

AIR

(DE) Strategic Air Transport for Outsized Cargo (SATOC)

(Established in November 2021)

For Public Release

PROJECT DESCRIPTION

The aging of the aircraft in the SALIS service contract, the lack of complementary global services and the lack of an option to acquire the aircraft (in the Antonov 124 class) result in a potential gap in Strategic Fixed Wing Air Transport (most likely 100-ton class) in the 2030s. The A400M fleet can partially mitigate this risk, but the A400M is limited in size and payload. The SALIS contract helps to mitigate this critical shortfall as well but will expire in the early 2030s, while the risk of availability of the chartered Antonows increases due to the ongoing aging of the aircraft. There is an increasing critical risk of delays in operations, a risk of dependency on external resources and a risk of not be able to deploy and sustain substantial EU forces as outlined in the "Peace Enforcement" illustrative scenario. The C-17 fleet operated by EU MS is expected to reach the end of service date in the 2040s. Therefore, solutions have to be found in order to address the capability gap before the capability shortfall increases to a serious capability gap in the 2030s.

The project SATOC foresees a gradual 3-step approach: Block 1 – harmonization of requirements and assessment of identified solutions, Block 2 – Prototyping of the solution found and Block 3 – Capability Development. The successful achievement of milestones and objectives of a block is the prerequisite to start with the following Block. This project SATOC Block 1 aims to collect and consolidate different national requirements, to harmonize them and identify options for a development or commercial of the shelf solution regarding strategic air transport capabilities. The result of the project will be harmonized requirements and possibly an already identified development solution, which paves the ground for a future multinational capability development project. Block 1 also addresses discussions on the possible future operation and service from a common hub similar to NATO's AWACS base, the MMF-Fleet base or Strategic Airlift Capability (SAC) in Hungary, for example under the European Air Transportation Command.

The project also considers requirements for next generation strategic air transport for outsized cargo in accordance with requested capabilities by other stakeholders, for example with NATO target E 2201 N STRATEGIC DEPLOYMENT AND SUSTAINMENT. The project as such has a high operational impact and the potential to become a flagship project for NATO-EU cooperation.

OBJECTIVES/PRODUCTS

The deployment, sustainment and re-deployment of forces to and from Afghanistan during the ISAF and RESOLUTE SUPPORT missions have shown the need for a strategic airlift capability over the last 20 years – a need that still exists today. The illustrative scenario "Peace Enforcement" as the most challenging scenario of the EU, with the ambition to deploy around 60.000 troops within 60 days for a major joint operation, would also only be feasible with SATOC resources. In Progress Catalogue 20, the EU MC identified a significant shortfall of around 50 heavy Fixed Wing Air Transport aircraft, which poses a high operational risk to the successful deployment of forces. The overall aim of the project Strategic Air Transport for Outsized Cargo is therefore to fill this critical shortfall for strategic deployment by developing, in a gradual, 3-step approach, a European solution for the transport of outsized and heavy cargo:

In the short- to mid-term (Block 1), the objectives are to identify a sufficient number of project members (incl. third-state participants), harmonise requirements and identify and agree on a common solution. This includes discussing and analysing the collective demand and available resources for the coming years. For the success of this project, it is crucial to have as many participants on board as possible.



DE, CZ, FR, NL

BE, FI, HU, IT, PL,
PT, SK, SI, SEIDEATION
INCUBATION
EXECUTION
CLOSING**Contribution to
the more binding
commitments**
Yes**Capability
Perspective****EU CDP priority**
Air Transport

CARD references

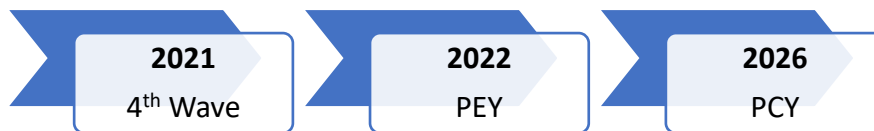
Fixed Wing Air
Transport
Harmonise
Requirements for
Gen. Transport
Outsized Cargo
Joint
Development and
Acquisition of
Outsized Cargo**Operational
Viewpoint****HICG**
Readiness**EDA support**
YesAd-hoc Cat.B
support

The tasks for Block 1 are to draw up a catalogue of common and harmonised requirements, define the time-cost-risk dimensions of all potential solutions, identify options to complement the various solutions by other (existing or future) solutions (i.e. a solution mix), describe operational concepts for the potential solutions (acquisition, contracting etc.) and identify infrastructure requirements (e.g. on pMS' airbases), required strategic partnering (e.g. non-EU technical stopover bases to increase range of platforms) and industrial issues (e.g. industries involved, technologies for which industrial RD is required).

The catalogue will detail the required investments, possible risks and timelines as well as all other prerequisites for the various options. Based on that, potential avenues of approach for the SATOC project will emerge and provide the basis for a follow-on development programme (Block 2). If the most favourable avenue of approach turns out to be a development solution / adaptation of existing frames, the mid- to long-term objectives (Blocks 2 and 3) are to develop a prototype (which could be a civil contractor solution, a conversion of a civil airliner or a new design and development project), and, finally, to develop this solution.

INDICATORS

Project Execution Year (PEY) and Project Completion Year (PCY):



DELIVERABLES ACHIEVED

- HLCOR (incl. 3 reference scenarios) signed by FR, NL, BE, DE, CZ.

CRITERIA FOR SUCCESS

- Currently EDF Interview phase with nations. The first results expected in 09/2025 will inform PESCO Group of a possible follow-on study in EDF27 (towards concrete development) and upcoming steps to be taken.