Engage

At the core of the Engage KTN is the definition of various thematic challenges: new ideas suggested by the research community, not already included within the scope of an existing SESAR project. They are developed along with the ATM concepts roadmap and complementarily with some of the network's PhDs and theses.

Thematic challenge 3

Efficient provision and use of meteorological information in ATM

Workshop final programme

Workshop date:	**13 November 2018**
Host:	SESAR Joint Undertaking
Address:	Avenue de Cortenbergh 100, 1000 Brussels
Web details for access:	https://sesarju.eu/about-us/visiting-us

Abstract

The main objective of this challenge is to improve overall ATM system performance by providing better user-support tools based on improved meteorological ('met') products. The focus is on the synergy of several methods and techniques in order to better meet the needs of operational users and to support aviation safety (e.g., through creating early warning systems) and regulation-makers (e.g., moving from text-based to graphical information provision). All stakeholders may benefit from this synergy: ANSPs (e.g., sector reconfiguration and separation provision), airlines (e.g., storm avoidance), airport operators (e.g., airport management under disruptive events), and the Network Manager (e.g., demand-capacity balancing). The challenge is, therefore, to bring the following perspectives closer: (a) for meteorological/atmospheric science, the development of products tailored to ATM stakeholders' needs, which are unambiguous and easy to interpret; (b) for stakeholders, the identification of the most suitable information available and its integration into planning and decision-making processes.

Programme

0915-0930   Registration, at SESAR JU reception, 4th floor

SESSION 1   Setting the scene - ATM MET related research overview

0930-0940   ***Welcome***
SESAR JU

0940-1000   ***Introductory remarks from Engage KTN***
Introduction to Engage and the thematic challenge
Prof Andrew Cook, University of Westminster
Dr Tatjana Bolic, University of Trieste

1000-1100   ***MET Exploratory Research results***
Overview of the results from three MET ER projects
Prof Damian Rivas, University of Seville

1100-1125   ***SESAR2020 IR PJ18-04b MET information – progress and expected result***
Overview of MET related research in the Industrial part of SESAR
Yi Xiong, EUROCONTROL

1125-1140   ***Coffee break***

SESSION 2   Operational aspects

1140-1200   ***MET Service Provision in the future***
Overview of present and future MET service provision, with illustrative examples
Eric Petermann, EUMETNET

1200-1220   ***The urgent need for weather in ATM***
Overview of mandated MET provision for pilots and MET information needs
Klaus Sievers, European Cockpit Association

1220-1240   ***Overview of MET decision-support tools in use in USA***
Overview of US MET decision-support tools
Dr Tatjana Bolic, University of Trieste

1240-1310   ***Climate change impacts and new developments in the atmospheric sciences***
Overview of climate change impacts and new developments in the atmospheric sciences
Dr Riccardo Biondi, University of Padova

1310-1430   ***Lunch break***

SESSION 3   Facilitated discussions

1430-1545

A structured discussion, bringing together perspectives from different ATM stakeholders, ATM researchers and scientists, with the speakers and delegates. This will explore ways in which the MET challenges faced by ATM may be addressed, in moving towards more efficient MET information provision.

Three moderated break-out sessions are envisioned, to be followed by the joint discussion session where the conclusions of the individual sessions will be presented and further discussed.

Specific closing questions will include:

• what specific types of follow-up research are likely to be useful to mature the state of the art (especially those that could be addressed by catalyst funding from the Engage KTN)?

• what are the measures of success that could be used to assess the progress of the challenge?

• what are the likely barriers to prevent progress towards maturing the challenge, and how might we overcome them?

Session 1: SESAR MET research maturity and utility in the light of operational needs Wrap-up and next steps

Moderators: Luca Crecco, SJU
                Prof Damian Rivas, University of Seville

Session 2: Operational requirements in the light of changing climate and new scientific developments

Moderators: Dr Tatjana Bolic, University of Trieste
                Prof Andrew Cook, university of Westminster

Session 3: State-of-the-art of the MET information provision in the changing climate, and with the scientific developments - how to improve?

Moderators: Prof Manuel Soler, UC3M
                Dr Riccardo Biondi, University of Padova

1545-1615   *Coffee break*

SESSION 4   Final discussion, wrap-up, and next steps

1615-1645   *Presentation of conclusions of individual discussion sessions*
Presentation of results by individual session moderators
Moderator: Prof Manuel Soler, UC3M

1645-1715   *Joint discussion and wrap-up*
Final comments, conclusions, next steps, opportunities for funding
Moderators: Prof Manuel Soler, UC3M
                              Dr Tatjana Bolic

Request a booking

To request a place:

- please visit: engagektn.com
- go to the "Contacts" page and select "Thematic challenge workshop registration", clearly stating which workshop you wish to attend