



**Fifth GREPECAS–RASG-PA Joint Meeting (GREPECAS-RASG-PA/5) and
 Twenty-Third Meeting of the CAR/SAM Regional Planning and Implementation Group
 (GREPECAS/23)**

Virtual Phase (Asynchronous, 19 January to 17 February 2026)
 In-Person Phase (Mexico City, Mexico, 4 to 6 March 2026)

Agenda Item 8: CAR/SAM Air Navigation Implementation

IATA A-CDM TOOLKIT

(Presented by IATA)

EXECUTIVE SUMMARY	
<p>This working paper presents an A-CDM toolkit elaborated by IATA to support globally harmonized and effective A-CDM implementation. It focuses on addressing the diverse operational challenges, needs, and responsibilities of all involved stakeholders, ensuring a consistent, effective and collaborative approach to airport operations and decision-making.</p>	
Action:	<p>Suggested actions</p> <p>The meeting is invited to:</p> <ul style="list-style-type: none"> a) Take note of the information provided in this working paper. b) Urge States, ANSP’s and Airports Authorities to perform the corresponding business case when considering upgrading SMGCS and Apron Control Management Service. c) Ask States, ANSP’s and Airports Authorities to consider the IATA A-CDM toolkit as a supporting material for implementing A-CDM, mainly the CRITICAL ELEMENTS AND CHALLENGES
<i>Strategic Objectives:</i>	<ul style="list-style-type: none"> • Safety • Air Navigation Capacity and Efficiency • Economic Development of Air Transport • Environmental Protection
<i>References:</i>	<ul style="list-style-type: none"> • ICAO Annex 14 • ICAO Doc. 9830 • ICAO Doc. 9971 • GREPECAS 22 Meeting Report

1. Introduction

1.1 During GREPECAS/22 meeting, A-CDM Implementation (F3) was discussed, and the Secretariat proposed a shift in focus from A-CDM to Surface Movement Guidance Control Systems

(SMGCS), addressing safety and efficiency at airports. This proposal was approved through Conclusion GREPECAS 22/13 below.

CONCLUSION	
GREPECAS/22/13	MODIFICATIONS APPROVAL TO CAR/SAM F3 PROJECT
<p>What: That, to implement Surface Movement Guidance Control System (SMGCS) as part of the F3 Project:</p> <p>a) the States approve the revised version (modifications) of the CAR/SAM F3 Project at Appendix B to this report.</p> <p>b) Member States and International Organizations review the proposed modifications to Project F3 and indicate their comments to the Secretariat by than 31 January 2025, and</p> <p>c) F3 Project Members prepare a detailed action plan, in conjunction with the Secretariat, to carry out such activities, with the identification of priority international aerodromes.</p>	<p>Expected impact:</p> <p><input type="checkbox"/> Political / Global</p> <p><input checked="" type="checkbox"/> Inter-regional</p> <p><input checked="" type="checkbox"/> Economic</p> <p><input type="checkbox"/> Environmental</p> <p><input checked="" type="checkbox"/> Operational/Technical</p>
<p>Why: To date, the F3 project has focused efforts on promoting the A-CDM concept and prepared an implementation guide accepted by the GREPECAS States. However, the Secretariat proposes new approach of the F3 project, based on the implementation of Surface Movement Guidance Control System (SMGCS) reflected in the revised version of the F3 Project.</p>	
<p>When: 1 December 2024</p>	<p>Status: <input checked="" type="checkbox"/> Valid / <input type="checkbox"/> Superseded / <input type="checkbox"/> Completed</p>
<p>Who: <input checked="" type="checkbox"/> States <input checked="" type="checkbox"/> ICAO <input type="checkbox"/> Other:</p>	

1.2 Justifications for changing the scope of the project F3 were listed in the appendix B of GREPECAS 22 Report, and they are the following:

- a) “A survey presented during GREPECAS/21 revealed the need to re-evaluate the approach to implementing A-CDM in the region.
- b) Investigations by the ICAO NACC and SAM Regional Offices concluded that the implementation of A-CDM, according to its original European definition, is not directly applicable to the CAR/SAM region, as it was designed to mitigate the effects of airspace management policies and take-off delays not implemented in our region.
- c) A significant lack of apron management and systems to improve situational awareness on the ground at airfields in the region was identified, a prerequisite for more advanced collaborative approaches in selected airports.
- d) Although capacity is an issue at some airports in the region, the implementation of A-CDM is not the direct solution to this challenge.
- e) It is recognized that the basis for an improvement in airport capacity is the implementation of appropriate platform management services and advanced SMGCS systems.
- f) This restructuring aligns with the correct implementation of the provisions contained in sections 9.5 and 9.8 of Annex 14, Volume I, Chapters 1, 7 and 9, Part II of PANS-Aerodromes (Doc 9981), and the guidance provided by Doc 9137, Part8 (Platform Management), Doc 9476 (SMGCS) and Doc 9430 (A-SMGCS).”

1.3 Although GREPECAS has changed the focus of implementing A-CDM to Apron Control and SMGCS, some CAR/SAM States has already or are planning to implement A-CDM. In this sense, IATA would like to share the A-CDM toolkit with all States CAAs, ANSPs and Airport Authorities as a contribution for a harmonized and successful A-CDM implementation and operations.

2. SMGCS and Apron Control Implementation

2.1 It is important to note that both Apron Control and SMGCS are ICAO Annex 14 Standards, respectively items 9.5.3 and 9.8.1.

2.2 An upgrade of SMGCS to A-SMGCS shall be based on the corresponding business case that takes into consideration visibility, traffic density, aerodrome layout and other local circumstances (ICAO Doc. 9830 – item 2.1.1).

2.3 Regarding the Apron Control, besides the same aspects mentioned in 2.2, a business case should also consider if the apron management service should be provided by an aerodrome ATS unit, by another aerodrome operating authority, or by a cooperative combination of these. (ICAO Annex 14 – item 9.5.1).

2.4 In CAR/SAM Regions, it is expected that just a few airports would need an apron control provided by an aerodrome operating authority and/or an A-SMGCS due to good visibility operations, low traffic density and/or simple aerodrome layout.

3. A-CDM Implementation

3.1 As global aviation demand continues to grow, the challenge of optimizing turn-around times, minimizing delays and delivering efficient passenger service becomes increasingly complex, particularly at airports where multiple stakeholders, including airlines, airport operators, air navigation service providers, and ground handlers, often operate in silos, each with distinct systems, priorities, and decision-making processes.

3.2 Airport Collaborative Decision Making (A-CDM) process addresses this challenge by promoting real-time information sharing and coordinated operations among all operational partners, thereby enhancing predictability, situational awareness, and overall capacity utilization.

3.3 Implemented at over 40 airports worldwide, A-CDM has delivered significant operational benefits, though its successful implementation requires more than just technological integration. It calls for a cultural shift and a comprehensive procedural transformation, with strong alignment across all participating stakeholders.

3.4 IATA strongly encourages the implementation of A-CDM through a tailored, practical, and effective approach that avoids unnecessary complexity and excessive costs.

3.5 To support globally harmonized and effective A-CDM implementation, IATA has developed a comprehensive A-CDM toolkit that provides step-by-step guidance. This A-CDM toolkit is attached as Appendix A to this working paper. It could also be obtained at [IATA ACDM Toolkit](#).

3.6 It focuses on addressing the diverse operational challenges, needs, and responsibilities of all involved stakeholders, ensuring a consistent, effective and collaborative approach to airport operations and decision-making.

3.7 The IATA A-CDM toolkit is structured around four key areas:

- a) A-CDM fundamentals & Systems - Introducing the core principles and enabling technologies that support collaborative decision-making.
- b) Sequence-building & A-CDM key Procedures - Defining the operational milestones and processes that drive coordinated airport operations.
- c) A-CDM Implementation process - Providing a phased, step-by-step approach for effective implementation.

- d) Challenges and Recommendations - Highlighting common obstacles and offering practical guidance for successful implementation.

3.8 Although the toolkit was developed to provide the big picture of A-CDM planning and implementation and it is highly recommended to consider it in total, it is important to call attention for the following even more essential extracts of the Chapter 6 - CRITICAL ELEMENTS AND CHALLENGES:

- a) Cultural Change - A-CDM involves creating a **commonly owned operational environment** based on **continuous information sharing**. It is necessary **to break the traditional silo approach** and **the traditional culture of blame avoidance**.
- b) Concept of Operations, AODB, ACISP and PDS Functionalities - The **A-CDM ConOps is one of the most important elements of the project**. It defines the **operational environment and information flows**, and **it is essential that all stakeholders endorse this new environment**. The functionalities of the PDS system regarding the **sequence-building process** and the capabilities to introduce additional features such as **flight swapping, flight prioritization, and slot apportionment should be discussed and agreed upon at this stage**.
- c) System Specification and Procurement - If the systems are not **specified, procured, or validated correctly**, the **A-CDM operational environment defined in the ConOps will not be successfully implemented**.
- d) Training Plan - For the implementation of an A-CDM project, **a training plan should be approved by the A-CDM WG. All appropriate staff should receive training before performing any duties** in the A-CDM environment. The training content should be part of the **safety case**. If **potential mitigations require changes to procedures or systems**, the training content should be **updated accordingly**.
- e) Communication Plan - For the implementation of an A-CDM project, **a communication plan should be approved by the A-CDM WG**. The communication plan should focus on:
- **Increasing and maintaining awareness and engagement** of staff involved in A-CDM.
 - **Contributing to the formation of an A-CDM community** that includes all stakeholders.
 - **Motivating and engaging the staff** by highlighting the benefits of the project and the progress being made.
- f) Transition Phase - The **transition** from conventional operations to an A-CDM environment is the **final milestone of the project and requires intense coordination amongst stakeholders**. This transition should be planned by the **A-CDM WG**. The transition plan can include:
- **Planning** for the training activities
 - **Communication** activities
 - **Systems' end-to-end testing** if not carried out earlier
 - **AIP publication** timeline if needed
 - Timeline for the **A-CDM trials**.

3.9 It is also important to highlight that A-CDM is not dependent of ATFM implementation. However, if the ATFM is already implemented, a procedure harmonization or, if feasible, operations integration shall be considered.

3.10 For Airports that doesn't have operational requirements to implement A-CDM, it is highly recommended to share information to generate common situational awareness, which will foster improved decision making within aerodromes, by sharing relevant surface operations data among the local stakeholders involved in aerodrome operations. This initiative represents the first collaboration step among stakeholders involved in aerodrome operations.

4. Suggested actions

4.1 The meeting is invited to:

- a) Take note of the information provided in this working paper.
- b) Urge States, ANSP's and Airports Authorities to perform the corresponding business case when considering upgrading SMGCS and Apron Control Management Service.
- c) Ask States, ANSP's and Airports Authorities to consider the IATA A-CDM toolkit as a supporting material for implementing A-CDM, mainly the CRITICAL ELEMENTS AND CHALLENGES.