



ICAO

International Civil Aviation Organization
North American, Central American and Caribbean Office
WORKING PAPER

(NACC/WG/AGA/TF/3) — WP/05
16/06/25

Third North American, Central American and Caribbean Working Group (NACC/WG) Aerodromes and Ground Aids (AGA) Implementation Task Force Meeting (NACC/WG/AGA/TF/3)
Tulum, Mexico, 18 to 20 June 2025

Agenda Item 4: Projects, Initiatives and Challenges on Airport Capacity and Efficiency

SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEMS (SMGCS) UNDER GREPECAS

(Presented by Secretariat)

EXECUTIVE SUMMARY	
This working paper presents the GREPECAS Aerodrome Projects in the CAR region.	
Action:	Under section 2.
Strategic Objectives:	<ul style="list-style-type: none">• Safety• Air Navigation Capacity and Efficiency
References:	<ul style="list-style-type: none">• Annex 14, Volume I• Procedures for Air Navigation Services — Aerodromes, (Doc 9981)• Airport Services Manual, Part 8 (Doc 9137)• Manual of Surface Movement Guidance and Control Systems (SMGCS) (Doc 9476)• Advanced Surface Movement Guidance and Control Systems (A-SMGCS) Manual (Doc 9830)• GREPECAS/22 meeting final report

1. Introduction

1.1 The Twenty-second Meeting of the CAR/SAM Regional Planning and Implementation Group (GREPECAS/22) approved Conclusion GREPECAS/22/13 (see Table below), in which States and Territories approved the revised version (modifications) of the CAR/SAM F3 Project (see the **Appendix**), which proposes a new approach for Surface Movement Guidance and Control System (SMGCS).

CONCLUSION	
GREPECAS/22/13	MODIFICATIONS APPROVAL TO CAR/SAM F3 PROJECT
What: That, to implement Surface Movement Guidance Control System (SMGCS) as part of the F3 Project: <ul style="list-style-type: none"> a) the States approve the revised version (modifications) of the CAR/SAM F3 Project at Appendix B to this report. 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 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. 	Expected impact: <input type="checkbox"/> Political / Global <input checked="" type="checkbox"/> Inter-regional <input checked="" type="checkbox"/> Economic <input type="checkbox"/> Environmental <input checked="" type="checkbox"/> Operational/Technical
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.	
When: 1 December 2024	Status: <input checked="" type="checkbox"/> Valid / <input type="checkbox"/> Superseded / <input type="checkbox"/> Completed
Who: <input checked="" type="checkbox"/> States <input checked="" type="checkbox"/> ICAO <input type="checkbox"/> Other:	

2. Suggested actions

2.1 The Meeting is invited to:

- a) Review the information provided in this working paper; and
- b) States are invited to discuss implementation plans and priorities for this project relating to international aerodromes in the CAR Region.

— — — — —

GREPECAS F3 PROJECT

F3	PROJECT DESCRIPTION (PD)	PROGRAMME	
ICAO Coordinator: ROs AGA	Project Title	Start date	End date
Project Leader (State): <i>Joel Cordero - PERU</i>	Paving the future A-CDM through the implementation of Platform Management and SMGCS	Nov 2024	Nov 2028
Objective	Support the implementation of appropriate Apron Management and Surface Movement Guidance and Control Systems (SMGCS) services at selected aerodromes in the CAR/SAM regions, as a critical basis for improving the apron operations safety, increasing airport capacity, and prepare the terrain for future implementations of advanced collaboration concepts, such as the A-CDM and other operational efficiency improvements.		
Scope	Selected aerodromes in the CAR/SAM Regions		
Justification	<p>The A-CDM Project was approved by the Fifth Meeting of the Programmes and Projects Review Committee (PPRC/5) (2019) so the planning and actions of the project were just beginning with seminars in both regions. However, due to COVID-19, many of the congested airports (those where the full implementation of A-CDM would be applicable) have been affected in their traffic volume.</p> <p>The restructuring of this project, approved in GREPECAS/21, is based on a comprehensive assessment of the regional context and the real needs of the aerodromes in the CAR/SAM regions:</p> <ol style="list-style-type: none"> 1. A survey presented during GREPECAS/21 revealed the need to re-evaluate the approach to implementing A-CDM in the region. 2. 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. 3. 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 airports. 4. Although capacity is an issue at some airports in the region, the implementation of A-CDM is not the direct solution to this challenge. 5. It is recognized that the basis for an improvement in airport capacity is the implementation of appropriate platform management services and advanced SMGCS systems. 6. 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, Part 8 (Platform Management), Doc 9476 (SMGCS) and Doc 9430 (A-SMGCS). <p>Therefore, this restructuring seeks to address the specific needs of the CAR/SAM region, focusing on the implementation of Apron Management and SMGCS and/or A-SMGCS as a fundamental basis for future improvements in airport safety, efficiency, and capacity.</p>		

F3	PROJECT DESCRIPTION (PD)	PROGRAMME	
ICAO Coordinator: ROs AGA	Project Title	Start date	End date
Project Leader (State): <i>Joel Cordero - PERU</i>	Paving the future A-CDM through the implementation of Platform Management and SMGCS	Nov 2024	Nov 2028
Indicators	<ul style="list-style-type: none"> Percentage of international aerodromes that have implemented Apron Management services, among the ones that the necessity was determined. Percentage of aerodromes that have implemented or improved their SMGCS. Reduction in apron safety incidents. Improved break-in times and reduced surface delays. Increase in the operational capacity of the apron and manoeuvring areas. GANP KPI01, KPI02, KPI 09, KPI10, KPI 11, KPI13, KPI14, KPI21 		
Required Resources	<ul style="list-style-type: none"> High-level engagement of participating States, airport operators and air navigation service providers. Appointment of experts in airport management and SMGCS systems. Resources for evaluation, implementation and updating of systems and procedures. Training programmes for airport and air traffic control personnel. Training programs for airport and air traffic control personnel. 		

— END —