



ICAO

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North American, Central American and Caribbean Office

WORKING PAPER

NACC/WG/AGA/TF/2 — WP/04  
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**Second North American, Central American and Caribbean Working Group (NACC/WG) Aerodromes and Ground Aids (AGA) Implementation Task Force Meeting (NACC/WG/AGA/TF/2)**

Mexico City, Mexico, 15 to 17 May 2024

**Agenda Item 4: Global Reporting Format (GRF) Implementation — Reporting and Publishing of the New Aircraft Classification Rating – Pavement Classification Rating (ACR-PCR) Method**

**GLOBAL REPORTING FORMAT (GRF) IMPLEMENTATION IN THE CAR REGION**

(Presented by the Secretariat)

**EXECUTIVE SUMMARY**

From 4 November 2021, in accordance with the 16th Amendment of Annex 14, Volume I, States are required to adopt the enhanced global reporting format for assessing and reporting runway surface conditions (GRF) at their international aerodromes.

However, in the CAR Region there are several States that have not started or completed the implementation of the GRF in their international aerodromes.

This working document outlines the progress made by States in implementing the GRF, assessed through two criteria: one focusing on GRF milestones and the other on the number of international runways where GRF has been implemented. Furthermore, it seeks approval for the Terms of Reference for the GRF Project, aimed at developing guidance materials to support States in implementing the GRF.

<b>Action:</b>	See section 3
<i>Strategic Objectives:</i>	<ul style="list-style-type: none"><li>• Safety</li></ul>
<i>References:</i>	<ul style="list-style-type: none"><li>• Annex 14: Aerodromes, Volume I, Aerodrome Design and Operations</li><li>• Annex 3: Meteorological Service for International Air Navigation</li><li>• Annex 6: Operation of Aircraft (Parts 1 and 2)</li><li>• Annex 8: Airworthiness of Aircraft</li><li>• Annex 15: Aeronautical Information Services</li><li>• PANS Aerodromes (Doc 9981)</li><li>• PANS-AIM (Doc 10066)</li><li>• PANS-ATM (Doc 4444).</li></ul>

## 1. Introduction

1.1. The ICAO methodology for assessing and reporting runway surface conditions, commonly known as the Global Reporting Format (GRF), allows for the harmonised assessment and reporting of runway surface conditions and an enhanced flight crew assessment of take-off and landing performance.

1.2. Globally, movement areas are exposed to multiple weather conditions and therefore the conditions to be reported are quite different. A basic structure that applies to all these weather variations is described in the Runway Condition Report (RCR). The assessment of runway surface condition is based on a wide variety of techniques and no single solution can be applied to all situations.

1.3. The implementation date originally envisaged by the ICAO Council was 5 November 2020. However, in State letter N° AN 2/33-20/73, the ICAO Council, in order to ease the burden on States during the COVID-19 pandemic and the period, thereafter, adopted amendments at its 220-8th session to postpone from 5 November 2020 to 4 November 2021 the date of implementation of the provisions on the enhanced GRF for assessing and reporting runway condition.

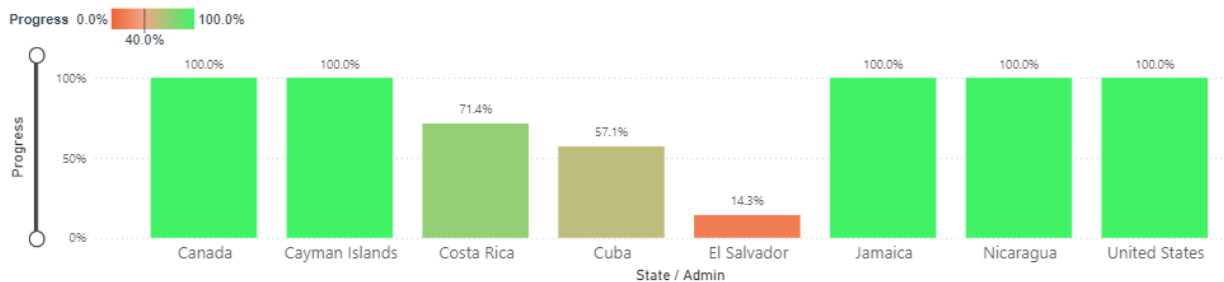
## 2. Discussion

2.1 To assist States in effectively implementing this new provision, ICAO has curated a dedicated webpage containing comprehensive information and materials on the subject: [The New Global Reporting Format for Runway Surface Conditions \(icao.int\)](https://www.icao.int/Newsroom/2021/03/2021-03-01-icaos-new-global-reporting-format-for-runway-surface-conditions)

2.2 Additionally, it offers a form outlining the key milestones for States to plan and evaluate the various stages of implementation: [GRF Implementation Milestones March 2021.pdf \(icao.int\)](https://www.icao.int/Newsroom/2021/03/2021-03-01-icaos-new-global-reporting-format-for-runway-surface-conditions)

2.3 However, in the CAR Region there are several States that have not started or completed GRF implementation in their international aerodromes.

2.4 Based on the GRF milestones<sup>1</sup>, the following levels of implementation are observed in the NAM and CAR Region:



<sup>1</sup> [GRF Implementation Milestones March 2021.pdf \(icao.int\)](https://www.icao.int/Newsroom/2021/03/2021-03-01-icaos-new-global-reporting-format-for-runway-surface-conditions)

Average by Milestones	100.0%	87.5%	75.0%	87.5%	87.5%	62.5%	62.5%
State / Admin	GRF2	GRF4	GRF7	GRF10	GRF11	GRF14	GRF15
Canada	✓ 1-Jun-18	✓ 1-Jun-18	✓ 1-Nov-18	✓ 15-May-20	✓ 21-Feb-21	✓ 1-Apr-21	✓ 12-Aug-21
Cayman Islands	✓ 31-Dec-19	✓ 31-Dec-19	✓ 31-Dec-19	✓ 31-Dec-19	✓ 31-Dec-19	✓ 21-Oct-21	✓ 4-Nov-21
Costa Rica	✓ 9-Jul-21	✓ 16-Jul-21	✓ 30-Jul-21	✓ 25-Jul-20	✓ 9-Jun-21	9-May-22	1-Nov-22
Cuba	✓ 30-Mar-21	✓ 3-Jan-21	1-Nov-22	✓ 1-Jun-21	✓ 1-Sep-21		
El Salvador	✓ 15-Feb-21	19-Jul-21	31-Aug-21	6-Sep-21	6-Sep-21	14-Oct-21	4-Nov-21
Jamaica	✓ 1-Sep-21	✓ 1-Sep-21	✓ 30-Sep-21	✓ 25-Oct-21	✓ 29-Oct-21	✓ 29-Oct-21	✓ 4-Nov-21
Nicaragua	✓ 26-Feb-21	✓ 19-Mar-21	✓ 31-Mar-21	✓ 7-May-21	✓ 14-May-21	✓ 30-Aug-21	✓ 4-Nov-21

2.5 The other States from NAM and CAR Region not mentioned show 0% implementation of the GRF milestones.

2.6 Nevertheless, the level of implementation in number of international aerodromes in the CAR Region is 3% (04 out 149 international aerodromes), especially in the States of Central America, where the number of international aerodromes with GRF implemented are 25% (04 out of 16).

2.7 This led to the following conclusion (NACC/WG/AGA/TF/01/03) during the last AGA Task Force meeting:

CONCLUSION	
NACC/WG/AGA/TF/01/03	DEVELOPMENT OF GRF PROJECT
<p><b>What:</b></p> <p>That,</p> <p>a) States and airports in the CAR Region implement the GRF as established in Annex 14 Vol 1 and Doc 9981; and</p> <p>b) the AGA Task Force develops practical guidance material to support States, with predominantly tropical climatic conditions, to implement the GRF, by 20 April 2024.</p>	<p><b>Expected impact:</b></p> <p><input type="checkbox"/> Political / Global</p> <p><input checked="" type="checkbox"/> Inter-regional</p> <p><input type="checkbox"/> Economic</p> <p><input type="checkbox"/> Environmental</p> <p><input checked="" type="checkbox"/> Operational/Technical</p>
<p><b>Why:</b></p> <p>The implementation date originally envisaged by the ICAO Council was 5 November 2020. However, in State Letter Ref. AN 2/33-20/73 the ICAO Council postponed it from 5 November 2020 to 4 November 2021, the implementation date of provisions in the enhanced global reporting format for assessing and reporting runway condition. However, after 20 months from the implementation date, the implementation level in the CAR Region is 14%.</p>	
<p><b>When:</b> 20 April 2024</p>	<p><b>Status:</b> <input checked="" type="checkbox"/> Valid / <input type="checkbox"/> Superseded / <input type="checkbox"/> Completed</p>
<p><b>Who:</b> <input type="checkbox"/> States <input type="checkbox"/> ICAO <input checked="" type="checkbox"/> Other:</p>	<p>AGA TF</p>

2.5 In view of the conclusion from the last AGA Task Force meeting, which establishes that the “AGA Task Force develops practical guidance material to support States, with predominantly tropical climatic conditions, to implement the GRF, by 20 April 2024,” we propose for approval at this meeting the Terms of Reference (Appendix A) for the project aimed to developing these materials.

**3. Suggested Action**

5.1 The Meeting is invited to:

- a) take note of the information presented in this WP.
- b) review and, if appropriate, approve the Terms of Reference (Appendix A).
- c) the AGA/TF to take action to promote the implementation of GRF at international CAR aerodromes.
- d) invite other States in the CAR Region to be part of the project.

— END —

**APPENDIX**  
**GRF Project**

<b>Project Name:</b>	Global Reporting Format (GRF) implementation for the Central American States		
<b>Date:</b>	03-JUN-2024	<b>Area of interest:</b> RS	Version: 0
<b>Author:</b>	ICAO NACC RO AGA		
<b>Project Sponsor:</b>	FAA		
<b>Funds required:</b>	US\$25,000		
<b>Duration:</b>	12 months		
<b>Client:</b>	Central American States- Airport operators and RASG-PA		
<b>Document ID:</b>	<i>(Priority area+Subject+Year+Ref #)</i>		
<b>Document link:</b>			

## 1. Executive Summary

- a) The ICAO methodology for assessing and reporting runway surface conditions, commonly known as the Global Reporting Format (GRF), allows for the harmonized assessment and reporting of runway surface conditions and an enhanced flight crew assessment of take-off and landing performance. Consequently, the ICAO GRF is a tool that helps mitigate the risk of runway excursions .
- b) Globally, movement areas are exposed to multiple weather conditions and therefore the conditions to be reported are quite different. A basic structure that applies to all these weather variations is described in the Runway Condition Report (RCR). The assessment of runway surface condition is based on a wide variety of techniques and no single solution can be applied to all situations.
- c) The implementation date originally envisaged by the ICAO Council was 5 November 2020. However, in State letter N° AN 2/33-20/73, the ICAO Council, in order to ease the burden on States during the COVID-19 pandemic and the period, thereafter, adopted amendments at its 220-8th session to postpone from 5 November 2020 to 4 November 2021 the date of implementation of the provisions on the enhanced GRF for assessing and reporting runway condition.
- d) The implementation of Global Reporting Format (GRF) should follow the ICAO SARPS and guidance for the prevention of runway excursions and to provide the flight crew with the information needed for safe operation of the aeroplane. A complete set of ICAO SARPS and guidance related to the topic is available through the respective content of:
  - Annex 14: Aerodromes, Volume I, Aerodrome Design and Operations
  - Annex 3: Meteorological Service for International Air Navigation

- Annex 6: Operation of Aircraft (Parts 1 and 2)
  - Annex 8: Airworthiness of Aircraft
  - Annex 15: Aeronautical Information Services
  - PANS Aerodromes (Doc 9981)
  - PANS-AIM (Doc 10066)
  - PANS-ATM (Doc 4444).
- e) Due to the benefit of the establishment of this systemic assessing and reporting runway surface conditions at international aerodromes, there is an opportunity to Region takes more actions to promote the effective implementation of GRF at all international aerodromes.
- f) In this regard, the current project proposal looks to support the implementation of GRF at international aerodromes in the Central American States, in order to comply with ICAO SARPs.

## 2. Problem / Opportunity Statement

*What problems are we addressing or opportunity are we pursuing?*

- a. Although the assessing and reporting the condition of the movement area and related facilities is necessary in order to provide the flight crew with the information needed for safe operation, in the Central American Region its implementation is moving at a relative low pace.
- b. Furthermore, the Runway Safety Programme – Global Runway Safety Action Plan, Second Edition, February 2024, establishes the following global runway safety recommended actions:
  - i. Continue to support the implementation of the Global Reporting Format (GRF) for assessing and reporting runway surface conditions, ensuring that staff are trained, and runway conditions reported and promulgated in a timely manner.
- c. In according to the information gathered from States, in the Central American Region only 04 out of 16 international aerodromes have a GRF implemented, that means 25%.

## 3. Business Options

*Analysis and reasoned recommendation for the base business options of: do nothing, do the minimal or do something.*

1. Do Nothing: States/Airports will remain with safety problems such as not reporting runway surface conditions to air navigation services provider and aircraft operators.
2. Do the minimal: low level of GRF implementation at international aerodromes, as observed in the last 3 years.
3. Do something: States/airports to be more proactive and aware to the process of implementation GRF considering the conditions at international aerodromes in tropical regions, like Centro America (where snow reports are not applicable, and thunderstorms could be more familiar).

## 4. Expected Benefits

*The benefits that the project will deliver expressed in measurable terms against the situation as it exists prior to the project.*

The ICAO Global Reporting Format for runway surface conditions (GRF) is a tool to help mitigate the risk of runway excursions by enabling a harmonized assessment and reporting of runway surface conditions and an improved flight crew assessment of take-off and landing performance. Thus, the GRF has been through a rigorous development, review and approval process.

## 5. Expected Detriments

*Outcomes perceived as negative by one or more stakeholders. Dis-benefits are actual consequences of an activity whereas, by definition, a risk has some uncertainty about whether it will materialize.*

Increase in possible operational costs of reporting runway conditions by aerodrome operators, especially if adopted automatic equipment to help measurements of water thickness over runway.

## 6. Project Objectives

*Objectives are statements that specifically describe what is to be achieved within the project's mandate in order to meet the overall project goal. Wherever possible, objectives should be quantified and "SMART" (Specific, Measurable, Achievable, Realistic, and Time-Based).*

The primary goal of the project is to foster the adoption of the GRF at international aerodromes from Central American States.

## 7. Scope Statement / Project deliverables

*Defines what is being produced. Deliverables relate to, and satisfy, the specific project requirements or capabilities. Deliverables must cross-reference and satisfy the project's objectives.*

The Project is designed to support States in the process of implementing the GRF, through the development of practical guidance material for aerodromes in tropical climatic conditions.

## 8. Critical Success Factors

*Defines what is needed as necessary conditions for project success.*

- High-level engagement and commitment from the different Stakeholders (State support - DG level, Airport operator support, ANSP support, Air Operator support, etc.)
- Engagement by involved parties- execution level, including active participation by Focal Point
- Successful implementation of GRF at international aerodromes.

## 9. Budget / Costs / Funding

*Source and funding amount (whether annual or in total) not be exceeded.*

The project is proposed to be funded by the FAA CAP Project funds mainly, and contributions from States or International Organizations (expertise).

Activity	Potential direct cost (USD) from CAP Funds	Notes
1. Prepare an GRF implementation plan (with milestones and target dates) for the CAR Region	USD 0.00	Prepared by NACC RO with the support of State's focal points (virtually) and SME.
2. Create a monitoring mechanism (virtual meetings, dashboards, reports) using all existing platforms	USD 0.00	NACC dashboards in AGA area
3. Compile and prepare best practices and guidance material to support GRF implementation for aerodromes in tropical climatic conditions.	USD 17.500	Hire a SME (50 working days in 12 month). Use of ICAO Portal resources and best practices from other countries.
4. Design and translation of guide material to make it available in two languages (English and Spanish)	USD 1.500	Cost depends on the final size of the document.

Activity	Potential direct cost (USD) from CAP Funds	Notes
5. Webinar on GRF	USD 1.000	Cost to translate the Webinar in Spanish and English.
6. GRF Go-Team at an aerodrome in Central America to identify the challenges and needs for guidance material.	USD 5.000	On-site GRF Go-Team (using 2 SME's, including tickets and DSA for 5 days).
<b>TOTAL REQUIRED FOR THE PROJECT USD 25,000</b>		

## 10. Stakeholder / Communications Plan

*Identifies the key individuals or organizations that have a clear stake in the project's success. Who is impacted by the project, and how should they be involved?*

Key Individuals/Organizations:	Specific Needs/Concerns:	Actions/Mean/Frequency of Communication
NACC RO AGA	Management of project	Monitoring report NACC Dashboard
AGA Focal points from Member States	Follow-up / Action	Monthly meetings Email
Involved Stakeholders (airport, ANSP, air operator, CAA)	Follow-up / Action	Email

## 11. High Level Milestone/Stages Schedule

*Identification of the major project phases and when they will be completed*

#	Major Project Phases / Milestones	Completion Date
1	Virtual Follow-up of GRF implementation plans of States <sup>1</sup>	June 2025
2	Delivery of guide material - GRF	May 2025
3	GRF Go-Team	June 2025

## 12. Acceptance Criteria

*Identify the quality standards and criteria that apply to the project. Explain how the plan will ensure adherence to these standards and criteria.*

- Increased implementation of GRF to 80% of international aerodromes in Centro America.

## 13. Risk Management Plan

*List of major risks confronting the project. Assessment of severity (H/M/L, or high, medium or low) as determined by (1) probability, and (2) potential impact. For each High risk item, develop appropriate mitigation plans.*

<sup>1</sup> [GRF Implementation Milestones March 2021.pdf \(icao.int\)](#)



#	Major Risks	Assessment	Mitigation
1	States may not participate on the project	H	<i>Include the project as part of already accepted mechanisms by States (NACC/WG/AGA/TF).</i>
2	Low involvement and consultation of other Stakeholders (airport operator, airlines, pilots, ATC).	H	<i>Foster collaboration with partners (ACI, IATA, CANSO, IFALPA, IFATCA) to ensure stakeholder involvement.</i>

## 14. Project Team Organization

*Who will be involved in managing the project and how will they interface?*

Project Sponsor:	Role:	Responsible for:
FAA CAP Project		Follow-up High Level engagement to the project Project mandate
Project Manager:	Role:	Responsible for:
NACC RO/AGA (CAR Region)		Manage the project activities and deliverables. Reports to sponsor
Team Member:	Role:	Responsible for:
State assigned AGA focal point		Follow-up project activities under his/her area of responsibility

## 15. Project Control Procedures

*Anticipated processes for monitoring and ensuring work progress, including: Status reporting and frequency, Review meetings (including who and when), Tracking methods and tools*

- Monthly reports.
- NACC Dashboard in AGA area.