



MEMORANDUM OF COOPERATION

between

the European Space Agency

and

the Single European Sky ATM Research (SESAR) Joint Undertaking





THE EUROPEAN SPACE AGENCY,

An international intergovernmental organization established by the Convention on the Establishment of a European Space Agency,

With its headquarters located in 8-10, rue Mario Nikis, 75015 Paris, France,

Hereinafter referred to as "ESA",

Represented by Mrs Magali Vaissière, Director of Telecommunications and Integrated Applications Programmes,

ON THE ONE PART,

and

THE SESAR JOINT UNDERTAKING,

A Joint Undertaking within the meaning of Article 187 of the Treaty on the Functioning of the European Union ("Union"),

Established by Council Regulation (EC) No 219/2007 of 27 February 2007 on the establishment of a Joint Undertaking to develop the new generation European air traffic management system (SESAR), as amended by Council Regulation (EC) 1361/2008 of 16 December 2008 and Council Regulation (EU) No 721/2014 of 16 June 2014,

Located at 100 Avenue de Cortenbergh, B-1000 Brussels, Belgium,

Hereinafter referred to as "SJU",

Represented by Mr Florian Guillermet, Executive Director,

ON THE OTHER PART,

WHEREAS, as technological pillar of the Single European Sky, the SESAR Project aims to modernise Air Traffic Management (ATM) in Europe;

WHEREAS, under the SESAR Project Development Phase, the SJU is responsible for the modernisation of the European Air Traffic Management Systems ("EATMS") by coordinating, rationalising and concentrating all relevant research and development efforts in the European Union in accordance with Article 1.5 of Regulation (EC) No. 219/2007 on the establishment of a Joint Undertaking to develop the new generation Air Traffic Management system (SESAR) as amended by Council Regulation (EC) No. 1361/2008 and Council Regulation (EU) No. 721/2014;

WHEREAS ESA and its Member States participating in the "Iris" Element of the Programme of Advanced Research in Telecommunication Systems (ARTES) aim at supplying a validated satellite-based communication solution for and complementing existing and planned EATMS;

WHEREAS it is anticipated that Iris will be fully operational in 2028, with the deployment of a precursor service foreseen for 2018;

WHEREAS ESA, having a unique expertise in the satellite technology domain, and SJU, having a unique role in the field of aviation and ATM as well as interfacing with the aviation and air traffic management industry and other stakeholders in the air transport and aeronautics sector, share the objective to identify synergies and optimisation to avoid redundancies and reduce cost in their respective technical programmes;

NOW, THEREFORE, in consideration of the mutual interests described above, ESA and SJU have reached the following understanding:

1. PURPOSE AND PRINCIPLES OF COOPERATION

- 1.1 The purpose of this Memorandum of Cooperation ("MoC") is to establish a cooperative framework between ESA and SJU that contributes to the development of a satellite-based communication system compatible with the existing and planned EATMS through an effective coordination of some areas of their respective activities and programmes.
- 1.2 Through their cooperation under this MoC, ESA and SJU aim to reach the following objectives:
 - a) identify the potential role of satellite communication (SATCOM) as part of the ATM future enabling infrastructure;
 - b) share and exchange information and views, in a structured manner and pursuant to their respective rules and regulations, in order to coordinate strategies and key milestones as well as define synergies for the implementation of activities in their respective frameworks;
 - c) coordinate the Iris and SESAR roadmaps specifically in relation to the developments of SESAR solutions involving avionics and in relation to the SESAR integrated communication, navigation and surveillance (CNS) strategy and the ATM Master Plan, and taking into account the evolution of the ESA Iris Element and its future capabilities;
 - d) promote the exploitation of SATCOM technology, validated by ESA, in the context of the SESAR Project;
 - e) exchange information and coordinate their communication with internal and external stakeholders;
 - f) explore the potential secondment of staff between ESA and SJU;
 - g) exchange periodically on the progress achieved.

2. LEGAL NATURE

- 2.1 This MoC is a statement of intent and does not create any directly or indirectly enforceable rights or obligations. ESA and SJU will fulfil their tasks under this MoC on a reasonable effort basis.
- 2.2 This MoC does not affect any provisions under multilateral or bilateral agreements in force and applicable to ESA or SJU.
- 2.3 There will be no third party beneficiaries to this MoC.

3. GOVERNANCE AND IMPLEMENTATION

- 3.1. This MoC and its objectives and areas of cooperation as set out in Paragraph 1 will be implemented as mutually agreed and through regular consultation between ESA and SJU.
- 3.2. The MoC will be administered through the ESA/SJU Steering Committee (SC), wherein ESA and SJU will be equally represented. The SC will be co-chaired by the ESA Director for Telecommunications and Integrated Applications and the SJU Executive Director, who will each designate primary points of contact. These points of contact will jointly act as the secretariat within each organisation, facilitating an effective implementation of this MoC.
- 3.3. The SC will be responsible for the effective implementation of the MoC and will meet once a year to review the status of the agreed cooperation activities and to follow up the effective execution of the MoC. The primary points of contacts shall prepare the meetings and provide relevant progress reports.
- 3.4. The SC may, on an ad-hoc basis, define and set up groups or task forces reporting to the SC in support to the achievement of the objectives of this MoC. In particular, but not limited to, these groups or task forces may address risks assessment and critical paths definition in relation to agreed topics.
- 3.5. Upon the request of either ESA or SJU, both organisations may together organise dedicated common reviews and meetings as appropriate and necessary for their cooperation. Industry may attend such reviews or meetings as appropriate and in line with the rules of each organisation.

4. INFORMATION EXCHANGE AND CONFIDENTIALITY

4.1 ESA and SJU will take the appropriate measures to exchange data and information as needed to implement this MoC and to the extent permitted under their respective legal frameworks. This includes the effective distribution of such data and information within both organisations, as necessary.

5. ENTRY INTO FORCE, REVISION AND TERMINATION

- 5.1 This MoC takes effect upon its signature by the ESA Director for Telecommunications and Integrated Applications and the SJU Executive Director and remains valid for a period of five years unless terminated earlier as per section 5.3 below.
- 5.2 This MoC may be revised upon written agreement by ESA and SJU.
- 5.3 ESA or SJU may terminate this MoC at any time in writing by notifying the other side at least six months in advance. If this MoC is terminated by either ESA or SJU, adequate measures will be taken to mitigate adverse effects on any activity already in progress under this MoC.

The European Space Agency Director of Telecommunications and Integrated Applications Programmes The SESAR Joint Undertaking Executive Director of SESAR JU

Mrs Magali Vaissière

Mr Florian Guillermet

(Date and signature)

(Date and signature)