

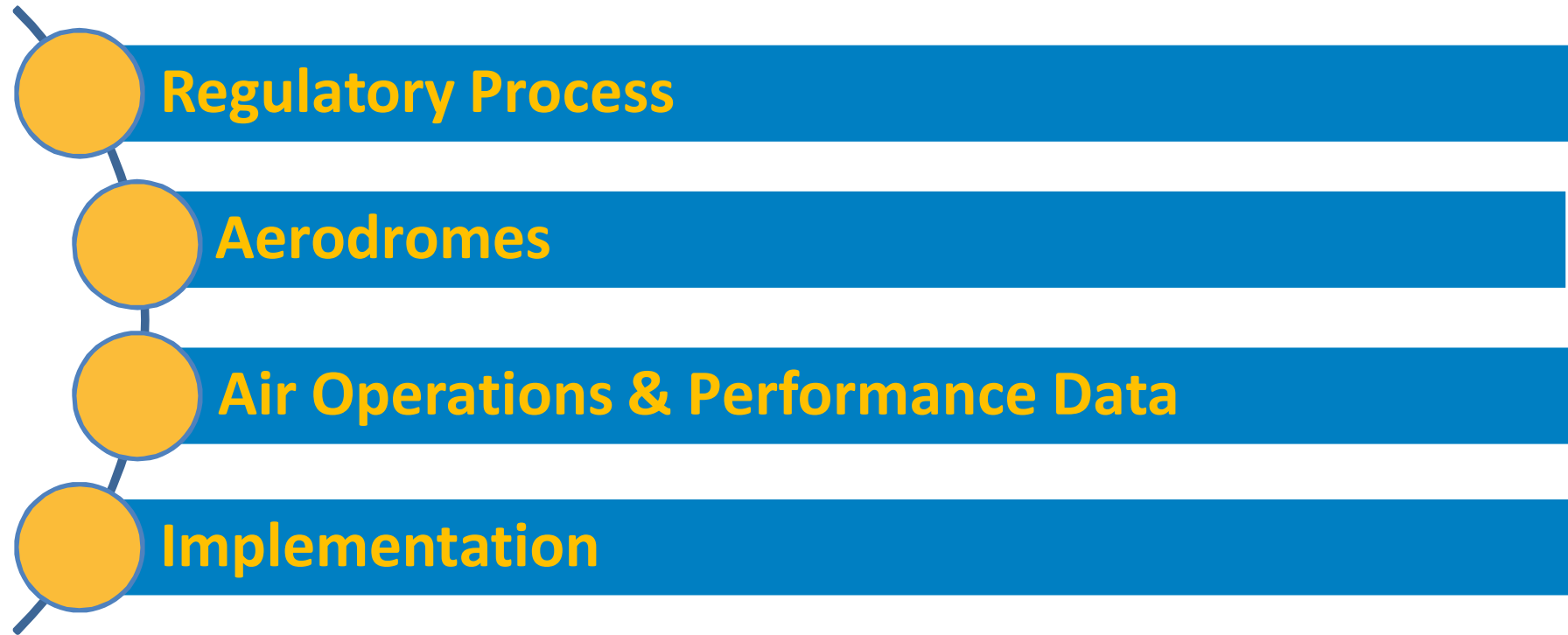
EASA Regulations on GRF

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Your safety is our mission.

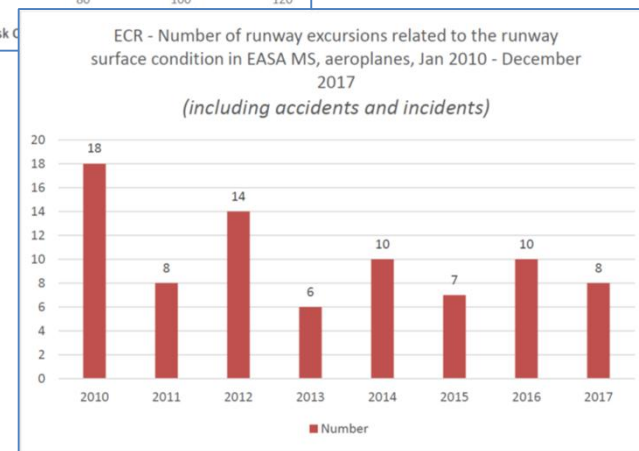
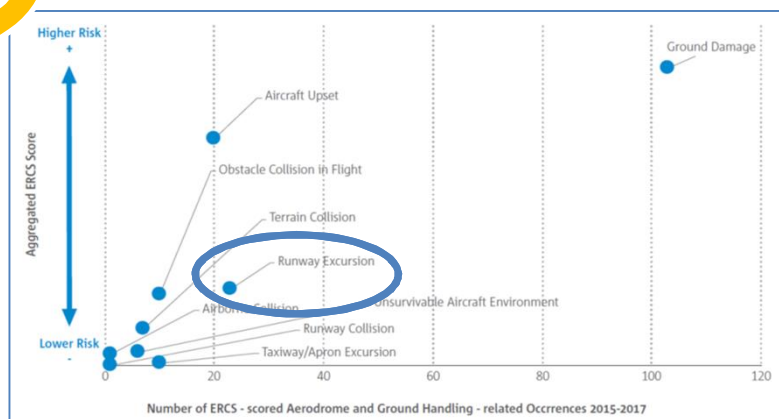
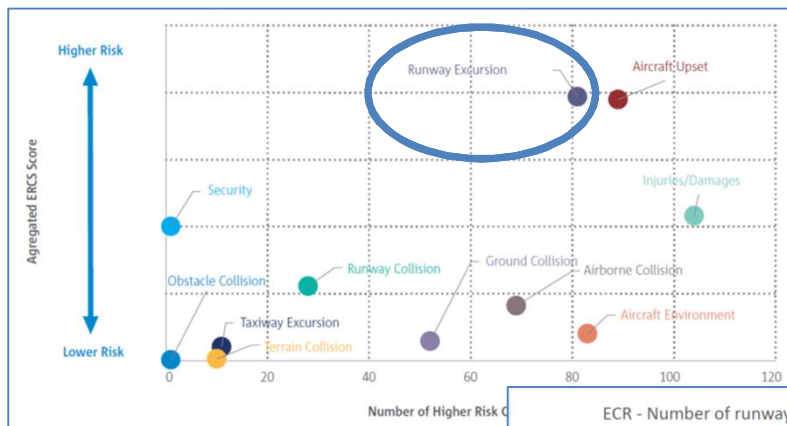
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Overview



Regulatory Process

Regulatory Process - General



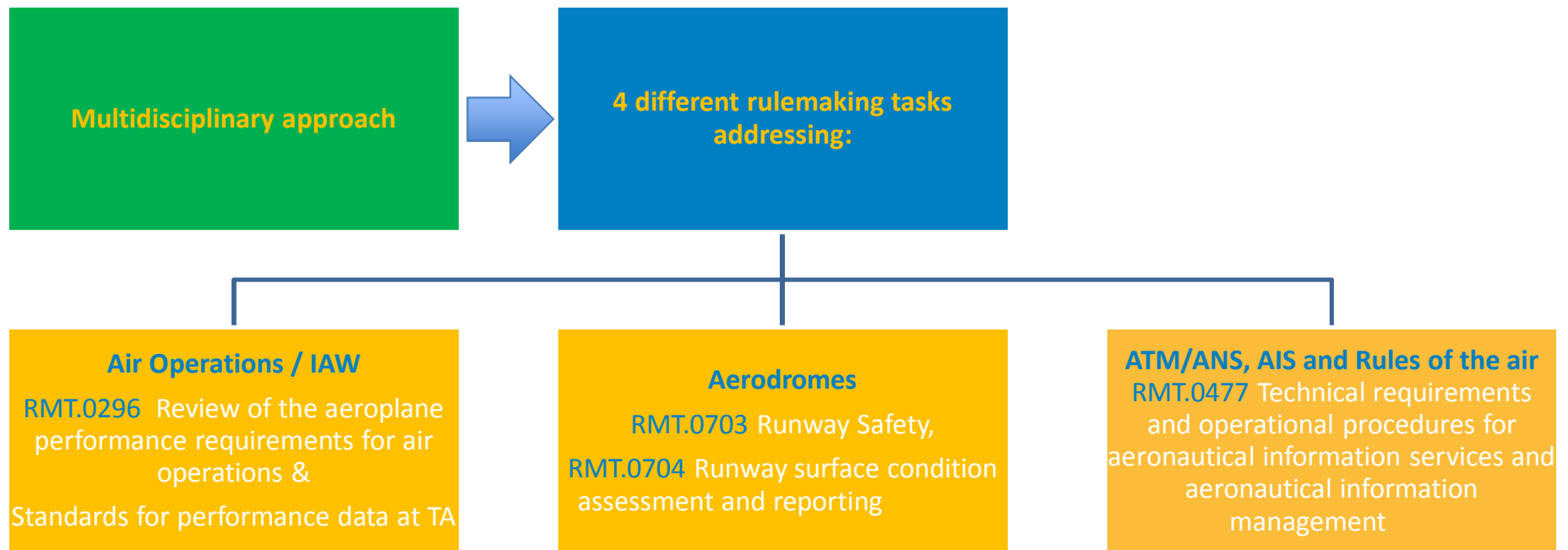
Safety Recommendations to EASA

- AIB Norway following 30 investigated runway excursions on contaminated runways
 - *“ICAO, FAA, EASA and CAA Norway should review and validate the permitted measuring (validity) ranges for approved friction measuring devices (SR: 2011/08T)”*
 - *“ICAO, FAA, EASA and CAA Norway should consider revising the SNOWTAM table to reduce the degree of friction uncertainty (SR: 2011/09T)”*
 - *“ICAO should initiate an updating and revision of the Airport Services Manual on the basis of the results of investigations of runway excursions and recent research findings”*

Safety Recommendations to EASA

- AIB Sweden following a runway excursion on 6/4/2016
 - *“EASA is recommended to introduce generic performance corrections for aeroplane operations on surfaces contaminated with slush or water”*
 - *“EASA is recommended to review the feasibility of changing the method of reporting from airports in terms of friction coefficients, so that measured values are reported as unreliable under certain conditions”*
- European Action Plan for the Prevention of Runway Excursions
 - *“Establish and implement one consistent method of contaminated runway surface condition assessment and reporting by the aerodrome operator for use by aircraft operators. Ensure the relation of this report to aircraft performance as published by aircraft operators”*

Regulatory Process - EASA

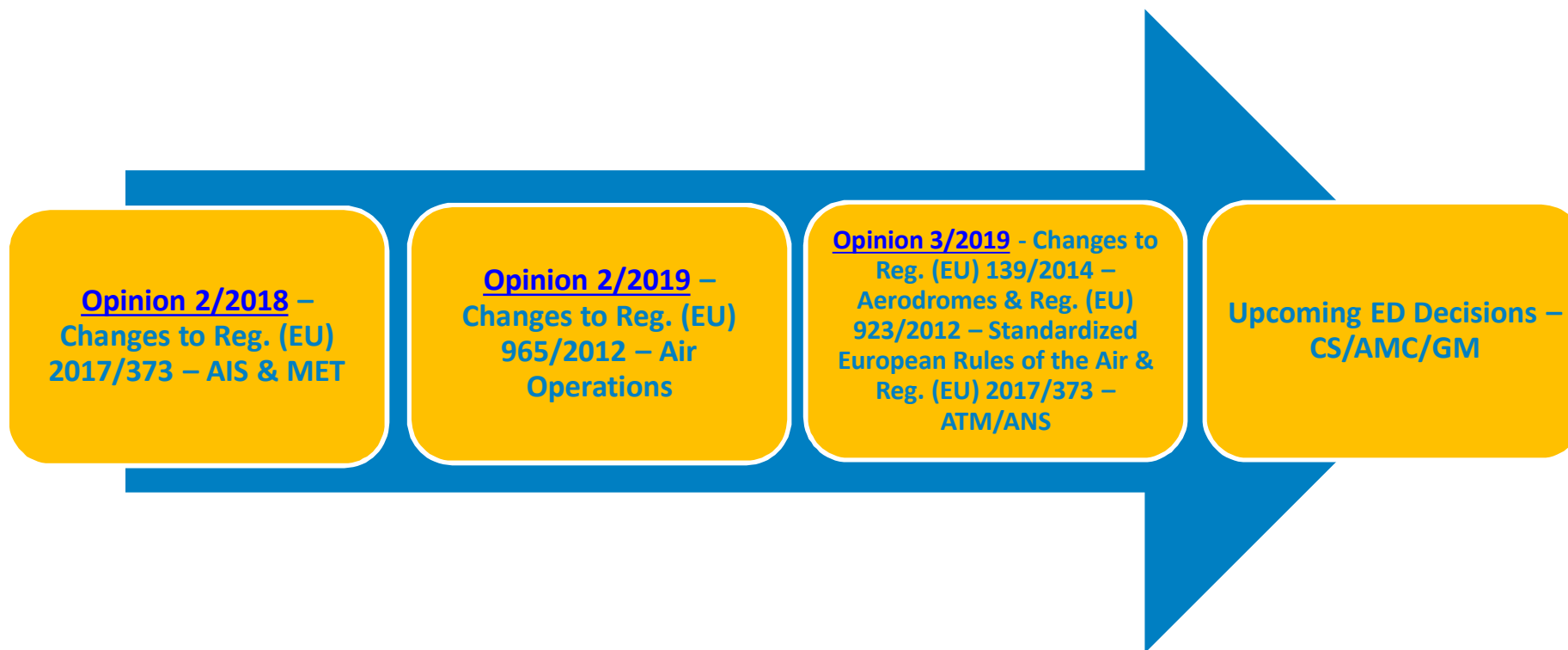


Regulatory Process - EASA

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

Regulatory Process - EASA



Aerodromes

Aerodromes - 1

Friction measurements

- Publication of friction measurements is not allowed
 - Friction measurements are not correlated with aeroplane performance data
 - Performance standards for friction measurement devices do not exist
- Friction measurements can be used in a comparative way for upgrade or downgrade of the runway condition code but always in combination with other observations

Aerodromes - 2

Definitions - SNOWTAM

- Addition of two (2) new terms for describing runway surface condition
 - Specially prepared winter runway
 - Runway covered with compacted snow or ice, which has received special treatment and has improved friction characteristics (RWYCC greater than 3)
 - Slippery wet
 - Associated with RWYCC 3 when the runway is wet and below the minimum friction level
- Changes to the SNOWTAM Format
 - To include the two terms above
 - To simplify the situational awareness section in order to avoid long NOTAM strings

Aerodromes - 3

METAR – Reporting

- Changes to the METAR Format
 - Removal of runway surface conditions
- Obligation of the PIC to report back when braking action encountered is not as good as reported
- Obligation of the ATS to report to the aerodrome operator when a pilot indicates that the braking action is not as good as reported.

Air Operations & Performance Data

Air operations & Performance data - 1

CAT.OP.MPA.303 – LDTA assessment

- (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.**

Air operations & Performance data - 2

CAT.OP.MPA.311 – pilot reports

- Whenever the runway braking action encountered during the landing roll is not as good as that reported by the aerodrome operator in the runway condition report (RCR), the commander shall notify the air traffic services (ATS) by means of a special air-report (**AIREP**) as soon as practicable.

Air operations & Performance data - 3

AMC1 CAT.OP.MPA.303(e) – performance data

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

Air operations & Performance data - 4

CS 25.1592 – performance standards

- Uncouple take-off performance (kept in CS 25.1591) from landing performance
- Consistency with new RWY surface descriptors and correlation between runway codes and braking action
- Assumptions for time or arrival assessment (on all rwy conditions)
- Performance data for dispatch on dry and wet runways remain as per CS-25.125
- Performance data for dispatch on “wet slippery” and contaminated runways under CS-25.1592

Implementation

Implementation - 1

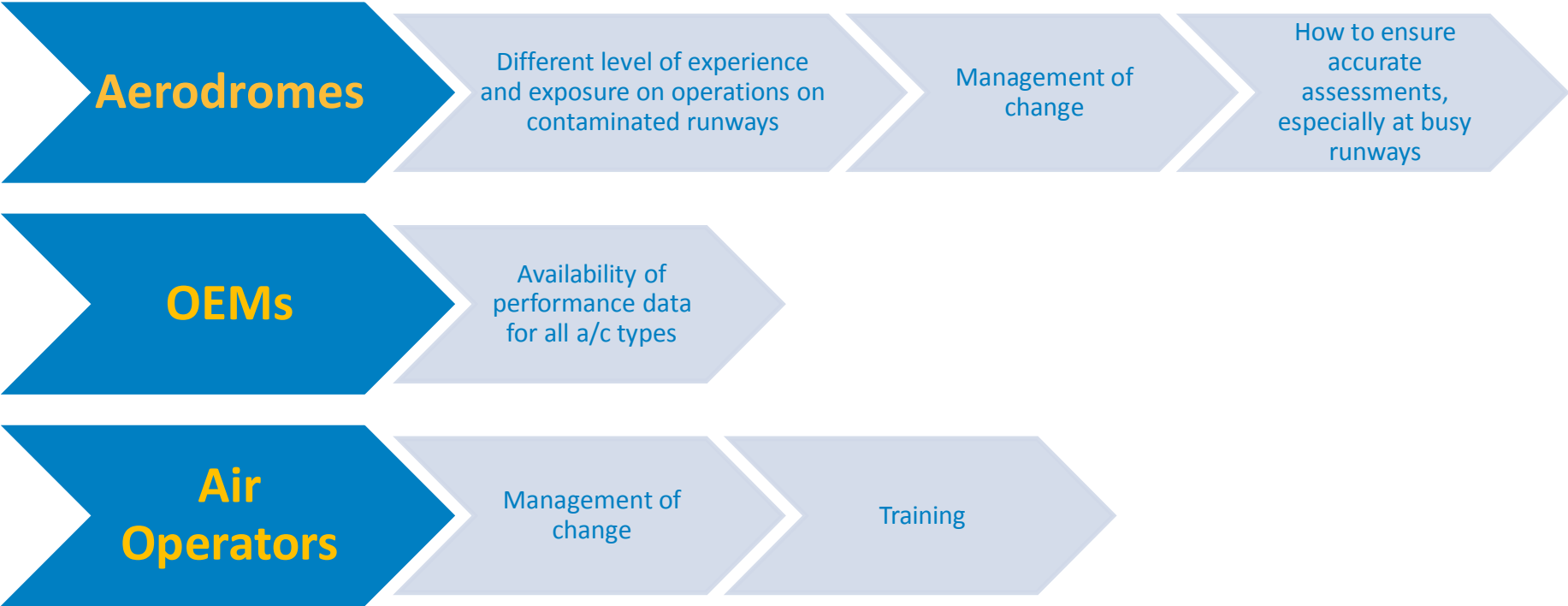
Adoption of all Regulations by early 2020

- Some adopted in 2019

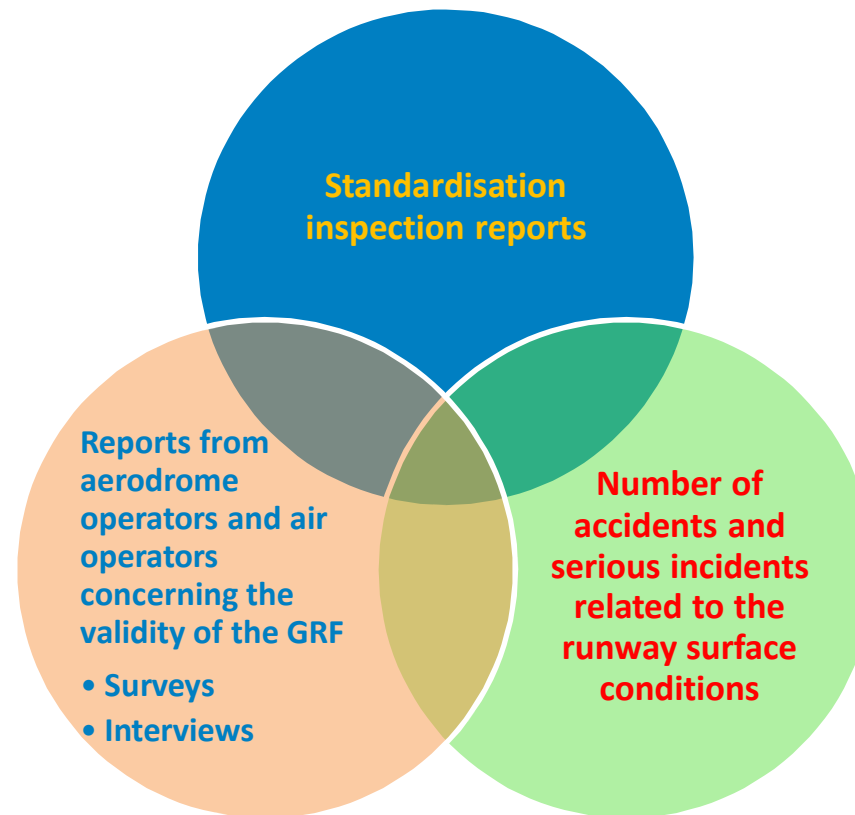
In the mean time

- Safety promotion to raise awareness
- Focus on training
- Support the development of standards for automated systems for runway surface conditions assessments

Implementation - 2



Implementation - 3



Thank you very much for your attention

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