Keeping the human in the U-space loop!

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EUROCONTROL’s Renée Medwed-Pelchen presents the human performance work in PODIUM

U-space services rely on digitalised and automated functions and specific procedures designed to support safe, efficient and secure drone operations, facilitating an appropriate interface with manned aviation and air traffic control.

Despite a continuous increase of automation in ATM and UTM, it is still the human who must use these automated functions. It is vital that drone operators, drone pilots, air traffic controllers and different authorities can efficiently use the UTM system and that the system fulfils the information requirements of the human actors.

EUROCONTROL experts applied the SESAR human performance assessment process (HPAP) to PODIUM. The HPAP focused on four different areas: the (1) Human and their Roles and Responsibilities and their operating methods; (2) the Human and the System; (3) Team Communication; and (4) Transition Factors (e.g. Job satisfaction; skill and competence requirements; training needs). Along with EUROCONTROL experts in validation, safety and security, the HP team contributed in developing the validation kit and supported the data collection on site. The HP results were analysed and reported into the individual validation reports, and a separate HP Assessment Report was drafted.

The HP assessment resulted in important requirements and recommendations for the U-space/UTM system highlighting the following:

The need for one human machine interface providing the actors with all relevant information for the mission preparation phase.

The need to provide the possibility to simultaneously fly the drone and access the UTM system in the flight execution phase

The need to develop procedures for the use of the UTM system and integrated drone operations.

Renée (Medwed-Pelchen of EUROCONTROL) explains the human performance work performed in PODIUM in the short video below, filmed at Hans Christian Andersen airport, Odense in May. (Interview and filming by Ellen Malfliet of Unifly). The extensive HP report can be accessed [here](https://www.sesarju.eu/sites/default/files/documents/projects/783230_D1_2_PODIUM_Human_Performance_Assessment_Report%20(1_0).pdf).

PODIUM stands for Proving Operations of Drones with Initial Unmanned aircraft system traffic Management. The main PODIUM partners are EUROCONTROL (project coordinator), Airbus, Delair, Drone Paris Region, DSNA, Integra Aerial Services, Naviair, NLR, Orange and Unifly. PODIUM supports U-space, the European vision for the safe, secure and efficient handling of drone traffic, and a key enabler for a growing drone market to generate economic and societal benefits