

Recognition of Equivalence (RoE) and One-Stop Security (OSS) Challenges and Opportunities

Executive Summary

- IATA and its member airlines fully support States and airport operators in conceptualizing, designing, and implementing One-Stop Security (OSS) and Recognition of Equivalence (RoE) collaborative arrangements, recognizing their potential to enhance security outcomes while improving passenger flow, operational efficiency, and hub competitiveness.
- Recognition of Equivalence (RoE) allows for the mutual recognition of equivalent robust security
 measures applied at the point of origin, that in turn facilitates the elimination of potential
 redundant measures and security controls and opens the way for OSS initiatives.
- Global implementation remains limited, especially outside Europe, with fewer than a dozen non-European States applying OSS through unilateral, bilateral, or multilateral arrangements.
- Major implementation challenges persist, including the lack of an Industry and ICAO-endorsed economic modelling framework, combined with infrastructure and master-planning constraints, regulatory fragmentation, and extraterritorial demands imposed by downstream States that do not fully accept the controls applied by upstream States.
- A practical early focus for States and airports not yet convinced about the full economic and operational benefits of OSS is the deployment of hold-baggage OSS initiatives, where updated ICAO guidance and existing technical criteria provide a lower-complexity, operationally credible pathway before expanding to full passenger-flow OSS.



Background Information

The original One-Stop Security (OSS) initiative, also known as Recognition of Equivalence (RoE), seeks to eliminate redundant aviation security screening for transfer passengers and hold baggage between States that apply comparable or equivalent security measures and maintain mutually recognized security arrangements. RoE and OSS complement existing bilateral Air Service Agreements (ASAs) between States and associated administrative clauses on security.

The OSS concept was created by the European Civil Aviation Conference (ECAC) in 1996, with the initial objective of creating a regional airspace composed of its Member States (44 today), in which the screening at transfer for all ECAC originating passengers and hold baggage could be removed.

This objective was only possible if the quality and equivalence of the screening measures applied at origin could be guaranteed and verified by independent and trusted entities.

Therefore, ECAC created a regional Aviation Security Audit Programme in 1999 with the following two main objectives (slide 7, ECAC presentation, 2018):

- 1. Effective implementation of international standards and harmonization of security measures; and
- 2. Facilitation of one-stop security arrangements among ECAC member States

In addition to the ECAC Aviation Security Audit Programme, a European Union (EU) Aviation Security Inspection Programme was adopted in 2002 under Implementation Regulation (EC) 2320/2002 with the objective of verifying the uniform application of common aviation security standards across all EU Member States (27 today).

Regulation (EC) 300/2008 replaced 2320/2002 in maintaining the inspection scheme. Detailed procedures for conducted EU inspections are governed by the Commission Regulation (EU) 72/2010. These independent auditing/inspecting regional entities reinforce the quality of the harmonization of security measures, as well as the current success of OSS in Europe.

In parallel, the OSS concept was introduced in Annex 17 by the ICAO AVSEC Panel in 2005, then approved by the ICAO Council in November 2005, with an applicability date of 1 July 2006. The introduction of the OSS provisions in Annex 17 protected States already implementing OSS from potential USAP-CMA findings.

ICAO published guidance in the Aviation Security Manual (Doc 8973, Restricted) in 2014, and in 2023, shared the previously restricted guidance through a public document titled: Recognition of Equivalence of Security Measures - One-Stop Security (OSS).



Challenges

Since its inception of the One-Stop Security (OSS) concept worldwide, very few non-European States have implemented it, despite multiple working papers presented by IATA at the AVSEC Panel and in the regions. Some States have established their own OSS schemes, such as Australia, New Zealand and Singapore in 2017, or have entered into unilateral OSS agreements, such as Qatar, the UAE or more recently Panama as presented by LACAC during the last ICAO Assembly (A42-WP/239 in 2025).

As of today, fewer than a dozen non-European ICAO States (including the US, Canada and the UAE) are implementing the OSS concept, either unilaterally, meaning one-way only, or bilaterally, or even multilaterally. Others (such as Israel and Japan) have been in discussions with Europe for over a decade, illustrating the policy and implementation complexity and associated challenges. Several challenges have been identified by ACI World in 2020, the US, the UK and New Zealand or Brazil in 2024.

These challenges are categorized as follows:

Economic Modelling and Justification Challenges

A critical challenge identified in States implementation of One-Stop Security (OSS) arrangements relates to the absence of an internationally recognized methodology or guidance for developing an economic justification model. While the security and facilitation benefits of OSS are widely acknowledged, States, airports, and aircraft operators often lack a clear mutual framework to assess the financial feasibility, longterm return on investment, and cost-benefit distribution among stakeholders.

This deficiency complicates national decision-making processes and delays policy adoption and liaison with bilateral and multilateral States. Governments and airport/terminal operators require a robust economic case to justify infrastructure upgrades, procedural alignment, and resource allocation. In the absence of ICAO-endorsed economic modelling guidance, stakeholders rely on disparate, ad hoc approaches that often fail to capture the full scope of benefits, such as operational efficiency, passenger experience, reduced environmental impact, and enhanced coordination between security authorities.

Furthermore, the absence of a standardized model makes it difficult to evaluate cross-border cost recovery mechanisms, particularly where benefits are shared between multiple States or between public and private entities. Airports may face challenges in quantifying potential savings derived from reduced re-screening or in demonstrating how OSS investments align with national transport strategies and public value metrics.

A harmonized ICAO framework providing clear economic and policy guidance would help ensure consistency, transparency, and comparability of proposals for OSS implementation. Such guidance should include model templates for cost-benefit analysis, investment prioritization, and performance indicators, thereby empowering States, airports, and operators to make evidence-based decisions and attract appropriate funding for secure and efficient OSS integration.

Infrastructure challenges

Airports must invest in existing facilities to accommodate both OSS and non-OSS transfer passenger flows, particularly where immigration or other border procedures are required for all transfer passengers. Infrastructure challenges also include other arrangements that could be in place, such as the Schengen area in some European States, as well as their temporary suspension that could be imposed, often with a short notice, by participating States.





Airport Master Planning challenges

When the possibility of implementing OSS has not been integrated into the airport master plans, particularly at the initial stages of the planning, potential misalignments in areas such as influencing terminal configuration, zoning of space, throughput performances, and terminal capacity when freeing up space that otherwise would have been used by security screening infrastructure.

Another challenge is having to factoring in and planning offer modular or reversible layouts to allow temporary OSS suspension or reinstatement based on changing risk conditions and levels. Discussions for OSS should also be included in Airport Master Planning processes as early as possible in order to support the potential adoption, utilization, and support of digital trust solutions (verifiable security credentials, digital certificates and passports, Digital Travel Credentials (DTCs), and other forms of digital admissibility) within airport management systems.

Regulatory challenges

When adequate information has not been shared with third-party (downstream) States potentially impacted by (upstream) OSS arrangements, this may result in such impacted (downstream) States potentially imposing additional extraterritorial measures directly on Operators (airports and airlines) in order to close perceived gaps in security measures and controls.

Interagency Regulatory challenges

When all agencies involved in the operational process flow are not adequately included in the OSS discussions, such as immigration agencies for passengers or customs agencies for hold baggage, such exclusions in the consultative and operational design process may result in potential misalignment between regulatory requirements and operational realities, or an overly complicated patchwork of regulations.

Operational challenges

When affected airport and aircraft operators, including their respective External Service Providers (ESPs), have not been associated in the OSS project at its earliest conceptual stages, this may result not only in potential operational misalignments, but may also trigger post-OSS implementation regulatory-based adjustments to security procedures and controls as airlines must accept all the conditions imposed by relevant authorities from the States of the operations (Last point of Departure) and the State of the Operator when departing/returning for home-based airports and hubs.

Extraterritorial challenges

When additional extraterritorial measures are imposed on operators by third-party (downstream) States that are not fully satisfied with the (upstream) OSS arrangements to compensate for a perceived gap in the required levels of security measures and controls. Again, airlines are ultimately forced to accept all conditions imposed on their operations by the authorities of the States impacted by such OSS arrangements.

During the last 42nd ICAO Assembly held in 2025, the Executive Committee "acknowledged the ongoing regional" efforts to implement OSS arrangements through close collaboration and the sharing of best practice and expertise. The Committee noted the benefits of OSS arrangements in not duplicating security controls whilst also recognizing the need to ensure the highest levels of security are implemented and upheld overtime. The Committee also noted the request for OSS arrangements between States to be made known to all States so that they can respond as appropriate" (para 13.26 of A42-WP/645).





In addition to the foreword in Annex 17, the term "one-stop security" appears only twice in the ICAO Assembly Consolidated Statement on continuing ICAO policies related to aviation security, as well as in the title of the guidance on Recognition of Equivalence of Security Measures - One-Stop Security (OSS). It means that nor OSS, neither RoE are clearly defined in Annex 17.

In parallel of the regional and international ongoing developments, the U.S. Congress authorized, in December 2022, the Transportation Security Administration (TSA) to launch a six-year OSS Pilot Program (covering up to six locations) which represents a significant development partially linking U.S. national policy to ICAO's global framework.

Risk-Based Continuous Verification

While periodic on-site assessments remain an important component of maintaining trust between States, a fixed interval of two years, as currently documented by the publicly available ICAO Recognition of Equivalence of Measures - One-Stop Security (OSS) guidance published in 2023, does not reflect the principles of modern, performance-based oversight. Indicating in public guidance that reassessments are at predetermined intervals create procedural compliance rather than risk and assurance driven approaches that may divert resources away from areas of genuinely elevated risk.

In addition, a predetermined interval for periodic on-site assessments is contradicting the spirit and efficiency of the collaborative arrangements that may arise from the Recognition of Equivalence of the measures implemented in an upstream State X, and the terms agreed upon in the Memorandum of Understanding (MoU) creating the legal basis for OSS arrangements. The frequency of on-site assessments, as well as the relevant factors and performance indicators used for such assessments should remain flexible and decided by the States involved in collaborative arrangements.

Moreover, the "recommendation that on-site re-assessments should be conducted at regular intervals notexceeding two-years" was introduced in 2017, in a "Restricted" ICAO document (Aviation Security Manual, Doc 8973) for guiding States and not for public exposure. There is no reference to predetermined intervals for on-site assessments in Annex 17, nor in the "Continuous Review" portion of the model of MoU model for RoE of measures introducing OSS (Appendix 28 to Doc 8973 and public guidance), nor in the USAP-CMA Protocol Questions.

In this context, a more credible and operationally aligned approach is the risk-based adoption on continuous validation, by the States involved, where the frequency and depth of reassessment are calibrated to:

- The maturity and demonstrated performance of the *upstream* State X's security oversight system,
- The stability of its regulatory framework and amendment cycle,
- Real-time intelligence on threat evolution,
- Incident history and operator compliance trends, and
- The effectiveness of existing reciprocal information sharing arrangements.

Under this model, States with strong oversight performance and consistent compliance records may warrant longer intervals between on-site assessments, supplemented by continuous monitoring, datasharing, and targeted off-site validation activities. Conversely, States showing variability, emerging threats, or systemic vulnerabilities would justifiably be subject to shorter, more intensive review cycles.

This approach preserves assurance, reduces unnecessary burdens on States and operators, and aligns with ICAO's broader movement toward risk-driven, performance-based security oversight, rather than prescriptive calendar-driven inspection timelines.



IATA Opportunities Planning

In parallel with the challenges already documented when trying to implement OSS for Passengers (Annex 17, Standard 4.4.3), the ICAO AVSEC Panel, in 2025 and following decisive advocacy from IATA, expanded the original concept of OSS, or more widely the concept of RoE, to include some security measures that are not directly related to the screening of persons or baggage. The aircraft searches and checks (Annex 17, Standard 4.3.2) will be included in the OSS or RoE concepts in the forthcoming Amendment 19 to Annex 17.

The Panel also agreed to continue considering the broader application of OSS and RoE within Annex 17 in the future. Proposals were presented for expanding RoE to other topics such as, for example, background checks for Operator's security managers.

The well-known potential OSS benefits are the reduction of congestion, shorter transfer times improving airline minimum connection times, improvement capital and operational costs for redundant screening areas, optimized resource allocation and staff utilization, enhanced hub attractiveness through seamless transfer experience and getting for the future of digital and data-driven security management and oversight.

In addition to the above-mentioned benefits, some "reachable" opportunities could already be explored to expand OSS implementation, addressing both current operational and financial challenges.

OSS for Hold Baggage (Annex 17, Standards 4.5.1, 4.5.2, 4.5.3, 4.5.4, 4.5.5 and 4.5.6)

During the year 2020, between 17 February 2020 and 3 November 2020, IATA launched the HBS OSS initiative with more than 60 security professionals who developed technical criteria through ten (10) meetings and conference calls. The full 125-pages Phase 1 report is available here.

In 2020, the initiative aimed to create operational added-value proposition in hold baggage operations by enabling risk- and performance-based outcomes through augmenting current security standards and practices.

It focused on major transfer hubs (handling more than 80% of global transfer traffic) and their feeder airports. These locations presented the greatest potential for gains derived from high quality and technologically advancements security systems. The project sought to promote globally risk-based outcome-focused standards encouraging the use of the most efficient and innovative solutions. Both, hubs and their feeder airports play key roles in realizing the aspirational objectives of such an approach.

More importantly, all originating hold baggage carried on commercial air transport must be screened at the point of origin in accordance with appropriate standards for screening defined by the appropriate authorities, protected from interference, individually identified as accompanied or unaccompanied, and finally accepted for carriage by the aircraft operator (Annex 17, Chapter 4.5).

When the security measures applied at the point of origin are not deemed sufficient by the authorities of the next point of transfer (or arrival), then additional (often extraterritorial) measures are imposed prior to departure.

In practice, it means that when hold baggage departs its airport of origin, the applied security measures must be accepted by the authorities of the State of departure, deemed acceptable by the authorities of the State of transfer (or arrival), and ultimately by the aircraft operator.

In this context, the systematic rescreening of hold baggage at transfer points could legitimately be questioned and reconsidered. The technical criteria essential for a multilateral validation process for Hold Baggage Screening could therefore be further developed.





It should also be noted that the ICAO guidance on Hold Baggage Screening, Handling and Processing has been adjusted in June 2025, including a section dedicated to "Hold Baggage Reconciliation - the accompanied versus unaccompanied process", which could offer new opportunities for implementing OSS for HBS. More details are available in the IATA Position Paper on Hold Baggage Reconciliation (2025).

In the current context, it is proposed that the HBS OSS initiative be resumed and continued in 2026, with outcomes being shared within the international community in 2027, leading to the promotion of a global OSS implementation for all HBS transferring through major hubs by 2028.

OSS for Crew (Annex 17, Standards 3.5.2, 4.2.5, 4.2.6 and Annex 9, Standard 3.70)

At transfer airports, crew members may be legitimately considered as representing better opportunity to manage aviation security risk than international passengers, as they are subject to background checks when issued a Crew Member Certificate or Crew Identity Card (Annex 9, Standard 3.70 and Annex 17, Standard 3.5.2), and to 100% screening when departing (Annex 17, Standard 4.2.5 and 4.2.6).

Accordingly, all crew members should be eligible for OSS at transfer points, ideally supported by automated crew identification kiosks where feasible.

Crew members operating multi-sector duty patterns that originate and terminate at the same base of aircraft operations may, under specific conditions, be exempted from re-screening between sectors. This exemption applies when the flight and cabin crew complete consecutive sectors within the same duty period, possible change aircraft but and remain within the airport's secure or sterile area during the turnaround between flights. To maintain the integrity of this exemption, the crew must remain within a designated security-restricted area or under continuous supervision throughout the turnaround period. The chain of custody for personal belongings, baggage, and flight deck equipment must be preserved to ensure that no prohibited articles are introduced. Security controls established by the aircraft operator must always remain unbroken, and there must be no exit from or breach of the sterile environment.

The aircraft operator's aviation security programme shall include documented procedures to verify and ensure the continued security integrity of crew, their possessions, and operational equipment between sectors. These procedures should specify the oversight responsibilities, supervision arrangements, and reporting mechanisms to confirm that all conditions of the exemption are met and maintained throughout the duty period.

Divergences and synergies between the ICAO OSS concept and TSA OSS project

U.S. Legislative and Programmatic Milestones (2023–2025) - under U.S. law (Dec 2022), TSA may operate OSS pilots for six years at no more than six Last Points of Departure (LPDs). Requirements include equivalent security standards, segregation of screened passengers, insider risk controls, and joint covert testing.

In October 2024, TSA and the UK DfT signed an OSS MOU - phase 1 (ATL/DFW-LHR) began Feb 2025, with Phase 2 (LHR-U.S.) to begin June 2025. TSA reduced initial 27 interested locations to 13 potential sites for completion before 2028.

Given these developments, the divergences between the two concepts should be discussed at the ICAO AVSEC Panel level in 2026. Clarifications and potential synergies could then be developed and reflected in ICAO guidance material, including the update of model Memorandum of Understanding (MoUs).





Adjustment of existing ICAO Aviation Security Manual (Doc 8973, Restricted)

Following discussions at the ICAO AVSEC Panel, all relevant guidance material, including the existing ICAO guidance on Recognition of Equivalence (RoE) and One-Stop Security (OSS) should be adjusted.

Alignment in terminologies in Annex 17, only using "collaborative arrangements" in Standard 2.4.9, and "validation process" in Standards 4.4.3 and 4.5.5, should also be addressed.

Inclusion of all involved agencies in the discussions of OSS or RoE collaborative arrangements, such as immigration agencies for passenger flows and customs agencies for hold baggage flows, should be considered in ICAO guidance material.

Existing Public References

- 2014 IATA presentation on RoE and OSS*
- 2. 2019 IATA Position paper on Recognition of Equivalence
- 3. 2023 ICAO guidance on Recognition of Equivalence and One-Stop Security (OSS)
- 4. 2023 ICAO SkyTalk on OSS
- 5. 2024 Abstract of an IATA presentation on OSS for an ACI webinar*
- 6. 2025 IATA Position Paper on Hold Baggage Reconciliation

^{*}Available on the SeMS Aviation Community (please contact aviationsecurity@iata.org for access) together with more information shared in: Background information on OSS.