

Global Reporting Format (GRF) for runway surface conditions

INTRODUCTION

Due to the lack of consensus on the effectiveness of the current procedure for assessing and reporting the runway surface conditions, the International Civil Aviation Organisation (ICAO) developed a **new methodology**, known as the **Global Reporting Format (GRF)**. The aim of this new reporting format is to better associate aeroplane performance calculations with the actual runway surface conditions. This, in turn, allows a **decrease of the risk of runway excursions** during landing and take-off operations on wet and contaminated runway surfaces.

WHEN?

The GRF will be implemented within the European Union on **August 12th, 2021**. ICAO member states shall implement this not later than November 4th, 2021.

MORE INFORMATION?

The Belgian Civil Aviation Authority (BCAA) and skeyes developed the attached information leaflet, available below, in order to describe the change of methodology and provide insight on the GRF. An Aeronautical Information Circular (AIC 004/2021) will also be published on the **BeLux AIP** and will contain more detailed information about the applicable regulation.

Why this change?

Runway surface conditions have contributed to many safety events. Investigations revealed shortfalls in the accuracy and timeliness of the current assessment and reporting methods.

That's why ICAO developed the global reporting format for assessing and reporting runway conditions.

What's new?

Today, runway surface condition reporting is based on assessing or measuring friction with measuring equipment. However, in the aviation industry there is no standard or consensus about the effectiveness of this procedure.

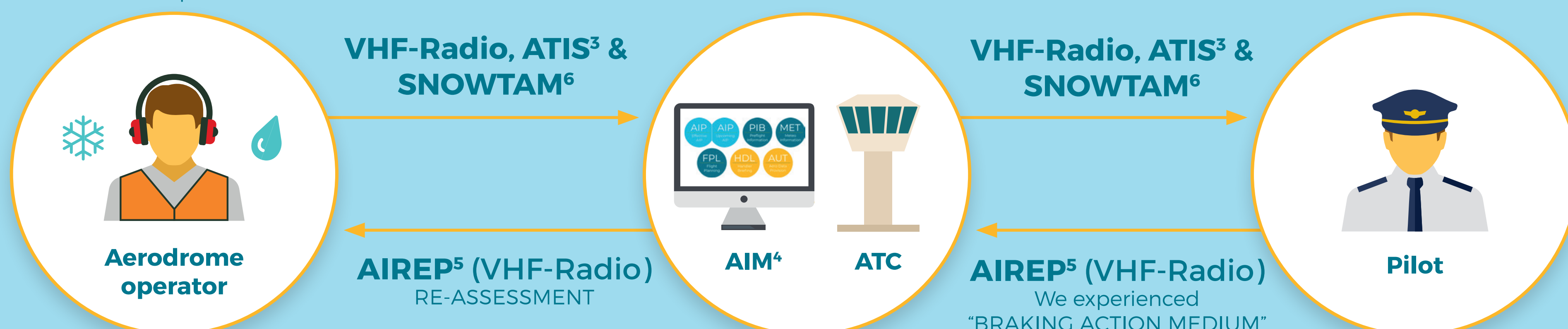
The new global reporting format (GRF) is based on a **total assessment** of the coverage with contaminants of the runway surface. This assessment will be made by trained and competent **aerodrome personnel**. This new method will be applied as of August 12th, 2021.

GRF, how does it work?

Who?	Today Before August 12 th , 2021	GRF From August 12 th , 2021 onwards
ADR⁷	Runway surface condition is measured and translated into "good", "medium to good" etc.	Runway surface condition is assessed using the RCAM and translated into a RWYCC ² (0 to 6).
AIM⁴	SNOWTAM ⁶ reports estimated surface friction	SNOWTAM ⁶ reports RWYCC² in new SNOWTAM format.
ATS	Report estimated friction to pilots	Report RWYCC² , surface condition description etc. to pilots
Pilot	Produce an AIREP ⁵ if conditions are not as good as reported	Produce an AIREP ⁵ if conditions are not as good as reported
ATS	Relay information from AIREP ⁵ to aerodrome operator (voluntary)	Relay information from AIREP ⁵ to aerodrome operator (mandatory)

The Global Reporting Format (GRF)

RWY¹ inspection
Assess situation and report RWYCC² IN RCR³



Runway Condition Assessment matrix (RCAM)

RWYCC ² ADR ⁷	RWY surface description ADR ⁷	Aeroplane deceleration or directional control observation	Report on Braking Action (AIREP ⁵) Pilot
6	Dry		
5	Frost Wet Slush Dry snow Wet snow	Braking deceleration is normal for the wheel braking effort AND directional control is normal.	Good
4	Specially prepared winter runway Compacted snow ≤-15°C	Braking deceleration OR directional control is between good and medium.	Good to medium
3	Slippery wet Dry snow or wet snow (any depth) on top of compacted snow Dry snow Wet snow	Braking deceleration is noticeably reduced for the wheel braking effort applied OR directional control is noticeably reduced.	Medium
2	Standing water Slush	Braking deceleration OR directional control is between medium and poor.	Medium to poor
1	Ice	Braking deceleration is significantly reduced for the wheel braking effort applied OR directional control is significantly reduced.	Poor
0	Wet ice Water on top of compacted snow Dry snow or wet snow on top of ice	Braking deceleration is minimal to non-existent for the wheel braking effort applied OR directional control is uncertain.	Less than poor

RWY¹ = RUNWAY / **RWYCC²** = RUNWAY CONDITION CODE / **ATIS³** = AUTOMATIC TERMINAL INFORMATION SERVICE / **AIM⁴** = AERONAUTICAL INFORMATION MANAGEMENT / **AIREP⁵** = AIR-REPORT / **SNOWTAM⁶** = SPECIAL NOTICE TO AIRMEN / **ADR⁷** = AERODROME OPERATOR / **RCR³** = RUNWAY CONDITION REPORT

This is a safety promotion document, some items have been simplified, always refer to the applicable regulation. More information can be found within the AIC Belgium and Luxembourg 004/2021, available via <https://ops.skeyes.be>.

Questions? Suggestions?
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skeyes

WHAT IS AN ASIL?

ASIL stands for Aviation Safety Information Leaflet. These leaflets are created and published by the Belgian Civil Aviation Authority (BCAA) in order to raise awareness and to promote aviation safety. They are also part of a larger frame aimed at achieving predetermined aviation safety objectives, including reports, flyers, posters, audiovisual material, manuals, conferences and promotional campaigns. These leaflets are often based on the safety analysis of occurrences reported in accordance with Regulation (EU) 376/2014 on the reporting, analysis and follow-up of occurrences in civil aviation. For more information about the leaflets themselves, visit our website in [french](#) or in [dutch](#).