PJ.13 W2 IFR RPAS

The project ‘IFR RPAS’ covers the following candidate SESAR Solutions:

- Solution PJ.13-W2-111 ‘Collision avoidance for IFR RPAS’.

The solution will develop and operationally validate a detect and avoid (DAA) system for IFR RPAS, which consists of two functions: collision avoidance (CA) and remain well clear (RWC), in order to allow the remote pilot to contribute to safety by preventing collisions, should normal separation provision fail. The RWC function is designed to provide the remote pilot with greater situational awareness.

- Solution PJ.13-W2-115 IFR RPAS accommodation in Airspace Class A to C.

The solution is aimed at accommodating IFR RPAS in non-segregated airspace in the short-term, in accordance with the drone roadmap in the ATM Masterplan. The objective is to enable IFR RPAS operating from dedicated airfields to routinely operate in airspace classes A-C as GAT without a chase plane escort. The development of ATC procedures, adaptations to the flight planning processes, contingency etc. are included in the solution.

- Solution PJ.13-W2-117 IFR RPAS integration in Airspace Class A to C.

The SESAR solution aims at providing the technical capabilities and procedural means to allow IFR RPAS to comply with ATC instructions and the development of new procedures and tools to allow ATC to handle IFR RPAS in a cooperative environment in full integration with manned aviation.

The number of remotely piloted aircraft systems (RPAS) is continuously increasing and this will imply higher interactions with the wider ATM system. IFR RPAS operation characteristics e.g. speed, manoeuvrability, etc., together with their avionic system equipage may differ substantially from conventional aircraft.

One basic principle underpinning the integration of IFR RPAS in ATM, in alignment with ICAO principles, is that RPAS have to be treated in a similar manner to manned aircraft while duly considering the specific character of remotely-manned operations. IFR RPAS must be transparent (alike) to ATC and other airspace users.

This project will develop solutions that are expected to have a positive impact on the Network improving:

- Safety thanks to the development of detect and avoid system for preventing collision with other traffic;
- Efficiency with the definition of adequate procedure and systems enabling the introduction of IFR RPAS in a controlled environment
- Access and equity in enabling airspace access to new users

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