# EUROPEAN CIVIL AVIATION CONFERENCE CONFERENCE EUROPEENNE DE L'AVIATION CIVILE

## FORTY-SECOND PLENARY (TRIENNIAL) SESSION

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Agenda item 4: Presentation of the Focal Point reports

#### **REPORT ON ECAC AVIATION SECURITY ACTIVITIES**

(Presented by Gunnar Ljungberg, Focal Point for Security)

### **SUMMARY**

This paper presents an overview of the implementation of ECAC's aviation security activities during the 2022-2024 triennium, highlighting the main achievements in this domain.

#### **ACTION TO BE TAKEN**

The Plenary Session is invited to note the main achievements in the aviation security field for the period 2022-2024.

#### Introduction

- 1. This paper presents an overview of the implementation of ECAC's aviation security work programme during the 2022-2024 triennium, highlighting the main achievements in this domain.
- 2. On the global stage, aviation security had a relatively low-profile period during 2022-24, with the industry preoccupied with the consequences of the COVID-19 pandemic. Aviation security itself was not immune from these consequences, with staff recruitment and retention issues creating continued disruption to the recovery of security activity, with the period characterised by consolidation rather than by major developments in the threat picture.
- 3. In the context of ECAC's work, this period of consolidation involved substantial reform to many existing activities, and bringing others back up to full speed. Expert groups have produced many recommendations, pieces of guidance material and other documentation for the benefit of Member States. The Aviation Security Audit and Capacity Building Programmes have restarted and are expanding into new areas. The Common Evaluation Process for security equipment (CEP) developed a roadmap for improvement, followed by a reorganisation of the tasks and responsibilities of the ECAC groups concerned with security technology aimed at improving the reliability, sustainability and transparency of the work.

#### Delivery of the 2022-2024 work programme

- 4. In accordance with the ECAC work programme 2022–2024, the following objectives in the field of aviation security were defined:
  - To promote a risk-based approach to aviation security;
  - To promote the development and use of security technology to address current and emerging threats;
  - To enhance the efficiency and effectiveness of the ECAC Common Evaluation Process of security equipment (CEP);
  - To harmonise aviation security measures on a Pan-European basis;
  - To support Member States in maintaining effective aviation security in the face of current changes and challenges within the aviation industry; and
  - To promote European priorities in aviation security with international partners, regional and international organisations

# Organisation

- 5. The work programme for security is delivered by a combination of the efforts of its expert groups, and by operational programmes directly managed by the ECAC Secretariat and delivered with the support of Member State experts.
- 6. The ECAC Security Forum ensures coordination and exchange of information on topics of common interest (e.g. artificial intelligence, aviation security technology, background checks), and comprises representatives of all ECAC Member States, Observer States and industry organisations. Three task forces (Guidance Material, Technical and Training) as well as three study groups (e.g. Behaviour Detection, Cyber Security, Explosive Detection Dogs) are instrumental in developing recommendations and supporting material for all ECAC Member States.

- 7. In addition, ECAC directly implements four operational programmes for the benefit of its Member States:
  - Aviation Security Audit Programme;
  - Aviation Security Capacity-Building Programme;
  - Common Evaluation Process (CEP) of security equipment; and
  - CASE II Project A separate paper on the activities of the CASE II Project has been provided as IP/12.
- 8. Details of the delivery of the various aspects of the work programme are set out in the following **Attachments**:
  - **Attachment 1**: Aviation security policy
  - Attachment 2: ECAC Common Evaluation Process of security equipment (CEP)
  - Attachment 3: ECAC Aviation Security Audit Programme
  - **Attachment 4**: ECAC Aviation Security Capacity Building Programme
- 9. Two European coordination groups work in the domain of aviation security, which assist the coordination of the European position at high-level events such as the ICAO Assembly, and discuss and exchange views on proposals at expert-level events.
- 10. The long-standing European Coordination Group on Aviation Security matters (ECG-AS) was joined by the European Coordination Group on Aviation Cyber Security matters (ECG-CS), which had been created in 2021 and began its programme of work with preparations for the first ICAO Cybersecurity Panel (CYSECP/21, May 2022). The ECG-CS seeks not only to complement the work of ECG-AS on security matters, but also to reflect the need for a multidisciplinary approach to cybersecurity work, drawing a wide range of expertise into the group from outside the security community.
- 11. The two groups' work has contributed to the positions taken by European expects at three ICAO Aviation Security Panels and three Cyber Security Panels, as well as at the 41<sup>st</sup> ICAO Assembly and other high-level meetings where security-related matters were discussed in 2022-2024.

#### Action to be taken

12. The Plenary Session is invited to note the main achievements in the security field for the period 2022-2024.

#### **AVIATION SECURITY POLICY**

### Promoting a risk-based approach to aviation security

- 1. The Security Forum and relevant security groups regularly discussed the evolution of the threat picture (e.g. insider threat, cyber threats) and possible attack using different attack vectors (e.g. chemical materials). Debates at meetings of the Security Forum and the security groups represented an opportunity to discuss the effectiveness and efficiency of security measures in mitigating threats to aviation, including developments in security technologies and the role of security equipment and technical innovations in addressing current and emerging threats; challenges relating to the use of security equipment; policy and regulatory issues pertaining to cargo and mail security etc.
- 2. These resulted in the development of new guidance material and best practice documents, including for example, on the link between behaviour detection and insider threat, sharing risk information, managing protests at regulated sites at airports.
- 3. Moreover, under the framework of the ECAC Capacity Building Programme a new training course on Best Practices for Risk Management in Aviation Security was developed by the ECAC Secretariat to promote the knowledge and an understanding of new and evolving threats and to support Member States in addressing the threats effectively. Until now security experts from ten Member States benefitted from this course.
- 4. A more substantial change of the application of the risk-based approach comes with the creation in 2024 of a new Threat Response Group under the umbrella of the Security Forum. This new group will promote the use of threat and risk information in prioritisation of ECAC's security activities generally, as well as contributing specifically to the programme of security technology work, to make the process of risk-based prioritisation of ECAC's work related to security technology and equipment more efficient.

# Harmonising aviation security measures on a Pan-European basis

- 5. To maintain consistency with the most recent changes to the EU/EC Regulations and ICAO Annex 17 Standards and Recommended Practices (SARPs), and to facilitate the development of efficient, effective and uniform aviation security measures on a pan-European basis, amendments to ECAC Doc 30, Part II (Security) 13th edition/May 2010 were regularly made by the ECAC Secretariat and security groups (e.g. GMTF, TTF), and adopted by Directors General: amendments n°15 dated June 2022, n°16 dated October 2022 and n°17 dated July 2024.
- 6. Currently, ECAC Doc 30, Part II consists of five parts and contains 25 chapters providing security recommendations in all areas of aviation security; and also 103 annexes supporting the understanding and implementation of these measures by ECAC Member States. Additionally, the ECAC Aviation Security Handbook provides best practices in the fields of risk management, training and human factors, cyber security, security culture, landside security, behaviour detection and other security measures, containing in total more than 100 documents. It also intends to assist Member States with their policy making on aviation security matters and to promote innovations and advanced approaches and technologies in aviation security. A new edition of the Handbook was prepared by the ECAC Secretariat in September 2023. The Handbook documents are regularly updated, and new documents are developed and shared with ECAC Member States.

- 7. More than 40 new documents were developed by different security groups to provide guidance and best practices in the field of security technology and innovations; oversight; risk management; screening; recruitment, training and certification of security personnel; human factors as well as behaviour detection. This included 4 new Annexes to Doc 30, Part II and 40 new documents for the Aviation Security Handbook. Furthermore, more than 45 existing documents were revised by different security groups.
- 8. Support to two Member States interested in establishing one-stop security with the EU is being provided through the ECAC Aviation Security Audit Programme. In doing so, an ECAC security audit (airport level) was organised in Albania in February 2023. An ECAC security audit (airport level) will be organised in North Macedonia in Q4 2024. Furthermore, the GMTF developed a new Guidance on best practices for procedures for achieving one-stop security with another ECAC Member State with the aim of promoting one-stop security and sharing best practices for procedures to assist with achieving one-stop security, to avoid the duplication of screening and to increase sustainability of aviation security and cooperation between States.

# Promoting the development and use of security technology to address current and emerging threats

9. The relevant working groups (e.g., TTF, CEP-MG) developed new performance standards and testing methodologies and explored the possibilities for further use of advanced security equipment. However, the pandemic and post-pandemic situation limited possibilities for in-person interactions (testing, meetings to discuss classified information) which held up the pace of delivery for both standards and testing methodologies in the early part of the triennium. Various actions to tackle this challenge, including the reorganisation of technology groups, were taken to bring more flexibility and efficiency into security technology workstreams in 2024.

# ECAC COMMON EVALUATION PROCESS OF SECURITY EQUIPMENT (CEP)

# Enhancing the efficiency and effectiveness of the ECAC Common Evaluation Process of security equipment (CEP)

- 1. During the period 2022-2024, the CEP has continued to run its test programmes for the benefit of ECAC Member States and industry stakeholders (e.g. airport operators). Reliable test results on security equipment performance contained in test reports (for equipment configurations meeting an ECAC/EU performance standard) have been regularly provided to a designated official in each Member State and to the European Commission (DG-MOVE) for the purpose of applying the EU stamp to equipment deployed at EU airports.
- 2. Moreover, the lists of equipment configurations found to meet any ECAC/EU performance standard have been regularly updated and made available on the public part of the ECAC website for the benefit of the industry and the worldwide aviation security community. They are also provided to ICAO for the purpose of updating the AVSECPaedia secured section in its own website.
- 3. So far during the triennium, 141 tests have been allocated under the CEP 54 in 2022, 48 in 2023 and 39 so far in 2024 of which 77 have been completed, resulting in 135 equipment configurations being agreed as having met the ECAC/EU performance standard. Additional allocations are already pending in 2024.
- 4. Under the ECAC Capacity Building Programme CEP awareness training has been delivered to 21 Member States via three workshops organised by the ECAC Secretariat. The Secretariat has also provided advice to Member States in response to more than 150 enquiries relating to CEP-approved equipment or related technical issues.
- 5. During the triennium, CEP procedures were continuously reviewed under the strategic approach guided by the CEP Roadmap 2022-2024, adopted by Directors General (DGCA(SP)/71, 25-27 August 2022). This roadmap was built upon three principles (reliability, sustainability and transparency), representing the foundation upon which the CEP needs to be built, and three outcomes.
- 6. The CEP Roadmap 2022-2024 included the following strategies:
  - Increasing the resources and capacities of existing CEP Participating Test Centres (training of new staff or staff specialised in other activities, additional facilities, etc.) both to increase the number of equipment configurations tested and to implement testing to additional types of equipment not yet tested at that Test Centre (two CEP Participating Test Centres have increased staff and facilities dedicated);
  - Increasing the number of CEP Participating Test Centres, either by welcoming new CEP Contributing Authorities (current dialogue with three States), and by existing CEP Contributing Authorities nominating additional Test Centres in their territory (current dialogue with one Member States); and
  - Implementing new testing approaches (e.g. equivalence testing for trays and other critical components), modular testing and simultaneous testing, all implementing during the triennium.
- 7. The process of continuous improvement resulted in several new procedures being implemented:

- CEP Test Centre Quality Plan Guidance Document, produced by the Quality Control Study Group, describes the elements of a common quality baseline to support continuous quality improvements at CEP Participating Test Centres;
- The CEP Management Group has endorsed the update of the document "CEP Test Centre Quality Plan Guidance Document (CEP TCQPGD).
- A major update of the CEP Handbook is planned to be completed during Q4 2024.
- The ECAC equipment lists available on the ECAC website have been continuously updated as new test results become available.
- 8. Directors General, at their 2023 Special meeting (DGCA/72(SP), 7-8 September 2023) decided to task the Security Programme Management Group with taking forward a number of changes to ECAC work on security technology. Among these changes were the reallocation of the task of developing Common Testing Methodologies (CTMs) away from the Technical Task Force (TTF) and to the Common Evaluation Process Management Group (CEP-MG), in order to streamline this process.
- 9. Following the agreement by the Security Programme Management Group of new Terms of Reference for the group affected by these changes, the CEP Management Group is now open to all ECAC Member States, with the aim to promoting engagement of more Member States into the CEP as either Supporting Authorities or Observers. Currently the CEP consists of five States as Contributing Authorities (France, Germany, Netherlands, Spain, United Kingdom) and three States as Supporting Authorities (Norway, Switzerland, Portugal). Ireland is expected to become the fourth Supporting Authority.
- 10. The development and maintenance of ECAC Common Testing Methodologies (CTMs) as of April is tasked to the CEP Management Group (CEP-MG), though a new CTM Sub-Group (CTM-SG). It aims to increase efficiency, to improve the timelines, facilitate CTMs harmonisation and transparency.
- 11. The CEP Management Group agreed to draft another CEP roadmap 2025-2027 at its 60<sup>th</sup> meeting (CEP-MG/60, 12 and 21 March 2024). This new roadmap is being drafted as the strategic document to support the further developing the CEP, enhancing its efficiency and effectiveness, and ensuring it has the resources to deliver a professional, responsive, and world-leading equipment certification process for all stakeholders, considering the lessons learned during the implementation of the roadmap 2022-2024.
- 12. The CEP currently applies to nine categories of security equipment: Explosive Detection Systems (EDS), Liquid Explosive Detection Systems (LEDS), Security Scanners (SSc), Explosive Trace Detection (ETD) equipment, Metal Detection Equipment (MDE), Explosive Detection Systems for Cabin Baggage (EDSCB), and Walk-Through Metal Detection (WTMD) equipment; during the period 2022-2024 the CEP has been extended to two new categories of equipment, Explosive Vapour Detection (EVD) equipment and APIDS (Automated prohibited item detection software). While APIDS tests commenced early in 2023, EVD tests are expected to commence at the end of 2024, awaiting the increase on maturity of existing systems. At the time of writing, there are eight hundred and four (804) configurations found to meet a current ECAC/EU valid performance standard among all the CEP test programmes.
- 13. This continuing expansion of the CEP's range of activities, along with the greater range of regulatory measures that it supports, presents developing challenges in terms of the volume of activity that needs to be carried out under the aegis of the CEP. The reforms of the process mentioned above are aimed to contribute to addressing these challenges, but also require the enhancement of cooperative efforts with all participants in

the process: not just Member States and test centres but also industry actors, and discussions with all stakeholders are taking place to enhance this cooperation.

- 14. In this context, in order to engage with equipment manufacturers, regular information sessions with equipment manufacturers have been organised. Thirteen sessions have been organised so far between 2022-2024, and at the time of writing the fourteenth Information Session was being planned for July 2024. In addition, since June 2022, the Secretariat started the production and dissemination of regular reports to each individual manufacturers on the progress of any active CEP test request
- 15. Cooperation with international partners interested in CEP procedures and results is also a high priority for the CEP activities. During this triennium, this cooperation has been reflected in the sharing of information with partner States, and their participation in ECAC technical meetings to exchange information and work towards the harmonisation of performance standards and testing procedures, in accordance with the relevant Memorandums of Understanding.

#### **ECAC AVIATION SECURITY AUDIT PROGRAMME**

- 1. Due to the COVID-19 pandemic, no ECAC audits were conducted from January 2020 to November 2022. As a consequence, all ECAC auditors' certifications had expired, and so none of the ECAC auditors could conduct ECAC audits until they were recertified in accordance with the Audit Methodology.
- 2. To resume the Audit Programme in Q4 2022 and respond to Member States' requests for audits, several amendments to the ECAC Audit Methodology were prepared by the ECAC Secretariat to address the issue of auditors' recertification. The proposed amendments were adopted by the Security Programme Management Group at its thirty-fifth meeting (SPMG/35, 23 June 2022).
- 3. With the aim of recertifying existing ECAC auditors, the ECAC Secretariat organised Recurrent training and recertification of auditors in Paris in June 2022 and April 2023. Fifteen auditors from eight Member States (Azerbaijan, Germany, Ireland, Montenegro, Poland, Portugal, Romania and Türkiye) were recertified as ECAC auditors.
- 4. To ensure the effectiveness of ECAC audits, including the coverage of the recent changes to Doc 30, Part II Recommendations, the Auditor's Aide and several other documents included in the Auditor's Handbook (e.g. templates for drafting the Interim Findings Report and Final Audit Report), were updated in 2022 and 2023 to reflect the provisions of the Amendments 16 (October 2022) and 17 (July 2023) to Doc 30, Part II. In addition, several additional amendments to the Auditor's Aide were prepared in 2024 to include additional guidance material for ECAC auditors.
- 5. The ECAC Certified Aviation Security Auditors' Group was established as a standalone group in March 2020. The group held three annual meetings in 2022-2024. These meetings provided an opportunity for the ECAC auditors to exchange experience and best practices in auditing various ECAC Doc 30, Part II recommendations, as well as to develop consistency in evaluating the implementation of ECAC Doc 30, Part II recommendations. The auditors also discussed ideas for amending the Audit Methodology and improving the Auditor's Handbook.
- 6. A description of full-scale and thematic audits in the ECAC Aviation Security Audit and Capacity Building Programmes Catalogue was updated in 2023 to provide Member States with a better understanding of the objectives, scope and benefits of the audits.
- 7. Five audits of an airport (one full-scale and four thematic) have been organised under the ECAC Aviation Security Audit Programme in Member States since the resumption of the Programme in December 2022. These supported Member States in assessing their implementation of ECAC Doc 30, Part II recommendations, identifying areas of needed improvement, providing advice and technical expertise as well as establishing one-stop security with the EU. An analysis of the results of the completed audits was regularly carried out by the ECAC Secretariat to identity trends in complying with Doc 30, Part II, including common deficiencies, and to identify areas where improvement might be needed, and presented to the Security Programme Management Group and Directors General.
- 8. Training and certification of new ECAC auditors was conducted in Dublin from 12 to 18 June 2024. Six new auditors from four Member States (Austria, Ireland, Romania and

the United Kingdom), the United States of America and the ECAC Secretariat were certified as ECAC auditors. To date, 21 security experts are certified as ECAC auditors.

9. At its fortieth meeting (SPMG/40, 31 May 2024), the Security Programme Management Group supported the organisation in 2025 of ECAC cyber security audits under the framework of the ECAC Aviation Security Audit Programme. To offer ECAC cyber security audits, the ECAC Secretariat prepared a draft Cyber Security Audit Methodology and the Cyber Security Auditor's Handbook. Subject to the adoption of the Methodology by the Security Programme Management Group, a pilot cyber security audit will be organised in Q4 2024. Training and certification of new ECAC cyber security auditors will be organised in 2025.

### **ECAC AVIATION SECURITY CAPACITY BUILDING PROGRAMME**

- 1. The ECAC catalogue of capacity-building activities was regularly updated in 2022-2024 to include information on new and updated activities offered to Member States under the ECAC Aviation Security Capacity Building Programme. The catalogue was provided to all Member States and made available online on the ECAC website.
- 2. The needs of Member States in capacity-building were analysed by the ECAC Secretariat based on a survey. A survey on Member States' priorities for developing capacity building activities in 2024-2026 was launched by the ECAC Secretariat in October 2023. The objective of this survey was to identify common priorities and needs among Member States for developing new activities and/or restarting existing ones (e.g. vulnerability assessments).
- 3. Feedback from participants was taken into consideration by the ECAC Secretariat when improving the training material. Online feedback forms were developed and implemented by the ECAC Secretariat in September 2023 to improve the process of providing participants' feedback and facilitate its analysis.
- 4. Since the beginning of 2022 nineteen training courses were organised under the ECAC Aviation Security Capacity-Building Programme in person and twenty online for the benefit of aviation security experts and aviation security auditors/inspectors from thirty-nine several Member States. Particular attention was paid to improving skills and knowledge of national auditors, with particular focus on inspecting/auditing cyber security measures, passenger and baggage screening, hold baggage screening, deployment and use of security equipment; and improving covert testing programmes and protocols as well as national auditors' competencies in conducting covert tests in various domains of aviation security.
- 5. A multilateral Workshop on Recruitment, Training and Certification of Screeners in Post-Pandemic Environment, was organised on 18-19 April 2023. Its main objective was to discuss developments and challenges relating to the recruitment of screeners, their training, including on the use of advanced security technologies, and certification in the post-pandemic environment. It also aimed to share experience during the COVID-19 pandemic and return to normal operations and to share lessons learnt and best practices for addressing the challenges.
- 6. Another multilateral workshop on Human factors and motivation in aviation security will be organised in Paris on 13-14 November 2024. Its main objective is to discuss challenges and lessons learnt relating to human factors and motivation in aviation security as well as to share best practices in this area.
- 7. To meet the needs expressed by ECAC Member States, two new courses focusing on risk management and auditing cyber security measures were developed and four existing courses were updated in 2022-2024. A new Best Practices for National Auditor Cyber Security (Level 2) course is currently under development by the ECAC Secretariat. The training material will be finalised by the end of October 2024 with a pilot course to be organised in November 2024.
- 8. For the first time, ECAC organised a training course for European Commission aviation security inspectors. The Best Practices for National Auditors Cyber Security (basic) was conducted online on 4 and 6-7 October 2022. The course enabled the exchange of

experience and best practices in inspecting and auditing the implementation of cyber security measures in aviation. Such valuable cooperation contributed to developing a common approach to addressing cyber threats to aviation, continuous professional development of aviation security experts and increasing aviation security in the European region.