, Ukraine, and the United Kingdom.

<b>Action:</b> The Assembly is invited to:	
<ul style="list-style-type: none"> <li>a) Urge ICAO, Member States and industry to take concrete actions to continue to promote the aviation security roles as a profession that merits recognition of the required skills and competencies;</li> <li>b) Call upon on Member States and industry to further integrate human factors principles into national level policies and operational reality in the aviation domain in general, and the security domain in particular;</li> <li>c) Request ICAO, with the ICAO Aviation Security Panel, to include a strong focus on human factor, performance and professionalization of the aviation security workforce when updating the Global Aviation Security Plan (GASeP);</li> <li>d) Request ICAO, and encourage Member States and industry to take practical actions to continue to promote the implementation and maintenance of an and effective security culture in aviation building on the achievements attained throughout the 2021 ICAO <i>Year of Security Culture</i> (YOSC); and</li> <li>e) Request ICAO, with the support of Member States and industry, to include in the ICAO Next Generation of Aviation Professionals (NGAP) Programme concrete actions and initiatives that ensure enough qualified and competent aviation security professionals are available to operate, manage and maintain the effectiveness and efficiency of the aviation security system.</li> </ul>	
<i>Strategic Objectives:</i>	This working paper relates to the <i>Security and Facilitation</i> Strategic Objective.
<i>Financial implications:</i>	None
<i>References:</i>	

## 1. INTRODUCTION

1.1 The aviation industry is facing difficult challenges to recruit staff with the right competency to support the resumption of activities, and carry out critical safety and security functions. Many reasons may be given for this situation: the general pressure on the labour market, aviation may no longer present the safe and attractive employment option that it was thought to be in the past, and workforce disruptions related to the COVID-19 pandemic (furlough, redundancies, pay cuts etc.) may have accelerated a recruitment problem that was already present at a much smaller scale for some time, but which currently may have reached levels of human resources shortage that could last for a long time. With these challenges, it is clear that the existing approaches employed to attract, manage and retain a competent workforce may no longer work to the same effect.

1.2 These challenges cut across all areas of the aviation sector, for both safety and aviation security professionals, placing industry recovery at risk and pushing the efficiency of the safety and security systems to its limits. Human resources shortage, including shortages of aviation security professionals, leads to situations where air operators have to cancel flights or where long delays are generated at passenger security checkpoints in airports. This also increases vulnerabilities and risks in landside areas of the airports, with possible side implications and impacts in the effectiveness of the security systems. This instability creates negative perceptions on air transport for the general public and on aviation’s attractiveness as an employer.

1.3 Aviation security roles are high skilled roles, bearing the hallmarks of professional roles – in terms of specialist knowledge, gained and maintained through extensive training and development, the requirement of complex cognitive abilities and the necessity to work with sensitive security information

and ever evolving technologies. It would be desirable to foster professional recognition of these skills and abilities that positively impacts pay, reward and working conditions, as is typical of other roles in the aviation industry. The concept of an highly skilled aviation security professional workforce is incompatible with some of the existing working practices, such as low pay, challenging working conditions and insecure contracts.

1.4 The technological advancement and the increasing automation requires from the human component of the aviation security system highly specialist skill sets, such as image analysis and alarm resolution. This may continue to pose challenges in recruiting staff with the required aptitude to develop the minimum competency standard for future aviation security roles. Building resilience today will avoid the accumulation of problems for tomorrow.

1.5 To face the current and future challenges for the aviation security workforce, States and industry must commit to work together to explore how the talent pipeline can be secured, and how the perception and reality of aviation security roles can be improved. This is with the aim of making aviation security roles more attractive and capable of retaining the required number of competent professionals. It is critical to acknowledge that any solution must not result in a lowering of aviation security Standards set out in the Annex 17 – *Aviation Security*.

## 2. DISCUSSION

2.1 The current approach to the recruitment and retention of the aviation security workforce, in certain situations, has not brought the required success to allow industry to employ sufficient number of competent staff. New approaches must be determined, trialled and implemented based on a reality check of significant change requirements:

- a) There should be **detailed root cause analysis** within States, and potentially at a more local level, to fully understand the current challenges to the recruitment and retention of aviation security professionals. This analysis should also anticipate the possible challenges that may result from the technological evolution, innovation and from the debate about the environmental sustainability associated with the recovery and the expected growth of the civil aviation sector. There should be engagement with the aviation security workforce to understand their perceptions and viewpoint at all levels. This approach allows for a databased analysis, but it also aligns with the continued drive for an effective security culture, which is based on the involvement of a competent and motivated workforce with support from all levels of leadership.
- b) Where States and industry have found **innovative solutions, the collective learning should be shared** to allow the entire sector to benefit. Innovation should provide opportunities for long held approaches to workforce management to be challenged and for the work to be reorganised to achieve a positive impact on performance and attractiveness of aviation security roles as a career.
- c) The **human factors impacting the performance of the workforce must receive greater recognition** and operational activity must be orientated towards its concepts, using the safety environment as a model. This cannot be just words – this requires that States and industry seek to understand what it means to consider human factors and performance to evaluate whether their workforce management reflects recommended practices. Human factors may play a significant part in the root cause of a security incident with aspects such as fatigue, complacency, lack of awareness, pressure and poor security culture, which can easily be caused by the working environment.

- d) **The Global Aviation Security Plan (GASeP) recognises security culture and human capacity development and the development of human capital, skill and competency as a priority.** This has laid the groundwork for this area to be explored further. It is important that the revision of the GASeP and its Roadmap takes place as a priority and that the revision considers the challenges and opportunities created and/or resulting from the impact of the COVID-19 pandemic for the recruitment and retention of aviation security professionals, as well as for the motivation and performance of the workforce. The Aviation Security Panel, in its Thirty-third meeting held in May 2022, recognized the importance of human factors and performance in aviation security. This was further highlighted, and acknowledged the interconnected relationship with security culture and training, agreeing to include a strong focus on human performance and factors when updating the GASeP.
- e) **The large-scale workforce shift has also highlighted opportunities for and benefits of creating and enhancing diversity and inclusion programs.** Diversity and inclusion programs assist with retaining employees through improving an employee's sense of belonging in the organization and to advancing its mission, and fostering a sense of community and commitment. Forming a workforce from diverse backgrounds also aids in providing the organization with fresh perspectives and often innovative concepts, thereby enhancing an organization's ability to meet and recover from challenges as well as develop and implement new and more effective operational policies and procedures.

2.2 It must be recognised that security culture as a mitigation for the internal and external threats is meaningless if we do not get this right. By its definition and nature, **security culture is the result of the actions and behaviours** of our workforce, from top to bottom in any organization – it is therefore directly impacted when our workforce cannot perform their role to the required standard. In this context, it is important to maintain the momentum of the YOSC and continue to build on its global achievements, to ensure a permanent focus on a strong and effective security culture by all in the aviation sector.

2.3 Finally, it is important to make reference to the ICAO NGAP Programme launched in 2009 with the aim of ensuring that enough qualified and competent aviation professionals are available to operate, manage and maintain the future international air transport system. However, this program does not include actions and initiatives on aviation security professionals. Given the current and future challenges faced by the aviation security sector, particularly the need for skilled aviation security workers, it is vital that these professionals are included in future NGAP initiatives.

### 3. CONCLUSION

3.1 The current challenge of ensuring the aviation security sector has sufficient number of competent staff, who are acknowledged as professionals conducting critical security roles, requires joint collaboration between the international civil aviation community, States and industry for long term, sustainable solutions. Short term fixes may be attractive in the upcoming months or years but may create structural problems that will be more difficult to resolve in the longer term once embedded.

3.2 The current challenges provide an opportunity and a wake-up call to tackle a challenge that was accelerated, but not necessarily solely caused by the COVID-19 pandemic. It is an opportunity to set the aviation security sector up for future success and build in long term human factor aspects that allow our workforce to operate at their best. The sector is seeking to implement an effective security culture – this is based on human actions and behaviours and cannot be achieved if we do not take into account human factors that impact the performance of our workforce.