

New EU-funded border security projects

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After three years of hard work the [AI-ARC](#) ("Artificial Intelligence based Virtual Control Room for the Arctic") EU-funded research and innovation project concluded in February 2024.

In February 2020, Frontex and the European Commission's Directorate-General for Migration and Home Affairs signed Terms of Reference regarding Frontex's role in the EU's Research & Innovation Programmes (Horizon), which laid the foundation for a close partnership and an enhanced Frontex contribution to maximising EU's research as a joint goal-oriented effort.

Eight new projects relevant to border security were launched under the Horizon programme in 2023 and will be monitored and supported by Frontex.

Eight new projects

[Project EINSTEIN](#) will deliver six applications essential to fight identity frauds: 1) online ID issuance using a secure cloud-based server for real-time biometric quality checks and fraud detection, 2) mobile document and identity checks using commercially available smartphones, 3) document authentication module to detect fraudulent documents, 4) pre-registration for land-border crossings including biometrics and Digital Travel Credentials (DTC), 5) Entry Exit System kiosk with advanced fraud detection using video surveillance, 6) fast track for enrolled travellers using on-the-move face and iris.

[Project SafeTravellers](#) proposes both a new way of citizen identification based on multiple biometrics as well as an enhancement of the current way of identity verification at the borders through a set of tools that will detect attacks at the biometric hardware, identity and travel document fraud and attempts to falsify biometrics.

[Project SMAUG](#) will improve the underwater detection of threats in ports and their entrance routes, by means of an integrated system capable of providing data concerning threat analysis between three main elements: ports security infrastructure, advanced underwater detection systems and surveillance vessels.

[Project UnderSec](#) will develop a modular/holistic approach prototype system, consisting of multimodal sensors and robotic assets, for ships', ports' and maritime infrastructures' Underwater Security Situational Awareness and Decision-Making Support, with relevant Response capabilities.

Project METEOR provides a new concept of cargo screening detector with a highly efficient air sampling technique and the ion mobility multidetector sensing technology.

Project CosmoPort proposes a completely novel, yet highly effective solution for detecting illicit goods in small shipments, developing the next generation of scanner systems using Atmospheric Ray Tomography.

Project BAG-INTEL will provide robust Artificial Intelligence based information utilization and decision support tools, within the context of advanced detection systems to support customs for increased effectiveness and efficiency of the customs control of air traveller baggage in inland border airports, while minimizing the human resources needed.

Project CONNECTOR aims for the first time to suggest an integrated, common and shared risk assessment approach for all Border Management Authorities, considering the pan-EU common risk indicators per end user group (Customs and Border and Coast Guards authorities).

All the above-mentioned projects are presented in more detail on our [page dedicated to the Horizon projects](#).