

Italian regional airport willing to participate in a Sesar3 project proposal to develop tools to digitalize airport process

Summary

Profile type	Company's country	POD reference
Research & Development Request	Italy	RDRIT20220608006
Profile status	Type of partnership	Targeted countries
PUBLISHED	Research and development cooperation agreement	• World
Contact Person	Term of validity	Last update
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General Information

Short summary

An Italian regional airport is willing to participate as a partner in projects answering SESAR call to develop research and integration between airport operations and ATC. The Airport has developed a tool to manage ICAO "Global Report Format" methodology and intends to develop a new tool to digitalize airport processes such as: Industrial Research & Validation for Connected and Automated ATM or Fast Track Innovation and Uptake Multi-modality and Passenger Experience. Research cooperation sought.

Full description

The company is the management firm of a regional airport (4 million passengers per year) that is part of a network strongly committed to environmental protection and to climate change fighting. The airport is part of a European project funded by Horizon2020 call "Green Airports and ports as multimodal hubs for sustainable and smart mobility".

The other strong research field activity is related to digitalization.

The Airport is furthermore strongly committed to quality improvement processes, aiming at confirming and improving the level of services offered in accordance with the technical, infrastructural and safety requirements provided in the current airport regulations and standards, in order to meet the expectation of airport stakeholders.

The European Union Aviation Safety Agency (EASA) applies strict standards to provide European citizens with the safest and most environmentally friendly aviation systems in the world. EASA is responsible for setting up the rules,

guidelines and standards for all safety and environmental aspects of civil aviation.

EASA constantly adapts to the demands of new technologies and the latest trends in particular for aviation strategy integration.

In this framework, airports must be connected to the ATM in a standardized way in order to comply with the European Air Traffic Management (ATM) Master Plan within the framework of the EU aviation strategy and Single European Sky (SES) . Moreover, the Global Reporting Format (GRF) for the assessment and reporting runway surface conditions entered in force in EU on August 12nd 2021 and will be globally applied from November 04, 2021.

The Airport has developed a tool to manage ICAO (International Civil Aviation Organisation) “Global Report Format” methodology (called “AirportGRF”) with own investment; the tool has been adopted already by 30 airports, thus it is on the market and already validated by the Italian Civil Aviation Authority.

This process copes with the new demanding EASA regulation, allows to perform researches on collected data and guarantees quality of aeronautical data, reducing human errors.

Based on the knowledge acquired during the Airport GRF project, the company now intends to develop a new tool to digitalize airport processes inside the framework of Horizon Europe SESAR coming calls (deadline October 13th) as for instance, but not limited to: Industrial Research & Validation for Connected and Automated ATM or Fast Track Innovation and Uptake Multi-modality and Passenger Experience.

These are in fact the main purposes of SESAR3 JU, aiming at creating a more efficient, secure and environmentally friendly management of air transport in Europe, enabled by the digital transformation.

The Airport would like to be partner of a consortium in order to contribute to develop tools to interface ground activities with ATM, ensuring safety and efficient regulation of ground traffic, the provision of the necessary information to flight crews for the efficient management of ground and airspace.

There is already another partner involved in the potential project; it is an innovative start-up developing autonomous guiding systems for drones through AI, which are used to monitor the de-icing operations.

The airport is interested to Research cooperation agreement to participate as partner in:

TOPIC ID: HORIZON-SESAR-2022-DES-IR-01-WA3-1

TOPIC ID: HORIZON-SESAR-2022-DES-IR-01-WA5-1

Advantages and innovations

The development of GRF tools responds to the requirements set by European new regulations to connect airports to the ATM in a standardized way.

The GRF tool is easily scalable and adaptable for airports from any country and it is in particular suitable for any airports.

Other advantages:

- Share clear information with all the stakeholders involved;
- Reduce errors in data filing and transmission to ATS and AIS;
- Alert operators for specific conditions (e.g. SNOWTAM update needed);
- Guarantee data quality and integrity;
- Reduce work load for operators during winter operations;
- Define a suitable standard for data sharing with ATS and AIS for ATIS and SNOWTAM;
- Easily handle additional information in SNOWTAM (e.g. contaminant type and depth on TWY and APRON).

Already approved by the Italian Civil Aviation Authority, it has been adopted by 30+ airports.

Stage of development

Under development

Sustainable Development goals

• **Goal 9: Industry, Innovation and Infrastructure**

IPR Status

No IPR applied

Partner Sought

Expected role of the partner

The Airport is looking for partners to develop a tool to connect airports to the ATM in a standardized way as requested by European regulations. Preferably other airports, but partners can also be SMEs, companies, research organisations. A coordinator is sought.

Type of partnership

Research and development cooperation agreement

Type and size of the partner

- **Big company**
- **SME 11-49**
- **SME 50 - 249**

Dissemination

Technology keywords

- **02011007 - Guidance and control**
- **02011001 - Aeronautical technology / Avionics**
- **02008001 - Air Transport**

Targeted countries

- **World**

Market keywords

- **09001001 - Airlines**
- **09001006 - Airfield and other transportation services**

Sector groups involved

- **Aeronautics, Space and Dual-Use Technologies**
- **ICT Industry and Services**