

A small state ANSP contributing to European alliances

Inga Jankūnaitė, head of innovation and development, Oro Navigacija explains the main innovation objectives of Lithuania's ANSP

Pioneering U-space implementation in Lithuania

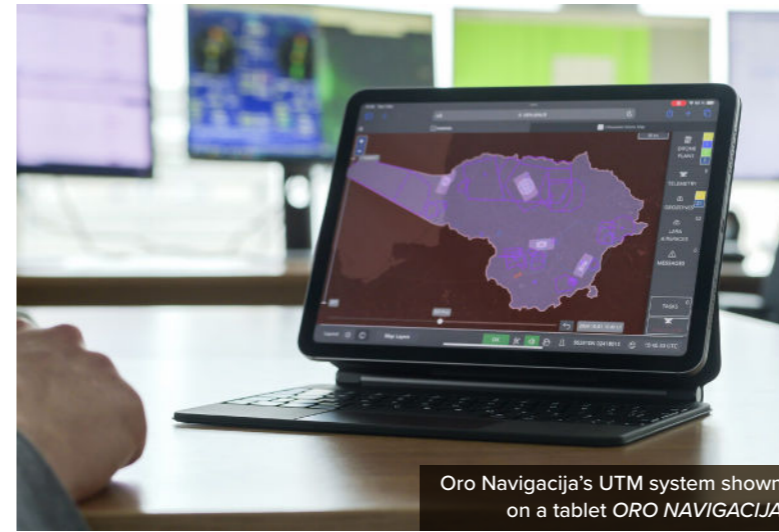
In July 2023, the Government approved regulatory changes to enable the creation of U-spaces and investment became possible. Oro Navigacija invested 2.5 million euros, in collaboration with Frequentis to implement U-space service provision.

With the implementation of the Common Information Service (CIS) system, Oro Navigacija became the sole CIS provider for Lithuania and one of the first to be certified in Europe. This enables real-time airspace monitoring, provides information to drone operators, and optimises unmanned aircraft flight management through automated approval processes.

On March 12, 2025, the Lithuanian government approved a plan making the U-space ecosystem development a "strategic state initiative". This acknowledges that Oro Navigacija's modernisation

efforts and surveillance improvements are not just technical upgrades, but also critical national infrastructure projects that reinforce Lithuania's strategic importance in Europe. For the country, this means strengthened airspace security, enhanced interoperability, and greater resilience against potential disruptions. It also ensures that Lithuania remains an integral part of the Single European Sky.

BELOW: The control tower at Vilnius airport ORO NAVIGACIJA



Oro Navigacija's UTM system shown on a tablet ORO NAVIGACIJA

Oro Navigacija also participates in the Solution B of the OperA project, which aims to facilitate the implementation of safe and efficient unmanned cargo operations in all types of airspace (controlled, uncontrolled and U-space) and weather conditions by validating those complex operations in real-life conditions, including degraded modes. It will ensure environmental sustainability compared to the next best transport alternative, and enhance it, by optimising flight routing.

Expanding international collaboration networks

In 2025, Oro Navigacija joined the Borealis Alliance. A key initiative of Borealis is the development of a harmonised approach to Air Traffic Controller (ATCO) licensing. This initiative is particularly important given the shortage of ATCOs, which is becoming critical. Lithuania, with its four international airports, often struggles to attract ATCOs to more remote locations, such as Palanga, which are distant from the capital. As European countries are rapidly implementing digital remote towers, it's expected that these will eventually be upgraded to multimodal systems, enhancing operational efficiency.

Oro Navigacija is also a member of the iTEC alliance. By contributing to a joint development pool, Oro Navigacija avoids the expense of a purely national solution while benefiting from the collective innovation of other European ANSPs.

This collaborative approach not only reduces per-member costs but also guarantees interoperability – every iTEC member will deploy systems built to the same standards and capabilities.

In early 2025, the company joined other ANSPs in signing a joint commitment to support SESAR's new service delivery model and transition toward a data-driven, cloud-based service-oriented architecture (SOA) for air traffic management (ATM). Oro Navigacija's support for this new delivery model underscores its dedication to the modernisation and digitalisation of European airspace.

By championing concepts like virtual centres and common data services, the company positions itself at the forefront of the next paradigm in ATM service provision, which promises quicker deployment of new functionalities and greater network flexibility across Europe.

Advancing ATM Modernisation through SESAR and CINEA

Oro Navigacija actively taps into SESAR and European Climate, Infrastructure and Environment Executive Agency (CINEA) to co-finance its projects and participate in research.

The company has been involved in SESAR solution validations ranging from digital towers and advanced traffic separation tools, to integrating drones into controlled airspace and developing the virtual centre concept. This direct participation in SESAR research allows Oro Navigacija's experts to explore new concepts before they are deployed, and to ensure that they meet the operational needs of smaller states like Lithuania, including maintaining cost-effective operations despite having lower traffic volumes than major European hubs and carefully planning technology implementation strategies that maximise benefits while managing investment risks.

Strategic investments in Surveillance and System Modernisation

The organisation's investment portfolio includes a replacement of the primary and secondary radar in Vilnius and a Wide Area Multilateration (WAM) and ADS-B implementation.

Lithuania, being on the eastern edge of the EU's controlled airspace, plays a strategic role in ensuring seamless air traffic management that connects Western and Eastern Europe. Implementing WAM and ADS-B systems in this region ensures comprehensive surveillance coverage, especially at lower altitudes and remote areas where traditional radar coverage may be limited.

The organisation is also making significant progress in implementing System-Wide Information Management (SWIM) capabilities through regular national and international collaborations. This work supports the requirements defined in the Common Project 1 framework, contributing to the broader goal of creating a more interconnected European ATM network.

These collaborative frameworks enable the organisation to punch above its weight – implementing sophisticated technologies, maintaining exemplary safety standards, and optimising performance while managing costs effectively.



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Inga joined Oro Navigacija in December 2020. Before that, she held management positions with various airlines in Europe.