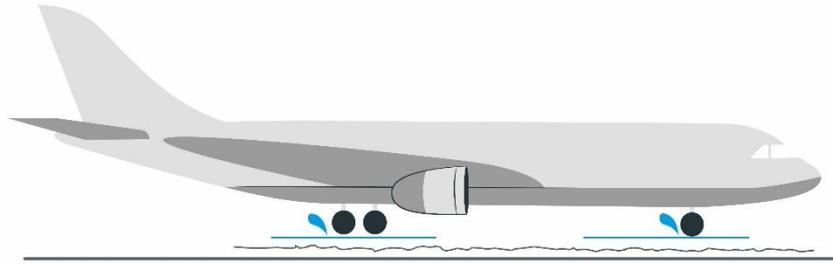


Research project Runway micro texture (RWYMT)



Contractor

NLR

Consortium Members

ESDU (Engineering Sciences Data Unit) - IHS
Global Ltd

Contract period

20/06/2022 - 19/06/2025

Budget

1 500 000 €

Scan the QR code or click [here](#)
to visit the webpage of this project



Main objectives

According to EASA Annual Safety Review 2021, **runway excursion** is one of the main key safety risk areas for commercial air transport (CAT), business aviation and non-commercial operations with complex motor-powered aircraft (NCC).

Wet runways are a contributing factor in runway excursions. Good aeroplane tyre braking friction on wet runways is of essential importance for the safe stop of aircraft. The braking action generated by an aeroplane tyre depends on several factors, amongst which the macro- and micro-texture characteristics of the runway surface are very important.

Macro-texture refers to visible roughness of the pavement surface. **Micro-texture** refers to the fine-scale roughness contributed by small individual aggregate particles on pavement surfaces, e.g., the roughness of the individual stones that form the macro-texture.

For the micro-texture however, there are neither minimum requirements nor an established method for determining and monitoring micro-texture characteristics. Therefore, there is a need to establish minimum values for micro-texture characteristics and to develop a method which can be used to determine and monitor these characteristics.

Impacts & benefits

The expected benefits of the research project will enable EASA to:

- initiate rulemaking action to revise Regulation (EU) No 139/2014 as regards aerodromes in order to establish micro-texture threshold values, below which a runway would be considered as slippery wet and maintenance actions are required;
- establish clear criteria for the development of a trend monitoring programme of runway surface; and
- review the certification specifications regarding runway surface construction.

EASA-managed projects address research needs of civil aviation authorities and are geared to generate mid-term benefits after the successful completion to enhance safety, security, and sustainability.

