# Proposed implementation of ICAO's Global Reporting Format (PP 2211AS)

# Overview

We are intending to introduce the International Civil Aviation Organization (ICAO) Global Reporting Format (GRF) in some Australian aerodromes. Your feedback will help us to better understand the potential impacts in our unique Australian environment before we finalise the policy.

The GRF establishes a consistent system covering the assessment, reporting and use of contaminated runways.

We are asking you for feedback on the policy proposals for:

* definition of contaminated runway and associated terms
* standards associated with aerodrome serviceability inspections
* how GRF standards apply to aerodrome operators
* triggers for runway surface condition inspections
* runway surface condition assessment process (including use of technical solutions)
* timely communication of Runway Condition Reports (RCRs)
* introduction of SNOWTAMs
* embedding GRF implementation in the Aeronautical Information Publication (AIP)
* transition to implementing these standards.

Australia's commitment to implementing the GRF is available in the [Australian National Aviation Safety Plan (NASP)](https://www.infrastructure.gov.au/sites/default/files/documents/national-aviation-safety-plan-2021.pdf).

**Previous consultation**

**Fact Bank:** CASA internal GRF implementation team

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| *Content:*  In accordance with the ICAO implementation action plan, CASA established an internal, cross-disciplinary implementation team consisting of members from:   * International Operations Section * Aerodromes Section * Air Traffic Management (ATM) System Standards Section (including aerodromes and Aeronautical Information Management (AIM)) * Safety Systems Section * Risk Oversight Section * Engagement, Communications and Safety Education Branch.   This team has met regularly to coordinate GRF-related activities including identifying regulatory gaps and reviewing relevant safety risk assessments impacted by the GRF.  The activities and results of this team were presented to the National Runway Safety Group (NRSG) and in coordination with this group, an industry working group was established. |

**Fact Bank:** The National Runway Safety Group (NRSG) GRF working group

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| *Content:*  The [NRSG-GRF](https://www.casa.gov.au/about-us/who-we-work/national-runway-safety-group/about-national-runway-safety-group) working group consists of members from:   * CASA * Airservices Australia * Major airlines (Qantas, Virgin Australia, Jetstar) * Airport operators (Sydney airport, Sydney Metro Airports) * Industry associations (Australian Airports Association (AAA), Regional Aviation Association of Australia (RAAA), Australian Airline Pilots’ Association (AusALPA)).   The NRSG-GRF working group has been instrumental in the development of this policy proposal document.  CASA representatives have also provided industry presentations at the 10 March 2022 AAA Safety Forum, held in Brisbane, and the 1-3 June 2022 AAA OPS Swap, held in Sydney. |

# Why your views matter

Your feedback will increase our understanding of the potential impacts of implementing GRF in Australia before we change any rules. This includes what it means for Australian aerodromes, taking into consideration the diverse environment, services offered, and weather conditions which affect runway contamination.

Your feedback will help us continue working with stakeholders (including the NRSG-GRF working group) to finalise the best way to implement the GRF.

**Documents for review**

All documents related to this consultation are attached in the ‘Related’ section at the bottom of the overview page. These are:

* Policy proposal (PP 2211AS) document which provides the details on the policy proposed for GRF and its implementation in Australia.
* MS Word copy of online consultation for ease of distribution and feedback within your organisation.

Please submit your comments using the survey link below. If you are unable to provide feedback this way, please contact us for advice at [regulatoryconsultation@casa.gov.au](mailto:regulatoryconsultation@casa.gov.au)

### What happens next

At the end of the response period, we will review each comment and submission received. We will make all submissions publicly available on the CASA website where consent has been given.

Your feedback will be used to refine the policies and guide the development of the regulatory changes.

We plan to consult on the draft legislation by early 2023.

# Give Us Your Views

Online Survey

**Related**

**Related Documents**

* Policy Proposal - PP 2211AS
* MS Word copy of online consultation - Proposed amendments for the implementation of ICAO’s Global Reporting Format (PP 2211AS)

# **Audience & Interest groups**

**Audience**

* CASA staff
* Air operators
* Instructors and flight examiners
* Flight training organisations
* Manufacturers
* Pilots
* Air traffic controller/s
* Foreign operator
* Air traffic service providers
* Part 175 of CASR Aeronautical information service providers
* Aviation Meteorology
* Forecaster/Meteorological service provider
* Operations Control/Flight Dispatch
* School/Education/Aviation Theory Provider
* Certified aerodrome owner/operator
* Aerodrome owner/operators
* CASA aerodrome inspectorate
* Aerodrome industry consultants
* Aircraft owner/operator
* Training organisation representative

**Interest**

* Human factors
* Safety management systems
* Operational standards
* Aircraft certification and design
* Flight training
* Training and checking systems

# Page. Consultation Content

**Proposed policy – implementation of ICAO’s Global Reporting Format (GRF)**

This consultation is seeking feedback on a set of proposed policy amendments that would support the implementation of ICAO’s GRF in Australia.

The survey has been designed to give you the option to provide feedback on the survey in its entirety or to provide feedback on the policy topics applicable to you.

When you have completed the sections on which you wish to provide feedback, select the **‘Finish’** button at the bottom right of this page.

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# Page 1. Personal information

## First name

*(Required)*

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## Last name

*(Required)*

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## Email address

If you enter your email address, you will automatically receive an acknowledgement email when you submit your response.

Email

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## Do your views officially represent those of an organisation?

## *(Required)*

*Please select only one item*

Yes, I am authorised to submit feedback on behalf of an organisation

No, these are my personal views.

If yes, please specify the name of your organisation.

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Which of the following best describes the group you represent?

*Please select only one item*

Aircraft owner/operator

Pilot

Aerodrome owner/operator

Aerodrome personnel

Air traffic services provider

Air traffic controller

Aerodrome consultant

Airline consultant

Air traffic services consultant

Flight training organisation

Other training organisation

GRF-related equipment/service provider

Other

Please specify “Other” if selected.

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# Page 2. Consent to publish submission

To provide transparency and promote debate, we intend to publish all responses to this consultation. This may include both detailed responses/submissions in full and aggregated data drawn from the responses received.

Where you consent to publication, we will include:

* **your last name** if the submission is made by you as an individual or
* **the name of the organisation** on whose behalf the submission has been made
* **your responses** and comments.

We **will not** include any other personal or demographic information in a published response.

Do you give permission for your response to be published?

*(Required)*

*Please select only one item*

Yes - I give permission for my response/submission to be published.

No - I would like my response/submission to remain confidential but understand that de-identified aggregate data may be published.

I am a CASA officer.

Information about how we consult and how to make a confidential submission is available on our **website** [*<https://www.casa.gov.au/rules-and-regulations/landing-*](http://www.casa.gov.au/rules-and-regulations/landing-) *page/consultation-process>* .

# Page 3. Policy topic 1 - Contaminated runway definition

## **Policy proposal**

To align with ICAO Global Reporting Format (GRF) reporting of runway contamination in runway thirds and specific contaminants, we propose the definition for contaminated runway be amended to the following:

‘A runway is contaminated when a significant portion of the runway surface area (whether in isolated areas or not) within the length and width being used is covered by one or more of the following substances:

1. compacted snow, being snow that has been compacted into a solid mass such that aeroplane tyres, at operating pressures and loadings, will run on the surface without significant further compaction or rutting of the surface
2. dry snow, being snow from which a snowball cannot readily be made
3. frost consisting of ice crystals formed from airborne moisture on a surface whose temperature is below freezing and differing from ice in that the frost crystals grow independently and therefore have a more granular texture
4. ice, being water that has frozen or compacted snow that has transitioned into ice, in cold and dry conditions
5. slush, being snow that is so water-saturated that water will drain from it when a handful is picked up or will splatter if stepped on forcefully
6. standing water, being water of depth greater than 3 mm including running water of depth greater than 3 mm
7. wet ice, being ice with water on top of it or ice that is melting
8. wet snow, being snow that contains enough water content to be able to make a well-compacted, solid snowball, but water will not squeeze out.’

**Fact bank 1 –** Current definition contained in CASR Dictionary

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| *Content:*  ***contaminated***, for a runway: a runway is ***contaminated*** if more than 25% of the surface area required for a take-off or landing is covered by any of the following:  (a) water or slush more than 3 mm deep;  (b) loose snow more than 20 mm deep;  (c) compacted snow or ice. |

The ICAO definition (see fact bank below) is less specific and leverages the assessment and reporting standards contained within the GRF system. The proposed definition seeks to use those same systems but with further details on each contaminants limitations.

**Fact bank 2 –** ICAO definition following introduction of the GRF

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| *Content:*  "A runway is contaminated when a significant portion of the runway surface area (whether in isolated areas or not) within the length and width being used is covered by one or more of the substances listed in the runway surface condition descriptors." |

**Question 1** – Do you think the amendment to the definition of **contaminated** would work as intended?

*Radio buttons*

Yes

Yes, with changes (please specify suggested changes below)

No (please explain why and provide alternative suggestions below)

Undecided / Not my area of expertise

Comments

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# Page 4. Policy topic 2 - Serviceability inspection regime

## **Policy proposal**

We propose a requirement for aerodrome operators to confirm aerodrome serviceability, within an outcome-based program that provides for discrete inspections for simple aerodromes, and decoupled inspections for complex and/or busy aerodromes. The focus will be on providing sufficient confidence in aerodrome serviceability for scheduled air transport operations.

**Enhanced ongoing serviceability of aerodromes**

The flexibility provided in a serviceability inspection program would enhance ongoing serviceability of aerodromes by focusing resources to those areas in need at any given time. It would also promote outcome-based thinking in aerodrome operators through designing systems to meet their needs and the needs of their users.

**Confirmation of aerodrome serviceability requirements**

The new standard for proactive inspections would require:

* aerodromes with scheduled air transport movements over a span of more than 8 hours to confirm the serviceability of the aerodrome’s facilities, environment and equipment (in line with section 12.03 of the Part 139 Manual of Standards) at least twice per day.
* all other aerodromes to confirm the serviceability of the aerodrome’s facilities, environment and equipment, at least once per day on days of scheduled air transport movements and at least twice per week (with 48 hours between inspections) for aerodromes with minimal traffic.

## **Policy aim**

The proposed policy seeks to promote flexibility in confirming aerodrome serviceability including over multiple steps at different times of the day depending on environmental conditions, level of operations and runway in use. It also facilitates targeted inspections and assessments in response to specific triggers (such as when requested by air traffic control). These amendments would also ensure alignment with ICAO standards.

**Fact bank:** Alignment with ICAO standards to reduce unnecessary serviceability inspections

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| *Content:*  The existing Part 139 Manual of Standards provisions are not aligned with ICAO standards. For the most part, they describe a serviceability inspection as a discrete event that covers the aerodrome from start to finish according to the schedule. This language is suitable for a small day-only aerodrome with limited traffic but can become restrictive to larger, more complex aerodromes with significant traffic.  Further, this language requires reactionary inspections to consist of a full aerodrome serviceability inspection even when triggered by a localised problem (e.g. a bird strike on the runway) in which a target/limited activity is required. |

**Question 2** – Do you think the proposed policy affecting inspection language and the requirements for confirmation of aerodrome serviceability would work as intended and achieve the aim?

*Radio buttons*

Yes

Yes, with changes (please specify suggested changes below)

No (please explain why and provide alternative suggestions below)

Undecided / Not my area of expertise

Comments

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# Page 5. Policy topic 3 – Global Reporting Format applicability

## **Policy proposal**

The proposed policy varies in its Global Reporting Format (GRF) requirements for the different types of aerodromes. The requirements range from mandatory application of GRF to no requirement. The proposed policy is:

* Controlled aerodromes that are certified, and service air transport operators would be required to implement a runway surface condition assessment process.
* Non-controlled aerodromes that are certified with regular air transport operations would be required to consult with stakeholders before deciding to voluntarily implement a runway surface condition assessment process. The consultation process would establish the safety benefits, other benefits, and resource implications of implementing the GRF at their aerodrome.
* Aerodromes, including uncertified aerodromes, not servicing air transport operators would not be required to implement or consult on the implementation of a GRF-based runway surface condition assessment process, but would be required to follow the serviceability inspection program outlined in Chapter 12 of the Part 139 MOS.

## **Policy aim**

The aim of this policy is to balance the benefits of implementing GRF with the resource implications of providing such a service.

The GRF envisaged by ICAO includes services (i.e. Air Traffic Control) that do not exist at every certified aerodrome. As such, requirements should be different across the range of certified aerodromes.

**Question 3** – Do you think the policy aim is appropriate and do the proposed requirements achieve the aim?

*Radio buttons*

Yes

Yes, with changes (please specify suggested changes below)

No (please explain why and provide alternative suggestions below)

Undecided / Not my area of expertise

Comments

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# Page 6. Policy topic 4 - Runway surface condition inspection triggers

## **Policy proposal**

We propose common inspection triggers for all aerodromes that are either required to or electing to implement the Global Reporting Format. For consistency, this includes controlled aerodromes supported by Air Traffic Control personnel monitoring the runway and receiving reports from aircraft.

**Triggers to commence monitoring conditions**

A trigger to monitor would be based on:

* forecast weather conditions in the first instance
* thereafter observed or reported conditions, and
* timing of scheduled air transport operations.

The specific conditions triggering this monitoring would be aerodrome specific with the aerodrome operator to establish, through experience, documented trigger conditions (both forecast and observed).

Once monitoring has commenced, the aerodrome operator must have personnel available to conduct a runway surface condition assessment in a timely manner.

**Trigger to conduct a runway surface condition assessment**

A trigger to conduct a runway surface condition assessment would be based on:

* Observed conditions that, through experience, are reasonably likely to result in runway surface conditions different to the current Runway Condition Report (RCR), if any.
* An aircraft reporting a braking action worse than the current RCR (in line with ICAO Standards and Recommended Practices and guidance material).

These triggers are to be documented in the aerodrome manual.

Given the flexible nature of these triggers and the applicability policies outlined above, it is proposed that they and the subsequent issue of runway condition reports may be limited to the:

* Air Traffic Control tower operational hours for controlled aerodromes
* operational period agreed to during stakeholder consultation for non-controlled aerodromes and outside of ATC operational hours at controlled aerodromes.

## **Policy aim**

Our policy aim is to ensure the language in the Part 139 Manual of Standards provides sufficient detail and clarity for Australian aerodrome operators and inspectors to reasonably determine which conditions should trigger an inspection and avoid overly specific language that may adversely impact some aerodrome operators.

Striking a balance between flexibility and specification to ensure inspection conditions are consistent but not unnecessarily burdensome to some aerodromes.

**Question 4** – Do you think the policy aim is appropriate and the proposed triggers for monitoring conditions and conducting a runway surface condition assessment will work as intended?

*Radio buttons*

Yes

Yes with changes (please specify suggested changes below)

No (please explain why and provide alternative suggestions below)

Undecided / Not my area of expertise

Comments

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# Page 7. Policy topic 5 - Runway surface condition assessment process

## **Policy proposal**

Serviceability inspection requirements are described in section 12.03 of the Part 139 Manual of Standards (MOS) with a specific section on ‘surface conditions of the movement area’. We propose amending this section by:

* distinguishing between broad serviceability inspection and specific runway surface condition assessments
* incorporating the international Global Reporting Format (GRF) requirements for the latter.

Runway surface condition assessment specification will only apply to aerodromes required or electing to implement the GRF.

The specifications in this revised section would reflect those found in ICAO Standards and Recommended Practices and guidance material. They will also include all contaminants, to ensure the regulations apply to any future certified aerodromes that may be affected by cold weather conditions. These specifications will include the assessment of runway thirds, contaminant types, depths and coverage calculations, runway condition codes, the runway condition assessment matrix and the runway condition report formulation.

Further guidance in the form of an advisory circular would be provided to support aerodromes conducting visual-inspection-based assessments. Aerodromes seeking to implement a technical solution would be encouraged to consult with CASA prior to implementation.

## **Policy aim**

To provide standards and guidance material on the runway surface condition assessment that detail the broad specifications of the assessment, without requiring a specific technique or equipment to be used.

To amend section 12.03 of the Part 139 MOS so there is a distinction between broad serviceability inspections and specific runway surface condition assessments, and to incorporate the international GRF requirements for the latter.

**Question 5** – Do you think the policy aim is appropriate and that the proposed policy affecting serviceability inspection requirements will work as intended?

*Radio buttons*

Yes

Yes with changes (please specify suggested changes below)

No (please explain why and provide alternative suggestions below)

Undecided / Not my area of expertise

Comments

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# Page 8. Policy topic 6 - Timely runway condition report communication

## **Policy proposal**

**For controlled aerodromes**

Requirements for reporting of unserviceabilities to Air Traffic Control (ATC) would include a Runway Condition Report (RCR), where appropriate. ATC would then provide the RCR to operating aircraft in line with procedures included in the Aeronautical Information Publication (AIP).

For periods outside of normally scheduled ATC operational hours where the aerodrome operator elects to provide runway surface condition assessments, the aerodrome operator would be required to establish a universal communications (UNICOM) service.

**For non-controlled aerodromes that have an approved air-ground radio service**

The aerodrome operator, where appropriate, would be required to provide the air-ground radio service provider with an RCR. That service provider would, as appropriate provide the RCR to operating aircraft in accordance with amended standards and/or the AIP.

**For non-controlled aerodromes that do not have an approved air-ground radio service**

The aerodrome operator would be required to establish a UNICOM service.

The standards for UNICOM services would be amended to permit the transmission of runway surface conditions in line with ICAO requirements.

The provision of service requirement for UNICOM would also be amended to permit limited-period UNICOM during Global Reporting Format (GRF) conditions only, with appropriate notification in the AIP.

Due to the potential for issues between the respective requirements of Parts 139 and 175 of the *Civil Aviation Safety Regulations 1998* (CASR), the subsection 12.04 (1) of Part 139 Manual of Standards (MOS) NOTAM trigger list would be removed and a reference to the Part 175 of CASR Data Product Specification (DPS) would be added.

## **Policy aim**

The policy aims are:

* For aerodrome serviceability issues (as enumerated in section 12.04 of the Part 139 MOS or under a DPS issued under Part 175 of CASR) to be communicated to aerodrome users via the NOTAM system. For controlled aerodromes, these issues must also be reported to ATC.
* The ATC aspects of the GRF, as noted above, are to be incorporated into the AIP and the Manual of Air Traffic Services later in 2022. The above policy is focused on the communication of RCR details to ATC or, in their absence, through a third party or directly to aerodrome users.

**Question 6** **–** Do you think the policy aim is appropriate and that the proposed policy relating to the communication runway condition reports will work as intended?

*Radio buttons*

Yes

Yes, with changes (please specify suggested changes below)

No (please explain why and provide alternative suggestions below)

Undecided / Not my area of expertise

Comments

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# Page 9. Policy topic 7 - SNOWTAM

## **Policy proposal**

We would work with Airservices Australia to amend aerodrome operator Data Product Specification (DPS) documents, so that they include the Runway Condition Report (RCR) format as a structured message for use in a standard format NOTAM (jn particular item E).

Aerodrome operators would be provided with extensive guidance in an advisory circular on the formulation of an RCR.

We are planning to work with Airservices in the future, to introduce a fully compliant SNOWTAM. At that point, CASA would make the necessary changes to aerodrome operator standards and guidance.

## **Policy aim**

The intent of the new Global Reporting Format standards are to provide a revised format for SNOWTAMs in the form of a highly structured, machine-readable message format in a NOTAM that would facilitate efficient communication of runway surface conditions to aircraft-based performance systems

**Question 7** – Do you think the policy aim is appropriate and the proposed policy affecting issuance runway condition reports by NOTAM will work as intended?

*Radio buttons*

Yes

Yes, with changes (please specify suggested changes below)

No (please explain why and provide alternative suggestions below)

Undecided / Not my area of expertise

Comments

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# Page 10. Policy topic 8 - Promulgation of an Aerodrome's Global Reporting Format Implementation

## **Policy proposal**

Aerodrome operators that have implemented procedures to undertake runway surface condition assessments and provide Runway Condition Report (RCRs) in accordance with Global Reporting Format (GRF) standards, will be required to provide details in their aerodrome's Aeronautical Information Publication - Enroute Supplement Australia (AIP-ERSA) entry.

Aircraft operators should assume that runway surface condition assessments will not be undertaken and RCRs will not be provided at aerodromes where such detail is not included in their AIP-ERSA entry.

## **Policy aim**

To remove the aircraft operator uncertainty over which aerodromes have implemented procedures to undertake runway surface condition assessments and provide RCRs in accordance with GRF standards.

**Question 8** – Do you think the policy aim is appropriate and that the proposed requirements will work as intended?

*Radio buttons*

Yes

Yes, with changes (please specify suggested changes below)

No (please explain why and provide alternative suggestions below)

Undecided / Not my area of expertise

Comments

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# Page 11. Policy topic 9 - Transition timeframes

## **Policy proposal**

To ensure effective implementation of Global Reporting Format (GRF) at aerodromes where this is mandatory, a 6-month applicability date and a subsequent 12-month development period is proposed. This means that GRF may be implemented from 6 months after the making of any new legislation, and the aerodrome operator must have submitted all required material for approval of their GRF-based runway surface condition assessment system to CASA within 12 months after this date.

For non-controlled aerodromes with air transport operations, the mandatory consultation with stakeholders must be completed and a decision on whether to implement a GRF-based runway surface condition assessment process must be made within 12 months of the applicability date. For those aerodromes voluntarily implementing the process, their development period will be determined within their stakeholder consultation.

For aerodromes for which the implementation of a GRF-based runway surface condition assessment process becomes mandatory at a later date (e.g., the establishment of an Air Traffic Control tower service), the aerodrome operator must submit to CASA all required material for approval of their GRF-based runway surface condition assessment system at least 6 months prior to the expected date of entering the ‘mandatory’ category.

**Fact Bank:** Implementation of a GRF by aerodrome operators may require the following:

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| *Content:*   * consultation with stakeholders * amendment of their aerodrome manual * development of appropriate GRF procedures * reviewing and revising aerodrome reporting officer availability during monitoring periods * procurement of equipment and/or technical systems * training of aerodrome reporting officers in GRF techniques * establishment of a universal communications (UNICOM) service * training of UNICOM operators. |

## **Policy aim**

To provide transition periods that support a considered and coordinated approach to GRF implementation.

**Question 9** – Do you think the proposed timeframes for the implementation of GRF at applicable aerodromes is sufficient?

*Radio buttons*

Yes

Yes, with changes (please specify suggested changes below)

No (please explain why and provide alternative suggestions below)

Undecided / Not my area of expertise

Comments

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# Page 12. General comments

Do you have any general comments about the proposed policy?

Please include any **impact** this change may have on you or your operation which has not already been covered in this consultation.

Comments

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