Requirements for Regulators and Operators on GRF

ICAO *Eastern and Southern Africa*

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Overview

- ICAO provisions on GRF

- Implementation

ICAO Provisions on GRF

- **Annex 14, Volume 1 and PANS-Aerodromes:** fundamental provisions for assessing and reporting runway surface conditions

- **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;

- **PANS-ATM:** phraseology and communication of special air-reports concerning runway braking

- **Guidance materials**
  - *Aeroplane Performance Manual* (Doc 10064)
  - *Assessment, Measurement and Reporting of Runway Surface Conditions* (Circular 355)

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- **Annex 14, Volume 1** (sets out the provisions for the introduction of, inter alia, the RCR, RWYCC and the descriptors for assessing and reporting the runway surface condition)
  - *Chapter 1. General – Definitions*
  - *Chapter 2. Aerodrome data - 2.9 Condition of the movement area and related facilities*
  - *Chapter 10. Aerodrome maintenance - 10.2 Pavements and 10.3 Removal of contaminants*
  - *Attachment A. Guidance material supplementary to Annex 14, Volume 1*

- **PANS-Aerodromes, Part II, chapter 1** (contains globally-harmonized procedures complementing the high level requirements in Annex 14, Volume I). It provides guidance on:
  - *the concept, objectives and content of the RCR*
  - *how to assess a runway surface condition and assigning a RWYCC including procedures for the downgrading or upgrading of the codes*
  - *the use of the runway condition assessment matrix (RCAM) and the requisite operational practices in support of a global reporting format*

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– **Annex 3** (remove the runway state group in the aerodrome routine and special meteorological report (METAR/SPECI) since its continued use would represent a parallel information stream as a duplication of the proposed new provision contained in Annex 15)

   Appendix 3. Technical specifications related to meteorological observations and reports.
   - *4.8 Supplementary information*
   - *Table A3-2. Template for METAR and SPECI*
   - *Table A3-5. Ranges and resolutions for the numerical elements included in METAR and SPECI*

– **Annex 8, PART IIIB** (concerns the nature of the information provided by the aircraft manufacturers) – *Chapter 2. Flight*

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Annex 6, Parts I and II (establish the requirement for the pilot-in-command to assess the landing performance prior to landing and a requirement for commercial air transport operations to report when the braking action encountered is not as good as reported)

- **Annex 6, Part I**
  - *Chapter 1. – Definitions*
  - *Chapter 4. - Flight operations - In-flight procedures*
  - *Chapter 5. - Aeroplane performance operating limitation - 5.2 Applicable to aeroplanes certificated in accordance with Parts IIIA and IIIB of Annex 8*

- **Annex 6, Part II**
  - *Section 2. Chapter 2.2 - Flight operations*
  - *Section 3. Chapter 3.5 – Aeroplane performance operating limitations*

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– **Annex 15 and PANS-AIM** (dissemination of information that is harmonized with the provisions in Annex 14, Volume I and PANS-Aerodromes as well as the performance information required to be used in the operation of aeroplane)

- *Chapter 1. – Definitions*
- *Chapter 5. - NOTAM*
- *Chapter 7. – Aeronautical Information Circulars (AIC)*
- *Appendix 2. - SNOWTAM FORMAT*

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– **PANS-ATM** (Correct taxonomy and phraseology to be used throughout the communication chain from the ground staff, through ATS to the flight crew)

- *Chapter 1. – Definitions*
- *Chapter 4. - 4.12 Reporting of operational and meteorological information*
- *Chapter 7. – 7.5 Essential information on aerodromes conditions*
- *Chapter 11. – Air Traffic services messages*
- *Chapter 12. - 12.3 ATC Phraseologies*
- *Appendix 1. – Instructions for air reporting by voice communication*

Implementation - Roles

- **ICAO:** SARPS, PANS, guidance material (including training guidance), support to States
- **States:** Ensure awareness, training and deployment
- **International Organisations:** Provide training, support awareness efforts, support deployment
- **Airports:** Local deployment, training
- **Airlines:** Support deployment, training
- **Industry:** Provide training support, tools

Implementation - States

- Updating State's regulatory framework
  - updating National regulations (transposition of ICAO provisions to the national regulations)
  - filing differences / publishing significant differences in AIP (if required)
- Notification to affected aerodromes, ATS units and users of the new requirements and changes;
- Training of inspectors and oversight by the State of the implementation of regulations;
- Establishment of a national implementation plan that takes into account the modified ICAO provisions;
- Encourage the establishment of a **GRF Implementation Team** to ensure proper planning and coordination at the State level.

Implementation - Stakeholder responsibilities

- **Aerodrome operators:** assess the runway surface conditions, including contaminants, for each third of the runway length, and report them by means of a uniform runway condition report (RCR)

- **Air traffic services (ATS):** convey the information received via the RCR and/or special air-reports (AIREP) to end users (voice communications, ATIS, CPDLC)

- **Aeronautical information services (AIS):** provide the information received in the RCR to end users (SNOWTAM)

- **Aircraft operators:** utilize the information in conjunction with the performance data provided by the aircraft manufacturers to determine if landing or take-off operations can be conducted safely and provide runway braking action special air-reports (AIREP)

- **Aircraft Manufacturers** provide the necessary performance data in the aeroplane flight manual

Implementation – Operators (Airports, ANSPs, airlines, …)

- Coordination - make the necessary changes to the organization, policies and procedures in coordination with all the stakeholders

- Planning – establish a GRF implementation plan to ensure timely coordination and implementation

- Awareness – identify and make aware all the applicable personnel on this new format

- Equipment – Identify and make available all the required equipment and tools

- Training - ensure all members of the information chain from data origin to end users are appropriately trained.

Thank You