



International Civil Aviation Organization

Runway and Ground Safety Working Group

Fifth Meeting (RGS WG/5)
(Cairo, Egypt, 25 – 27 November 2018)

Agenda Item 2: Global and Regional Development related to RGS

GLOBAL REPORTING FORMAT (GRF)

(Presented by the Secretariat)

SUMMARY

This paper provides an update on the global developments related to the Global Reporting Format (GRF); and seeks the review of the SEI MID-RAST/RGS/10.

Action by the meeting is at paragraph 3.

REFERENCES

- State Letter Ref.: AN 4/27-16/28 dated 5 May 2016
- RGS WG/4 Report

1. INTRODUCTION

1.1 Approval of the Amendment 1 to the PANS Aerodromes (Doc 9981) was issued on 5 May 2016 with the applicability date 5 November 2020. The Amendment introduces provisions regarding the use of a Global Reporting Format (GRF) for assessing and reporting runway surface conditions, as at **Appendix A**.

1.2 GRF Provisions are addressed in the following ICAO Documents:

- Annex 14, Volume 1 and PANS-Aerodromes: elaboration of the information;
- Annex 6, Parts I and II: assessment by the pilot-in-command of the landing performance and report for commercial air transport operations;
- Annex 8: nature of the information provided by the aircraft manufacturers;
- Annex 3: removal of the runway state group for METAR/SPECI;
- Annex 15 and PANS-AIM: syntax and format used for dissemination; and
- PANS-ATM: communication of special air-reports concerning runway braking action and transmission of the runway condition report with a harmonized phraseology.

1.3 The meeting may wish to note that the following Guidance Materials on GRF are also under development:

- updated Circular 329 (Assessment, measurement and reporting of Runway Surface Conditions); and
- new document: Aeroplane Performance Manual-APM, Doc 10064.

2. DISCUSSION

Overview on GRF

2.1 GRF provides a globally-harmonized methodology for runway surface conditions assessment and reporting to provide reports that are directly related to the performance of aeroplanes:

- a) Aerodrome operator assess the runway surface conditions, including contaminants, for each third of the runway length, and report it by mean of a uniform Runway Condition Report (RCR);
- b) Air traffic services (ATS) provide the information received via the RCR to end users (radio, ATIS) and received special air-reports;
- c) Aeronautical information services (AIS) provide the information received in the RCR to end users (SNOWTAM); and
- d) Aircraft operators utilize the information in conjunction with the performance data provided by the aircraft manufacturer to determine if landing or take-off operations can be conducted safely and provide runway braking action special air-report (AIREP).

2.2 Runway Condition Report (RCR) is established by the aerodrome operator when a significant change in runway surface condition occurs due to water, snow, slush, ice or frost (and should continue to reflect significant changes until the runway is no longer contaminated). The following situation is considered as significant change:

- any change in the runway condition code, type and depth of contaminant or in reportable contaminant coverage; and
- any other information (e.g. a pilot report of runway braking action)

2.3 The RCR consists of two sections:

- aeroplane take-off and landing performance calculations; and
- situational awareness of the surface conditions on the runway, taxiways and aprons.

<u>Aeroplane performance Section</u>	<u>Situational Awareness Section</u>
Item A - Aerodrome location indicator	Item I - Reduced runway length
Item B - Date and time of assessment	Item J - Drifting snow on the runway
Item C - Lower runway designator number	Item K - Loose sand on the runway
Item D - Runway condition code (each runway third)	Item L - Chemical treatment on RWY
Item E - Per cent coverage (each runway third)	Item M - Snow banks on the runway
Item F - Depth of loose contaminant (each runway third)	Item N - Snow banks on the taxiway
Item G - Condition description for each third	Item O - Snow banks adjacent to the runway
Item H - Width of RWY to which the RWYCCs apply	Item P - Taxiway conditions
	Item R - Apron conditions
	Item S - Measured friction coefficient
	Item T - Plain language remarks

Global and Regional Activities on GRF

2.4 The meeting may wish to note that a Global ICAO/ACI Symposium on Implementation of the New Global Reporting Format for Runway Surface Condition (GRF2019) will be held in Montréal, Canada from 26 to 28 March 2019. The objective of the Symposium is to support the deployment of the GRF, taking into account the relevant ICAO supporting guidance materials. The Invitation Letter and the Provisional Agenda of the Symposium are at **Appendix B**.

2.5 There is a plan to organize Regional Seminars on GRF, subsequent to the Global Symposium, in coordination with the ICAO HQ.

2.6 The meeting may wish to recall that the RGS WG/4 meeting (Cairo, Egypt, 5-7 November 2017), through Draft Conclusion 4/5, agreed that an Advisory Circular on Monitoring and Reporting of Runway Surface Condition should be developed in the MID Region. Considering the developments of the GRF and its relevant Guidance Materials at the global level, it is proposed to postpone the development of any Regional Guidance Material and/or documents to after the Global GRF Symposium.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information provided;
- b) encourage States to participate in the Global ICAO/ACI Symposium on Implementation of the New Global Reporting Format for Runway Surface Condition (GRF2019) that will be held in Montréal, Canada from 26 to 28 March 2019; and
- c) agree on the proposal at Para. 2.6; and amend the SEI MID-RAST/RGS/10, accordingly.



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Ref.: AN 4/27-16/28

5 May 2016

Subject: Approval of Amendment 1 to the PANS-Aerodromes

Action Required: a) Implementation of Amendment 1 to the PANS-Aerodromes on 5 November 2020; b) Publication of any differences as of 5 November 2020

Sir/Madam,

1. I have the honour to inform you that the Air Navigation Commission, acting under delegated authority, on 18 February 2016, approved Amendment 1 to the first edition of the *Procedures for Air Navigation Services — Aerodromes* (PANS-Aerodromes, Doc 9981) for applicability on 5 November 2020. The amendment was approved on 20 April 2016 by the President of the Council on behalf of the Council in accordance with established procedure. A copy of the amendment is available as attachments to the electronic version of this State letter on the ICAO-NET (<http://portal.icao.int>) where you can access all other relevant documentation.

2. Amendment 1 stems from proposals developed by the Secretariat as a result of the work of the Friction Task Force (FTF) of the Aerodrome Design and Operations Panel (ADOP) (formerly the Aerodromes Panel (AP)) to introduce provisions regarding the use of a global reporting format for assessing and reporting runway surface conditions. The amendment also introduces the division of the PANS-Aerodromes into two parts for better readability: Part I contains high-level matters, including aerodrome certification, and Part II contains day-to-day operational matters such as foreign object debris (FOD), wildlife hazards and inspection of the movement area.

3. An implementation task list, including an outline of guidance material, and an impact assessment for the proposed amendment are presented in Attachments B and C, respectively.

4. Your Government is invited by the Council to implement the provisions of the PANS-Aerodromes. In this connection, I draw your attention to the decision taken by the Council, on 1 October 1973, to discontinue the publication of differences in Supplements to PANS documents and, instead, to request States to publish up-to-date lists of significant differences from PANS documents in their Aeronautical Information Publications (AIPs).

5. Please note that the time between the approved date and the applicability date of 5 November 2020 for Amendment 1 to the PANS-Aerodromes is longer than usual due to the nature and complexity of the proposals.

6. May I, therefore, invite your Government to publish in your AIP a list of any significant differences which will exist on 5 November 2020 between the provisions of the PANS-Aerodromes and your national regulations and practices.

Accept, Sir/Madam, the assurances of my highest consideration.

A handwritten signature in blue ink, appearing to read 'Fang Liu', with a horizontal line underneath the name.

Fang Liu
Secretary General

Enclosures:

- A — Amendment to the Foreword of the PANS-Aerodromes
- B — Implementation task list and outline of guidance material in relation to Amendment 1 to the PANS-Aerodromes
- C — Impact assessment in relation to Amendment 1 to the PANS-Aerodromes

ATTACHMENT A to State letter AN 4/27-16/28

AMENDMENT TO THE FOREWORD OF THE PANS-AERODROMES,
FIRST EDITION

Add the following at the end of Table A:

<i>Amendment</i>	<i>Source(s)</i>	<i>Subject</i>	<i>Approved Applicable</i>
1	Friction Task Force (FTF) of the Aerodrome Design and Operations Panel (ADOP) (formerly the Aerodromes Panel (AP))	Amendment concerning the use of an enhanced global reporting format for assessing and reporting runway surface condition.	20 April 2016 5 November 2020

**IMPLEMENTATION TASK LIST AND OUTLINE OF GUIDANCE MATERIAL
IN RELATION TO AMENDMENT 1 TO THE PANS-AERODROMES, DOC 9981**

1. IMPLEMENTATION TASK LIST

1.1 Essential steps to be followed by a State in order to implement the proposed amendment to the PANS-Aerodromes, Doc 9981:

- a) conduct a gap analysis between the new ICAO provisions and national regulatory framework;
- b) identification of the rule-making process necessary to transpose the new ICAO provisions into national regulations, where necessary;
- c) drafting the necessary modifications to the national regulations;
- d) official adoption of the national regulations and means of compliance;
- e) establishment of a national implementation plan that takes into account the new ICAO provisions;
- f) training of relevant aerodrome personnel prior to implementation of the new provisions;
- g) implementation of the new national regulations by aerodrome operators;
- h) modification of oversight framework according to the new national regulations;
- i) oversight by the State of the implementation of the regulations; and
- j) publication of significant differences, if any, in the State's AIP.

2. STANDARDIZATION PROCESS

- 2.1 Approval date: 20 April 2016
- 2.2 Applicability date: 5 November 2020
- 2.3 Embedded applicability date(s): N/A

3. SUPPORTING DOCUMENTATION

3.1 ICAO documentation

Title	Type (PANS/TI/Manual/Circ)	Planned publication date
<i>Airport Services Manual, Part 2 — Pavement Surface Conditions (Doc 9137)</i>	Updated guidance	November 2016
<i>Airport Services Manual, Part 8 — Airport Operational Service (Doc 9137)</i>	Updated guidance	November 2016
<i>Airport Services Manual, Part 9 — Airport Maintenance Practices (Doc 9137)</i>	Updated guidance	November 2016
<i>Circ 329, Assessment, Measurement and Reporting of Runway Surface Conditions</i>	Updated guidance	November 2016

3.2 External documentation

Title	External Organization	Publication date
None		

4. IMPLEMENTATION ASSISTANCE TASKS

Type	Global	Regional
Symposium on Runway Surface Condition Assessment and Reporting		Europe (Paris, March/April 2016)
Regional workshop on implementation of global reporting format		ICAO Regional Offices

5. UNIVERSAL SAFETY OVERSIGHT AUDIT PROGRAMME (USOAP)

5.1 No new protocol questions (PQs) are required. However, a number of related PQs will need revision of ICAO references for review of evidence.

**IMPACT ASSESSMENT IN RELATION TO
AMENDMENT 1 TO THE PANS-AERODROMES, DOC 9981**

1. INTRODUCTION

1.1 Amendment 1 to the PANS-Aerodromes, Doc 9981, contains provisions related to the implementation of the enhanced global reporting format for assessing and reporting runway surface conditions, and is intended to improve safety and efficiency performance at aerodromes.

2. IMPACT ASSESSMENT

2.1 *Safety impact:* Runway surface conditions have contributed to many safety events, and investigations have revealed shortfalls in the accuracy and timeliness of assessment and reporting methods. The proposed global reporting format is designed to report runway surface conditions in a standardized manner such that flight crew are able to accurately determine aeroplane take-off and landing performance, resulting in a global reduction in runway excursion incidents/accidents.

2.2 *Financial impact:* For States, the financial cost will be limited to generating a series of regulatory amendments, training of CAA inspectors and implementing a robust oversight process. For industry, specifically the aerodrome operators, the financial cost will mainly be in the areas of training of staff (runway assessors) exposed to the change.

2.3 *Security impact:* Nil.

2.4 *Environmental impact:* Positive impact due to lesser occurrences of runway excursion incidents/accidents.

2.5 *Efficiency impact:* Accurate and timely runway State information provided by aerodromes and adjusted to the operational need (i.e. aeroplane performance as provided by aeroplane manufacturers) and promulgated/disseminated according to defined terminology and procedures will have a positive impact on the efficiency of the air transportation system. Occurrences of excursions, disruptions to aerodrome and air traffic operations such as, but not limited to, the removal of aircraft disabled at an aerodrome, in particular on a runway, are expected to be reduced.

2.6 *Expected implementation time:* Between two to five years.

AMENDMENT No. 1

TO THE

**PROCEDURES
FOR
AIR NAVIGATION SERVICES**

AERODROMES

(Doc 9981)

INTERIM EDITION

The text of Amendment No. 1 to the PANS-Aerodromes (Doc 9981) was approved by the President of the Council on behalf of the Council on **20 April 2016** for applicability on **5 November 2020**. This interim edition is distributed to facilitate implementation of the amendment by States. Replacement pages incorporating Amendment No. 1 are expected to be distributed in October 2020. (State letter AN 4/27-16/28 refers.)

APRIL 2016

INTERNATIONAL CIVIL AVIATION ORGANIZATION

**NOTES ON THE PRESENTATION OF THE AMENDMENT
TO THE PANS-AERODROMES**

The text of the amendment is arranged to show deleted text with a line through it and new text highlighted with grey shading, as shown below:

1. ~~Text to be deleted is shown with a line through it.~~ text to be deleted
2. **New text to be inserted is highlighted with grey shading.** new text to be inserted
3. ~~Text to be deleted is shown with a line through it~~ followed by the replacement text which is highlighted with grey shading. new text to replace existing text

**TEXT OF AMENDMENT 1 TO THE
PROCEDURES FOR AIR NAVIGATION SERVICES
AERODROMES
(PANS-AERODROMES, DOC 9981)**

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FOREWORD

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6. CONTENTS OF THE DOCUMENT

*Editorial note.— Insert new paragraphs 6.1 to 6.4 as follows
and renumber subsequent paragraphs accordingly:*

6.1 The PANS-Aerodromes consists of two parts as follows:

Part I — *Aerodrome certification, safety assessments and aerodrome compatibility*

Part II — *Aerodrome operational management*

6.2 **Part I — *Aerodrome certification, safety assessments and aerodrome compatibility*** describes procedures for the certification of an aerodrome, how to conduct a safety assessment and methods required to assess the compatibility of an aerodrome to accept a proposed change in operation. Part I provides the basic guidelines to States, and those operators and organizations certifying and managing aerodromes.

6.3 **Part II — *Aerodrome operations management*** provides operational procedures for the operation and management of aerodromes and related aerodrome activities. The requirements contained in this part may be applicable to the aerodrome operator and/or other relevant entities operating on the aerodrome. The procedures described in this part provide an overall framework to allow for a standardized approach to aerodrome operations.

6.4 Both parts present coverage of operational practices that are beyond the scope of Standards and Recommended Practices (SARPs) but with respect to which a measure of international uniformity is desirable.

**PART I — AERODROME CERTIFICATION,
SAFETY ASSESSMENTS AND AERODROME COMPATIBILITY**

End of new text.

~~6.1~~ **6.5 Chapter 1 — Definitions**

Chapter 1 contains a list of terms and their technical meanings as used in this document.

~~6.2–6.6~~ **Chapter 2 — Certification of aerodromes**

6.26.1 Chapter 2 outlines the general principles and procedures to be followed through all of the suggested stages of certifying an aerodrome operator: the initial meeting between the State and the aerodrome operator, technical inspections of the aerodrome, approval/acceptance of all or relevant portions of the aerodrome manual, on-site verification of aerodrome operational aspects including the safety management system (SMS) of the operator, analysis of the deviations from regulatory requirements and issuance of the verification report, assessment of the corrective action plan, issuance of the certificate and continued safety oversight.

6.26.2 Appendix 1 to Chapter 2 contains a list of the main items to be inspected and/or audited in each of the technical and operational areas including the SMS of the operator. Appendix 2 concerns critical data related to safety occurrences. The attachments to Chapter 2 contain a list of possible subjects for an aerodrome manual, guidance on initial certification process and a checklist that can be used by the State to assess the acceptance of an aerodrome manual and initial certification of an aerodrome. It is appreciated that these will differ according to the legal basis of the State, but some States might find these helpful.

~~6.37~~ **Chapter 3 — Safety assessments for aerodromes**

Chapter 3 outlines the methodologies and procedures to be followed when undertaking a safety assessment. It includes a brief description of how a safety assessment fulfils an element of the overall aerodrome operator's SMS. An aerodrome operator's SMS should enable the aerodrome operator to manage the safety risks it is exposed to as a consequence of the hazards it must face during the operations of the aerodrome.

~~6.48~~ **Chapter 4 — Aerodrome compatibility**

6.48.1 Chapter 4 outlines a methodology and procedure to assess the compatibility between aeroplane operations and aerodrome infrastructure and operations when an aerodrome accommodates an aeroplane that exceeds the certificated characteristics of the aerodrome.

6.48.2 This chapter addresses situations where compliance with the design provisions stipulated in Annex 14, Volume I, is either impractical or physically impossible. Where alternative measures, operational procedures and operating restrictions have been developed, these should be reviewed periodically to assess their continued validity.

6.48.3 The attachments to Chapter 4 contain selected aeroplane characteristics data. They are provided for convenience to allow the aerodrome operator to easily compare the characteristics of various commonly operated aeroplanes. However, the data will be subject to change, and accurate data should always be obtained from the aircraft manufacturers' documentation prior to any official assessment of compatibility.

~~6.5~~ **Chapter 5 — Aerodrome operational management *(to be developed)***

~~Chapter 5 will outline the general principles and procedures to be followed in providing uniform and harmonized aerodrome operations.~~

PART II — AERODROME OPERATIONAL MANAGEMENT

6.9 The structure of each chapter within Part II is set up with three specific sections including a general part, the objectives to be achieved, and the operating practices related to these objectives.

6.9.1 The “general” section of the chapter includes an introduction to each of the topics covered in the subsequent chapter. It also provides an overview of the general principles in order to understand the procedures that follow.

6.9.2 The “objectives” section contains the basic principles that have been defined for the topic. These basic principles have been formulated as required for global uniform application. The “Objectives” cover the whole subject matter and are not broken down into the individual subsections.

6.9.3 The “operational practices” section covers the specific operational practices and the ways in which they are applied in order to achieve the basic principles defined in “objectives”.

6.9.4 Chapter 1 contains provisions and procedures applicable for assessing and reporting the condition of a runway.

6.9.5 Chapter 2 (*Airside inspections: to be developed*)

6.9.6 Chapter 3 (*Work in progress: to be developed*)

6.9.7 Chapter 4 (*Foreign object debris (FOD): to be developed*)

6.9.8 Chapter 5 (*Wildlife hazard management: to be developed*)

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Editorial Note.— Part II is all new text.

PART II – AERODROME OPERATIONAL MANAGEMENT

Chapter 1 REPORTING FORMAT USING STANDARD RUNWAY CONDITION REPORT

1.1 RUNWAY SURFACE CONDITION ASSESSMENT AND REPORTING

1.1.1 General

Note.— This section includes an introduction to each of the topics covered in subsequent sections. It also provides an overview of the general principles in order to understand the procedures that follow.

1.1.1.1 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 of the aeroplane. The runway condition report (RCR) is used for reporting assessed information.

1.1.1.2 On a global level, movement areas are exposed to a multitude of climatic conditions and consequently a significant difference in the condition to be reported. The RCR describes a basic structure applicable for all these climatic variations. Assessing runway surface conditions rely on a great variety of techniques and no single solution can apply to every situation.

Note.— Guidance on methods of assessing runway surface condition is given in Attachment A – Assessment Methods.

1.1.1.3 The philosophy of the RCR is that the aerodrome operator assesses the runway surface conditions whenever water, snow, slush, ice or frost are present on an operational runway. From this assessment, a runway condition code (RWYCC) and a description of the runway surface are reported which can be used by the flight crew for aeroplane performance calculations. This format, based on the type, depth and coverage of contaminants, is the best assessment of the runway surface condition by the aerodrome operator; however, all other pertinent information will be taken into consideration and be kept up to date and changes in conditions reported without delay.

1.1.1.4 The RWYCC reflects the runway braking capability as a function of the surface conditions. With this information, the flight crew can derive, from the performance information provided by the aeroplane manufacturer, the necessary stopping distance of an aircraft on the approach under the prevailing conditions.

1.1.1.5 The operational requirements in 1.1.1.3 stems from Annex 6 — *Operation of Aircraft, Part I — International Commercial Air Transport — Aeroplanes* and Annex 8 — *Airworthiness of Aircraft* with the objective to achieve the desired level of safety for the aeroplane operations.

1.1.1.6 Annex 14, Volume I contains high-level SARPs related to the assessment and reporting of runway surface condition. Associated objectives and operational practices are described in 1.1.2 and 1.1.3 below.

1.1.1.7 The operational practices are intended to provide the information needed to fulfil the syntax requirements for dissemination and promulgation specified in Annex 15 — *Aeronautical Information Services* and the *Procedures for Air Navigation Services — Air Traffic Management* (PANS-ATM, Doc 4444).

Note.— For practical reasons, the RCR information string has been provisionally incorporated in Annex 15 as a revision of the SNOWTAM format.

1.1.1.8 When the runway is wholly or partly contaminated by standing water, snow, slush, ice or frost, or is wet associated with the clearing or treatment of snow, slush, ice or frost, the runway condition report should be disseminated through the AIS and ATS services. When the runway is wet, not associated with the presence of standing water, snow, slush, ice or frost, the assessed information should be disseminated using the runway condition report through the ATS only.

Note.— Operationally relevant information concerning taxiways and aprons are covered in the situational awareness section of the RCR.

1.1.1.9 The operational practices describe procedures to meet the operationally needed information for the flight crew and dispatchers for the following sections:

- a) aeroplane take-off and landing performance calculations:
 - i) dispatch – pre-planning before commencement of flight:
 - take off from a runway; and
 - landing on a destination aerodrome or an alternate aerodrome
 - ii) in flight – when assessing the continuation of flight; and
 - before landing on a runway;
- b) situational awareness of the surface conditions on the taxiways and aprons.

1.1.2 Objectives

Note.— This section contains the basic principles that have been defined for the topic and have been formulated as required for global uniform application. They cover the whole subject matter and are broken down into the individual subsections.

1.1.2.1 The RWYCC shall be reported for each third of the runway assessed.

1.1.2.2 The assessment process shall include:

- a) assessing and reporting the condition of the movement area;
- b) providing the assessed information in the correct format; and
- c) reporting significant changes without delay.

1.1.2.3 The information to be reported shall be compliant with the RCR which consists of:

- a) aeroplane performance calculation section; and
- b) situational awareness section.

1.1.2.4 The information shall be included in an information string in the following order using only AIS compatible characters.

- a) aeroplane performance calculation section:
 - i) aerodrome location indicator;
 - ii) date and time of assessment;
 - iii) lower runway designation number;
 - iv) RWYCC for each runway third;
 - v) per cent coverage contaminant for each runway third;

- vi) depth of loose contaminant for each runway third;
 - vii) condition description for each runway third; and
 - viii) width of runway to which the RWYCCs apply if less than published width.
- b) situational awareness section:
- i) reduced runway length;
 - ii) drifting snow on the runway;
 - iii) loose sand on the runway;
 - iv) chemical treatment on the runway;
 - v) snowbanks on the runway;
 - vi) snowbanks on taxiway;
 - vii) snowbanks adjacent to the runway;
 - viii) taxiway conditions;
 - ix) apron conditions;
 - x) State approved and published use of measured friction coefficient; and
 - xi) plain language remarks.

1.1.2.5 The syntax for dissemination as described in the RCR template in Annex 15, Appendix 2, is determined by the operational need of the flight crew and the capability of trained personnel to provide the information arising from an assessment.

Note.— For practical reasons, the RCR information string has been provisionally incorporated in Annex 15 — Aeronautical Information Services as a revision of the SNOWTAM format.

1.1.2.6 The syntax requirement in 1.1.2.5 shall be strictly adhered to when providing the assessed information through the RCR.

1.1.3 Operational practices

Note.— This section covers the specific operational practices and the ways in which they are applied in order to achieve the basic principles defined in 1.1.2 – Objectives.

1.1.3.1 Reporting, in compliance with the runway condition report, shall commence when a significant change in runway surface condition occurs due to water, snow, slush, ice or frost.

1.1.3.2 Reporting of the runway surface condition should continue to reflect significant changes until the runway is no longer contaminated. When this situation occurs, the aerodrome will issue a runway condition report that states the runway is wet or dry as appropriate.

1.1.3.3 A change in the runway surface condition used in the runway condition report is considered significant whenever there is:

- a) any change in the RWYCC;
- b) any change in contaminant type;
- c) any change in reportable contaminant coverage according to Table 1;
- d) any change in contaminant depth according to Table 2; and
- e) any other information, for example a pilot report of runway braking action, which according to assessment techniques used, are known to be significant.

Runway Condition Report – Aeroplane performance calculation section

1.1.3.4 The aeroplane performance calculation section is a string of grouped information separated by a space “ ” and ends with a return and two line feed “<<≡”. This is to distinguish the aeroplane performance calculation section from the following situational awareness section or the following aeroplane performance calculation section of another runway.

The information to be included in this section consists of the following.

- a) **Aerodrome location indicator:** a four-letter ICAO location indicator in accordance with Doc 7910, *Location Indicators*.

This information is mandatory.

Format: nnnn
Example: ENZH

- b) **Date and time of assessment:** date and time (UTC) when the assessment was performed by the trained personnel.

This information is mandatory.

Format: MMDDhhmm
Example: 09111357

- c) **Lower runway designation number:** a two or three character identifying the runway for which the assessment is carried out and reported.

This information is mandatory.

Format: nn[L] or nn[C] or nn[R]
Example: 09L

- d) **Runway condition code for each runway third:** a one digit number identifying the RWYCC assessed for each runway third. The codes are reported in a three character group separated by a “/” for each third. The direction for listing the runway thirds shall be in the direction as seen from the lower designation number.

This information is mandatory.

When transmitting information on runway surface condition by ATS to flight crew, the sections are, however, referred to as the first, second or third part of the runway. The first part always means the first third of the runway as seen in the direction of landing or take-off as illustrated in Figures 1 and 2 and detailed in PANS-ATM (Doc 4444).

Format: n/n/n

Example: 5/5/2

Note 1.— A change in RWYCC from, say, 5/5/2 to 5/5/3 is considered significant. (See further examples below).

Note 2.— A change in RWYCC requires a complete assessment taken into account all information available.

Note 3.— Procedures for assigning a RWYCC are available in 1.1.3.12 to 1.1.3.16.

- e) **Per cent coverage contaminant for each runway third:** a number identifying the percentage coverage. The percentages are to be reported in an up to nine character group separated by a “/” for each runway third. The assessment is based upon an even distribution within the runway thirds using the guidance in Table 1.

This information is conditional. It is not reported for one runway third if it is dry or covered with less than 10 per cent.

Format: [n]nn/[n]nn/[n]nn

Example: 25/50/100

NR/50/100 if contaminant coverage is less than 10% in the first third

25/NR/100 if contaminant coverage is less than 10% in the middle third

25/50/NR if contaminant coverage is less than 10% in the last third

With uneven distribution of the contaminants additional information is to be given in the plain language remark part of the Situational awareness section of the runway condition report. Where possible a standardized text should be used.

Note.— When no information is to be reported, insert “NR” at their relevant position in the message to indicate to the user that no information exists (/NR/).

- f) **Depth of loose contaminant; dry snow, wet snow, slush or standing water for each runway third:** a two or three digit number representing the assessed depth (mm) of the contaminant for each runway third. The depth is reported in a six to nine character group separated by a “/” for each runway third as defined in Table 2. The assessment is based upon an even distribution within the runway thirds as assessed by a trained person. If measurements are included as part of the assessment process, the reported values are still reported as assessed depths as the trained person has placed his judgment upon the measured depths to be representative for the runway third.

Format: [n]nn/[n]nn/[n]nn
 Examples: 04/06/12 [STANDING WATER]
 02/04/09 [SLUSH]
 02/05/10 [WET SNOW or WET SNOW ON TOP OF ...]
 02/20/100 [DRY SNOW or DRY SNOW ON TOP OF]
 NR/NR/100 [DRY SNOW in the last third only]

This information is conditional. It is reported only for DRY SNOW, WET SNOW, SLUSH and STANDING WATER.

Example of reporting depth of contaminant whenever there is a significant change

- 1) After the first assessment of runway condition, a **first runway condition report** is generated. The initial report is:

5/5/5 100/100/100 02/02/02 SLUSH/SLUSH/SLUSH

Note.— The full information string is not used in this example.

- 2) With continuing precipitation, a new runway condition report is required to be generated as subsequent assessment reveals a change in the runway condition code. A **second runway condition report** is therefore created as:

2/2/2 100/100/100 03/03/03 SLUSH/SLUSH/SLUSH

- 3) With even more precipitation, further assessment reveals the depth of precipitation has increased from 3 mm to 5 mm along the entire length of the runway. However, a new runway condition report **is not** required because the runway condition code has not change (change in depth is less than the significant change threshold of 3 mm).

- 4) A final assessment of the precipitation reveals that the depth has increased to 7 mm. A new runway condition code is required because the change in depth from the last runway condition report (**second runway condition code**) i.e. from 3 mm to 7 mm is greater than the significant change threshold of 3 mm. A **third runway condition report** is thus created as below:

2/2/2 100/100/100 07/07/07 SLUSH/SLUSH/SLUSH

For contaminants other than STANDING WATER, SLUSH, WET SNOW or DRY SNOW, the depth is not reported. The position of this type of information in the information string is then identified by /NR/.

Example: /NR/

When the depth of the contaminants varies significantly within a runway third, additional information is to be given in the plain language remark part of the *Situational awareness section* of the runway condition report.

Note.— Significantly in this context is a variation in depth in the lateral direction more than twice the depth indicated in column 3 of Table 2. Further information is available in Circular 329.

- g) **Condition description for each runway third:** to be reported in capital letters using terms specified in paragraph 2.9.5 in Annex 14, Volume I. These terms have been harmonized with the terms used in the Standards and Recommended Practices in Annexes 6, 8, 11 and 15. The condition type is reported by any of the following condition type description for each runway third and separated by an oblique stroke “/”.

This information is mandatory.

COMPACTED SNOW
 DRY
 DRY SNOW
 DRY SNOW ON TOP OF COMPACTED SNOW
 DRY SNOW ON TOP OF ICE
 FROST
 ICE
 SLUSH
 STANDING WATER
 WATER ON TOP OF COMPACTED SNOW
 WET
 WET ICE
 WET SNOW
 WET SNOW ON TOP OF COMPACTED SNOW
 WET SNOW ON TOP OF ICE

Format: nnnn/nnnn/nnnn

Example: DRY SNOW ON TOP OF COMPACTED SNOW/WET SNOW ON TOP OF COMPACTED SNOW/WATER ON TOP OF COMPACTED SNOW

- h) **Width of runway to which the RWYCCs apply if less than published width** is the two digit number representing the width of cleared runway in metres if less than published width.

This information is optional.

Format: nn

Example: 30

If the cleared runway width is not symmetrical along the centre line, additional information is to be given in the plain language remark part of the situational awareness section of the runway condition report.

Runway condition report – Situational awareness section:

1.1.3.5 All individual messages in the situational awareness section end with a full stop sign. This is to distinguish the message from subsequent message(s).

The information to be included in this section consists of the following:

- a) **Reduced runway length**

This information is conditional when a NOTAM has been published with a new set of declared distances affecting the LDA.

Format: Standardized fixed text
 RWY nn [L] or nn [C] or nn [R] LDA REDUCED TO [n]nn
 Example: RWY 22L LDA REDUCED TO 1450.

b) **Drifting snow on the runway**

This information is optional.

Format: Standardized fixed text
 Example: DRIFTING SNOW.

c) **Loose sand on the runway**

This information is optional.

Format: RWY nn[L] or nn[C] or nn[R] LOOSE SAND
 Example: RWY 02R LOOSE SAND.

d) **Chemical treatment on the runway**

This information is mandatory.

Format: RWY nn[L] or nn[C] or nn[R] CHEMICALLY TREATED.
 Example: RWY 06 CHEMICALLY TREATED.

e) **Snowbanks on the runway**

This information is optional.
 Left or Right distance in metres from centerline.

Format: RWY nn[L] or nn[C] or nn[R] SNOWBANK Lnn or Rnn or LRnn FM CL
 Example: RWY 06L SNOWBANK LR19 FM CL.

f) **Snowbanks on taxiway**

This information is optional.
 Left or Right distance in metres from centerline.

Format: TWY [nn]n SNOWBANK Lnn or Rnn or LRnn FM CL
 Example: TWY A SNOWBANK LR20 FM CL.

g) **Snowbanks adjacent to the runway penetrating level/profile set in the aerodrome snow plan.**

This information is optional.

Format: RWY nn[L] or nn[C] or nn[R] ADJACENT SNOWBANKS.
 Example: RWY 06R ADJACENT SNOWBANKS.

h) Taxiway conditions

This information is optional.

Format: TWY [nn]n POOR.

Example: TWY B POOR.

i) Apron conditions

This information is optional.

Format: APRON [nnnn] POOR.

Example: APRON NORTH POOR.

j) State approved and published use of measured friction coefficient

This information is optional.

Format: *[State set format and associated procedures]*

Example: *[Function of State set format and associated procedures]*

k) Plain language remarks using only allowable characters in capital letters.

Where possible, standardized text should be developed.

This information is optional.

Format: Combination of allowable characters where use of full stop « . » marks the end of message.

Allowable characters:

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

0 1 2 3 4 5 6 7 8 9

/ [oblique stroke] “ . ” [period] “ ” [space]

Complete information string

1.1.3.6 An example of a complete information string prepared for dissemination is as follows:

[COM header and Abbreviated header] (Completed by AIS)

GG EADBZQZX EADNZQZX EADSZQZX

070645 EADDYNYX

SWEA0151 EADD 02170055

SNOWTAM 0151

[Aeroplane performance calculation section]

EADD 02170055 09L 5/5/5 100/100/100 NR/NR/NR WET/WET/WET

EADD 02170135 09R 5/4/3 100/50/75 NR/06/06 WET/SLUSH/SLUSH

EADD 02170225 09C 3/2/1 75/100/100 06/12/12 SLUSH/WET SNOW/WET SNOW

[Situational awareness section]

RWY 09L SNOWBANK R20 FM CL. RWY 09R ADJ SNOWBANKS. TWY B POOR.

APRON NORTH POOR.

Assessing a runway and assigning a runway condition code

1.1.3.7 The assessed RWYCC to be reported for each third of the runway is determined by following the procedure described in paragraph 1.1.3.12 to paragraph 1.1.3.16.

Note.— Guidance on methods of assessing runway surface condition, including the determination of a slippery wet runway, is given in Attachment A.

1.1.3.8 If 25 per cent or less area of a runway third is wet or covered by contaminant, a RWYCC 6 shall be reported.

1.1.3.9 If the distribution of the contaminant is not uniform, the location of the area that is wet or covered by the contaminant is described in the plain language remark part of the Situational awareness section of the runway condition report.

1.1.3.10 A description of the runway surface condition is provided using the contamination terms described in capital letters in Table 3 Assigning a runway condition code.

1.1.3.11 If multiple contaminants are present where the total coverage is more than 25 per cent but no single contaminant covers more than 25 per cent of any runway third, the RWYCC is based upon the judgment by a trained person, considering what contaminant will most likely be encountered by the aeroplane and its likely effect on the aeroplane's performance.

1.1.3.12 The RWYCC is determined using Table 3.

1.1.3.13 The variables, in Table 3, that may affect the runway condition code are:

- a) type of contaminant;
- b) depth of contaminant; and
- c) outside air temperature. Where available the runway surface temperature should preferably be used.

Note.— At air temperatures of +3°degrees Celsius and below, with a dew point spread of 3°degrees Celsius or less, the runway surface condition may be more slippery than indicated by the runway condition code assigned by Table 3. The narrow dew point spread indicates that the air mass is relatively close to saturation which is often associated with actual precipitation, intermittent precipitation, nearby precipitation or fog.

This may depend on its correlation with precipitation but it may also, at least in part, depend on the exchange of water at the air-ice interface. Due to the other variables involved such as surface temperature, solar heating and ground cooling or heating, a small temperature spread does not always mean that the braking action will be more slippery. The observation should be used by aerodrome operators as an indicator of slippery conditions but not as an absolute.

1.1.3.14 An assigned RWYCC 5, 4, 3 or 2 shall not be upgraded.

1.1.3.15 An assigned RWYCC 1 or 0 can be upgraded using the following procedures (but see 1.1.3.16 below):

- a) if a properly operated and calibrated State-approved measuring device and all other observations supports a higher RWYCC as judged by a trained person;
- b) the decision to upgrade RWYCC 1 or 0 cannot be based upon one assessment method alone. All available means of assessing runway slipperiness are to be used to support the decision;
- c) when RWYCC 1 or 0 is upgraded, the runway surface is assessed frequently during the period the higher RWYCC is in effect to ensure that the runway surface condition does not deteriorate below the assigned code; and
- d) variables that may be considered in the assessment that may affect the runway surface condition, include but are not limited to:
 - i) any precipitation conditions;
 - ii) changing temperatures;
 - iii) effects of wind;
 - iv) frequency of runway in use; and
 - v) type of aeroplane using the runway.

1.1.3.16 Upgrading of RWYCC 1 or 0 using the procedures in 1.1.3.15 shall not be permitted to go beyond a RWYCC 3.

1.1.3.17 If sand or other runway treatments are used to support upgrading, the runway surface is assessed frequently to ensure the continued effectiveness of the treatment.

1.1.3.18 The RWYCC determined from Table 3 should be appropriately downgraded considering all available means of assessing runway slipperiness, including the criteria given in Table 4.

1.1.3.19 Where available, the pilot reports of runway braking action should be taken into consideration as part of the ongoing monitoring process, using the following principle:

- a) a pilot report of runway braking action is taken into consideration for downgrading purposes; and
- b) a pilot report of runway braking action can be used for upgrading purposes only if it is used in combination with other information qualifying for upgrading.

Note 1.— The procedures for making special air-reports regarding runway braking action are contained in the Procedures for Air Navigation Services — Air Traffic Management (PANS-ATM, Doc 4444), Chapter 4, and Appendix 1, Instructions for air-reporting by voice communication.

Note 2.— Procedures for downgrading reported RWYCC can be found in 1.1.3.23 including the use of Table 5 runway condition assessment matrix (RCAM).

1.1.3.20 Two consecutive pilot reports of runway braking action of POOR shall trigger an assessment if RWYCC of 2 or better has been reported.

1.1.3.21 When one pilot has reported a runway braking action of LESS THAN POOR, the information shall be disseminated, a new assessment shall be made and the suspension of operations on that runway shall be considered.

Note 1.— If considered appropriate, maintenance activities may be performed simultaneously or before a new assessment is made.

Note 2.— Procedures for the provision of information to arriving aircraft are contained in Procedures for Air Navigation Services — Air Traffic Management (PANS-ATM, Doc 4444), Section 6.6.

1.1.3.22 Table 4 shows the correlation of pilot reports of runway braking action with RWYCCs.

1.1.3.23 The combined Table 3 and Table 4 form the runway condition assessment matrix (RCAM) in Table 5. The RCAM is a tool to be used when assessing runway surface conditions. It is not a standalone document and shall be used in compliance with the associated procedures of which there are two main parts:

- a) assessment criteria; and
- b) downgrade assessment criteria.

1.2 AERODROME MOVEMENT AREA MAINTENANCE

(Guidance on surface friction characteristics and State's responsibility including examples of States' good practices are currently being developed.)

LIST OF TABLES AND FIGURES

Table 1 – Percentage of coverage for contaminants

Assessed per cent	Reported per cent
10 – 25	25
26 – 50	50
51 – 75	75
76 – 100	100

Table 2 – Depth assessment for contaminants

Contaminant	Valid values to be reported	Significant change
STANDING WATER	04, then assessed value	3 mm up to and including 15 mm
SLUSH	03, then assessed value	3 mm up to and including 15 mm
WET SNOW	03, then assessed value	5 mm
DRY SNOW	03, then assessed value	20 mm

Note 1.— For STANDING WATER, 04 (4 mm) is the minimum depth value at and above which the depth is reported. (From 3 mm and below, the runway third is considered WET).

Note 2.— For SLUSH, WET SNOW and DRY SNOW, 03 (3 mm) is the minimum depth value at and above which the depth is reported.

Note 3.— Above 4 mm for STANDING WATER and 3 mm for SLUSH, WET SNOW and DRY SNOW an assessed value is reported and a significant change relates to observed change from this assessed value.

Table 3 – Assigning a runway condition code (RWYCC)

Runway condition description	Runway condition code (RWYCC)
DRY	6
FROST WET (The runway surface is covered by any visible dampness or water up to and including 3 mm deep. SLUSH (up to and including 3 mm depth) DRY SNOW (up to and including 3 mm depth) WET SNOW (up to and including 3 mm depth)	5
COMPACTED SNOW (Outside air temperature minus 15 degrees Celsius and below)	4
WET (“Slippery wet” runway) DRY SNOW (more than 3 mm depth) WET SNOW (more than 3 mm depth) DRY SNOW ON TOP OF COMPACTED SNOW (Any depth) WET SNOW ON TOP OF COMPACTED SNOW (Any depth) COMPACTED SNOW (Outside air temperature above minus 15 degrees Celsius)	3
STANDING WATER (more than 3 mm depth) SLUSH (more than 3 mm depth)	2
ICE	1
WET ICE WATER ON TOP OF COMPACTED SNOW DRY SNOW OR WET SNOW ON TOP OF ICE	0

Table 4 – Correlation of runway condition code and pilot reports of runway braking action

Pilot report of runway braking action	Description	Runway condition code (RWYCC)
N/A		6
GOOD	Braking deceleration is normal for the wheel braking effort applied AND directional control is normal	5
GOOD TO MEDIUM	Braking deceleration OR directional control is between good and medium	4
MEDIUM	Braking deceleration is noticeably reduced for the wheel braking effort applied OR directional control is noticeably reduced	3
MEDIUM TO POOR	Braking deceleration OR directional control is between medium and poor	2
POOR	Braking deceleration is significantly reduced for the wheel braking effort applied OR directional control is significantly reduced	1
LESS THAN POOR	Braking deceleration is minimal to non-existent for the wheel braking effort applied OR directional control is uncertain	0

Table 5 – Runway condition assessment matrix (RCAM)

Runway condition assessment matrix (RCAM)			
Assessment criteria		Downgrade assessment criteria	
Runway condition code	Runway surface description	Aeroplane deceleration or directional control observation	Pilot report of runway braking action
6	<ul style="list-style-type: none"> • DRY 	---	---
5	<ul style="list-style-type: none"> • FROST • WET (The runway surface is covered by any visible dampness or water up to and including 3 mm depth) <p>Up to and including 3 mm depth:</p> <ul style="list-style-type: none"> • SLUSH • DRY SNOW • WET SNOW 	Braking deceleration is normal for the wheel braking effort applied AND directional control is normal.	GOOD
4	<p>-15°C and Lower outside air temperature:</p> <ul style="list-style-type: none"> • COMPACTED SNOW 	Braking deceleration OR directional control is between Good and Medium.	GOOD TO MEDIUM
3	<ul style="list-style-type: none"> • WET ("Slippery wet" runway) • DRY SNOW or WET SNOW (Any depth) ON TOP OF COMPACTED SNOW <p>More than 3 mm depth:</p> <ul style="list-style-type: none"> • DRY SNOW • WET SNOW <p>Higher than -15°C outside air temperature¹:</p> <ul style="list-style-type: none"> • COMPACTED SNOW 	Braking deceleration is noticeably reduced for the wheel braking effort applied OR directional control is noticeably reduced.	MEDIUM
2	<p>More than 3 mm depth of water or slush:</p> <ul style="list-style-type: none"> • STANDING WATER • SLUSH 	Braking deceleration OR directional control is between Medium and Poor.	MEDIUM TO POOR
1	<ul style="list-style-type: none"> • ICE ² 	Braking deceleration is significantly reduced for the wheel braking effort applied OR directional control is significantly reduced.	POOR
0	<ul style="list-style-type: none"> • WET ICE ² • WATER ON TOP OF COMPACTED SNOW ² • DRY SNOW or WET SNOW ON TOP OF ICE ² 	Braking deceleration is minimal to non-existent for the wheel braking effort applied OR directional control is uncertain.	LESS THAN POOR

¹ Runway surface temperature should preferably be used where available.

² The aerodrome operator may assign a higher runway condition code (but no higher than code 3) for each third of the runway, provided the procedure in paragraph 1.1.3.15 is followed.

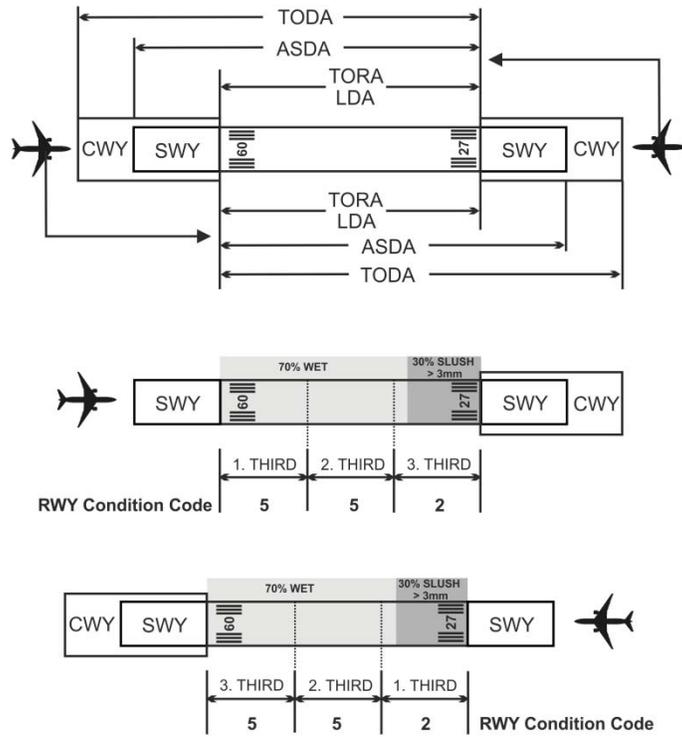


Figure 1. Reporting of runway condition code from ATS to flight crew for runway thirds

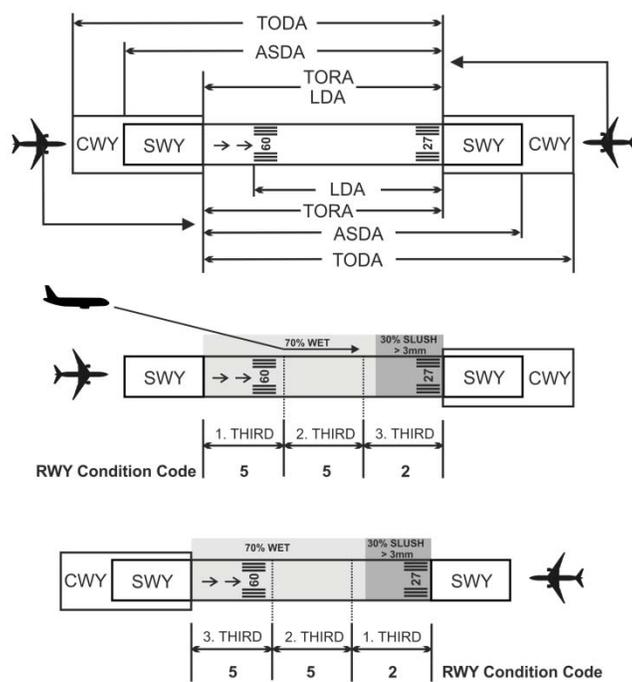


Figure 2. Reporting of runway condition code for runway thirds from ATS to flight crew on a runway with displaced threshold

**Attachment A to Chapter 1, Section 1.1
METHODS OF ASSESSING RUNWAY SURFACE CONDITION**

	ANNEX 14, Volume I, 6th Edition, July 2013	REMARK				
DESIGN CONSTRUCTION AND	slope					
	3.1.13 Longitudinal slopes 3.1.19 Transverse slopes					
	Texture					
	3.1.26 Recommendation. —The average surface texture depth of a new surface should be not less than 1.0 mm.					
Minimum friction level set by the State	3.1.23 A paved runway shall be so constructed as to provide surface friction characteristics at or above the minimum friction level set by the State.	The State set criteria for surface friction characteristics and output from State set or agreed assessment methods form the reference from which trend monitoring are performed and evaluated.				
Polishing	3.1.23 A paved runway shall be so constructed as to provide surface friction characteristics at or above the minimum friction level set by the State.	Polished Stone Value. (PSV-value) is a measure of skidding resistance on a small sample of stone surface, having being subjected to a standard period of polishing.				
ASSESSMENT METHODS FOR MONITORING TRENDS OF CHANGE TO SURFACE FRICTION CHARACTERISTICS	Visual - macrotexture	Visual assessment will only give a very crude assessment of the macrotexture. Extensive rubber build-up can be identified.	Rubber build-up	Geometry change	Polishing	
	Visual - microtexture	Visual assessment will give a very crude assessment of the microtexture and to what degree the microtexture has been filled and covered by rubber.	X			
	Visual – runway geometry (ponding)	Visual assessment during a rain storm and subsequent drying process of the runway will reveal how the runway drains and if there has been any changes to runway geometry causing ponding. Depth of any pond can be measured by a ruler or any other appropriate depth measurement method/tool.	X	X		
	By touch - macrotexture	Assessment by touch can differentiate between degree of loss of texture but not quantifying it.	X			
	By touch - microtexture	Assessment by touch can identify if microtexture has been filled in/covered by rubber-build-up.	X			
	Grease smear method (MTD)	Measure a volume – Mean Texture Depth (MTD) primarily by using the grease smear method, is the measurement method used for research purposes related to aeroplane performance.	X			
	Sand (glass) patch method (MTD)	Measure a volume – Mean Texture Depth. The sand (glass) patch method are not identical to the grease smear method. There is at present no internationally accepted relationship between the two methods.	X			
	Laser – stationary (MPD)	Measure a profile – Mean Profile Depth (MPD). There is no established relationship between MTD and MPD. The relationship must be established for the laser devices used and the preferred volumetric measurement method used.	X			
	Laser – moving (MPD)		X			

<p>Friction measurement – controlled applied water depth</p>	<p>A friction measurement is a system output which includes all the surface friction characteristics and characteristics of the measuring device itself. All other variables than those related to the surface friction characteristics must be controlled in order to relate the measured values to the surface friction characteristics.</p> <p>The system output is a dimensionless number which is related to the surface friction characteristics and as such is also a measure of macrotecture. (The system generated number needs to be paired with other information (assessment methods) to identify which surface friction characteristics that significantly influence the system output.)</p> <p>It is recognised that there is currently no consensus within the aviation industry how to control the uncertainty related to repeatability, reproducibility and time stability. It is paramount to keep this uncertainty as low as possible, consequently ICAO has tightened the standards associated with use of friction measurement devices, including training of personnel who operates the friction measuring devices.</p>	<p>X</p>	<p>X</p>
<p>Friction measurement – Natural wet conditions</p>	<p>Friction measurements performed under natural wet conditions during a rain storm might reveal if portions of a runway are susceptible to ponding and/or to fall below State set criteria.</p>	<p>X</p>	<p>X</p>
<p>Modelling of water flow and prediction of water depth</p>	<p>Emerging technologies based on the use of a model of the runway surface describing its geometrical surface (mapped) and paired with sensor information of water depth allow real-time information and thus a complete runway surface monitoring, and anticipation of water depths.</p>	<p>X</p>	<p>X</p>

End of new text

— END —



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14 August 2018

Ref.: AN 4/28 – 18/86

Subject: ICAO/ACI Symposium on Implementation of the New Global Reporting Format for Runway Surface Condition (GRF2019)
(Montréal, Canada, 26 to 28 March 2019)

Action required: Disseminate information as appropriate and register online by **1 March 2019**

Sir/Madam,

1. I have the honour to invite you to the joint International Civil Aviation Organization (ICAO)/Airports Council International (ACI) Symposium on Implementation of the New Global Reporting Format for Runway Surface Condition (GRF2019), which will be held at ICAO Headquarters in Montréal, Canada from 26 to 28 March 2019.

2. This symposium aims at increasing international awareness in advance of the November 2020 applicability date of the new ICAO methodology for assessing and reporting runway surface conditions. This new methodology, commonly known as the Global Reporting Format (GRF), ensures a harmonized assessment and reporting of runway surface conditions and a correspondingly improved flight crew assessment of take-off and landing performance. The preliminary list of objectives and topics for the programme of the symposium is attached.

3. The symposium will be followed by a half-day workshop on 28 March 2019, dedicated to training requirements and resources associated with the new methodology.

4. You are kindly requested to disseminate this invitation letter to all appropriate entities of your State, including, but not limited to, civil aviation authorities, aerodrome operators, aircraft operators, air navigation service providers, aeronautical information service providers and aerospace industry. Additional information regarding the meeting venue, hotel accommodations, visa requirements, and online registration will be available on the event website at <http://www.icao.int/Meetings/GRF2019>. Any queries regarding the symposium may be forwarded to GRF2019@icao.int. Participants should register no later than **1 March 2019**. The symposium will be held in English only.

Accept, Sir/Madam, the assurances of my highest consideration.

Fang Liu
Secretary General

Enclosure:

List of preliminary programme objectives

ATTACHMENT to State letter AN 4/28 – 18/86

**ICAO / ACI SYMPOSIUM ON IMPLEMENTATION OF THE
NEW GLOBAL REPORTING FORMAT
FOR RUNWAY SURFACE CONDITION (GRF2019)**

(Montréal, Canada, 26 to 28 March 2019)

PRELIMINARY PROGRAMME OBJECTIVES

- a) Increase global awareness and knowledge of the new methodology for assessing and reporting runway surface condition;
- b) develop an awareness of implementation challenges and opportunities;
- c) facilitate an exchange of best practices;
- d) ensure an understanding of associated ICAO Standards and Recommended Practices (SARPs), Procedures for Air Navigation Services (PANS) requirements and guidance material;
- e) establish the role for ICAO, international organizations and industry in global implementation;
- f) develop an understanding of training and awareness needs; and
- g) explore relevant new technology and future developments.

— END —