

FUTURE SKY SAFETY PROJECTS



PROJECT #3
**SPECIFIC SOLUTIONS
FOR RUNWAY EXCURSION
ACCIDENTS**

COLLABORATIVE PROJECT

THEME 1: NEW SOLUTIONS FOR TODAY'S ACCIDENTS

It improves the knowledge on runway excursion prevention and risk mitigation, in accordance with the European Action Plan for the Prevention of Runway Excursions. With focus on new technologies and concepts and on the areas where non-ATM research is needed, the project is expected to enable a significant reduction in the number of runway excursion accidents and occurrences in the medium term.

PROJECT MANAGER: **NLR**



PROJECT #4
**TOTAL SYSTEM
RISK ASSESSMENT**

COLLABORATIVE PROJECT

THEME 2: STRENGTHENING THE CAPABILITY TO MANAGE RISK

It develops a prototype risk observatory for Europe to assess and monitor safety risks throughout the Total Aviation System. Starting from existing means for safety risk assessment and continuous safety performance monitoring, the observatory will be an enabling tool to reduce accident rate, analyse safety performance, identify safety trends and key risk areas that can be most efficiently mitigated.

PROJECT MANAGER: **NLR**



PROJECT #1
**COORDINATION OF
INSTITUTIONALLY FUNDED
SAFETY RESEARCH**

COORDINATION PROJECT

It coordinates institutional safety research programmes, and connect and drive institutionally funded Safety R&TD by EREA to safety priorities established by the European Commission in the ACARE Strategic Research and Innovation Agenda on Safety and Security. Annual Aviation Safety Research Plans will be delivered for the participating Research Establishments and will be shared with the main European aviation stakeholders.

PROJECT MANAGER: **DLR**



PROJECT #2
**DISSEMINATION
EXPLOITATION AND
COMMUNICATION**

TRANSVERSAL PROJECT

The project is dedicated to communication and exploitation of knowledge and relevant findings generated by the different Future Sky Safety projects. It will ensure that all the aspects of communication are efficiently and effectively managed over the entire duration of the project, and that all content produced will be properly disseminated to their target audience, to maximise the impact of their research.

PROJECT MANAGER: **CIRA**



PROJECT #5
**RESOLVING THE
ORGANISATIONAL
ACCIDENT**

COLLABORATIVE PROJECT

THEME 3: BUILDING ULTRA-RESILIENT SYSTEMS AND OPERATORS

It performs breakthrough safety research on runway excursion prevention and risk mitigation, in accordance with European Action Plan for the Prevention of Runway Excursions priorities. With a focus on key areas like safety intelligence, safety culture and organisational/inter-organisational response capabilities, P5 addresses the effects of structure, processes and cultural phenomena on the organisation safety performance to produce a 'second generation' Safety Management System.

PROJECT MANAGER: **EUROCONTROL**



PROJECT #6
**HUMAN
PERFORMANCE
ENVELOPE**

COLLABORATIVE PROJECT

THEME 3: BUILDING ULTRA-RESILIENT SYSTEMS AND OPERATORS

Human Performance Envelope is to some extent a new paradigm in Human Factors. The project defines and applies the Human Performance Envelope for cockpit operations and design, looking for methods to recover crew's performance to the centre of the envelope, and consequently to augment this envelope through Human Machine Interface principles, procedures or training.

PROJECT MANAGER: **DLR**



PROJECT #7
**MITIGATING
THE RISK OF FIRE,
SMOKE & FUMES**

COLLABORATIVE PROJECT

THEME 4: BUILDING ULTRA-RESILIENT VEHICLES

It develops solutions to mitigate risks of fire, smoke and fumes in the modern cabin environment in order to reduce the number of fire-related fatalities (in-flight or post-crash) and to prevent low air quality related safety problems. It studies Carbon Fibre Reinforced Plastics composite materials to understand its combustive behaviours, explore innovative mitigating solutions and identify possible risks associated with on-board low air quality.

PROJECT MANAGER: **ONERA**