

LANDING DISTANCE COMPUTATION AT TIME OF ARRIVAL

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Overview



The Issue



The Global Reporting Format (GRF)



LDTA computation

The issue

Runway excursions



The Issue - 1



The issue -2

Many recommendations from accidents/incidents investigations

TALPA ARC
2009

ICAO : Global Reporting
Format (GRF)
2016 (applicable 2020)

Regulators actions
on-going

The Global Reporting Format (GRF)

ICAO approach



The GRF - 1

TALPA ARC recommendations

- Methods for assessing runway conditions
- Reporting of braking action by pilots
- Reporting of runway conditions through airport operators, the NOTAM system, and ATC agencies
- Airplane performance data
- Before landing/departing performance assessments
- Standardized condition reports terms



Main ICAO changes

- Annex 6, 8, 14, 15
- PANS ADR, PANS ATM
- Circular 355 - Assessment, Measurement and Reporting of Runway Surface Conditions
- Aeroplane Performance Manual (Doc 10064)

The GRF - 2

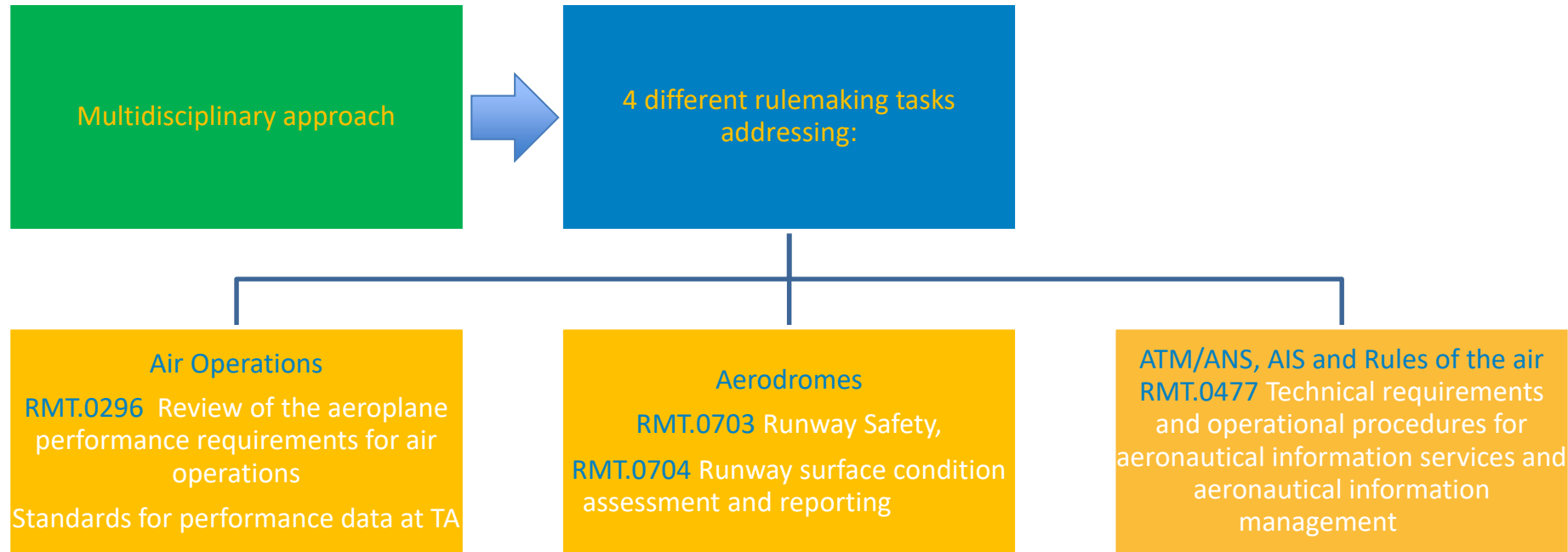
Principles

- to establish a globally harmonised reporting format for runway surface condition.
 - Definitions, contaminant descriptors
 - RCAM, correlation with braking action
 - RCR, NOTAM FORMAT
- To define airworthiness standards on aeroplane performance data for the assessment of the landing distance at the time of arrival
- To introduce operational requirements for the flight crew on landing performance assessment at time of arrival and braking action reporting.

EASA implementation of the GRF



The EASA approach - 1



The EASA approach - 2

Principles

- Follow ICAO provisions
 - To support global application and implement the GRF
- Keep a balance between implementing rules (IR), acceptable means of compliance (AMC) and guidance material (GM)
 - Reviewing and analysing every ICAO provision
 - Basic principles of the GRF kept at rule level to prohibit deviations
 - Procedural issues included in the acceptable means of compliance to allow some flexibility in the implementation
 - Extensive guidance material provided in order to explain the GRF

The EASA approach – GRF implementation

Opinion 2/2018 –
Changes to Reg. (EU)
2017/373 – AIS & MET

Opinion 2/2019 –
Changes to Reg. (EU)
965/2012 – Air
Operations

Opinion 3/2019 - Changes to
Reg. (EU) 139/2014 –
Aerodromes & Reg. (EU)
923/2012 – Standardized
European Rules of the Air &
Reg. (EU) 2017/373 –
ATM/ANS

Upcoming ED Decisions –
CS/AMC/GM

LDTA computation



LDTA computation

CAT.OP.MPA.303

- (a) No approach to land shall be continued unless the landing distance available (LDA) on the intended runway is at least 115 % of the landing distance at the estimated time of landing, determined **in accordance with the performance information for the assessment of the landing distance at time of arrival (LDTA)** and the approach to land is performed with **performance class A aeroplanes** that are certified in accordance with either of the following certification specifications, as indicated in the type-certificate:
 - **(1) CS-25 or equivalent;**
 - **(2) CS-23 at level 4 with performance level “High speed” or equivalent.**

LDTA computation cont'd

AMC1 CAT.OP.MPA.303(e)

- PERFORMANCE INFORMATION FOR THE ASSESSMENT OF LDTA
 - Approved data (iaw new CS-25-1592 on landing)
 - Supplementary data (list of alternatives when approved data not available)
 - GENERIC FACTORS (as per APM/TALPA when no data at all are available)

LDTA computation cont'd

CS-25.1592

- Uncouple take-off performance (kept in 25.1591) for landing performance data
- Consistency with new RWY surface descriptors and correlation between runway codes and braking action
- Assumptions for time or arrival assessment (on all rwy conditions)
- Dispatch on dry and wet runways remain as per CS-25-125
- Dispatch on “wet slippery” and contaminated runways under CS-25-1592

Thank you for your attention

Questions?

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