DECLARATION OF INTENT BETWEEN THE CO-OPERATING AGENCIES OF THE INTERNATIONAL COSPAS-SARSAT PROGRAMME AND THE EUROPEAN COMMISSION FOR CO-OPERATION ON THE INITIAL OPERATIONAL CAPABILITY OF THE COSPAS-SARSAT MEDIUM-ALTITUDE EARTH ORBIT SEARCH AND RESCUE (MEOSAR) SATELLITE SYSTEM

The Co-operating Agencies of the International COSPAS-SARSAT Programme and the European Commission hereinafter referred to as the Signatories:

NOTING the successful implementation of the COSPAS-SARSAT search-and-rescue Satellite System currently operated under the terms of the International COSPAS-SARSAT Programme Agreement, done at Paris on 1 July 1988;

NOTING the continued operation of the COSPAS-SARSAT System and its significant international contribution to the saving of human lives for more than thirty years through the use of search-and-rescue instruments on satellites in low-altitude Earth orbit (LEOSAR) and geostationary Earth orbit (GEOSAR);

NOTING the commitment of the COSPAS-SARSAT Parties to the Agreement to assure the long-term operation of the COSPAS-SARSAT System and access to this System to all States on a non-discriminatory basis, and free of charge to the end-user in distress;

RECOGNIZING that parallel efforts are being undertaken by the Russian Federation, the United States of America, and the European Union in the investigation of enhancing global satellite-aided search and rescue by placing 406-MHz transponders on the satellites of Global Navigation Satellite Systems (GNSS) in medium-altitude Earth orbit, respectively known as GLONASS, GPS, and GALILEO;

NOTING the COSPAS-SARSAT Council decision, made at its Thirty-Second Session in April 2004, that it was desirable for the Russian Federation, the United States of America, and the European Union to coordinate their respective GNSS and MEOSAR systems' planning and developmental activities to ensure that the systems would be compatible with the existing COSPAS-SARSAT System, and to the greatest extent possible, interoperable at the user level;

NOTING the COSPAS-SARSAT Parties' desire to co-operate on matters related to the use of the location services developed under the GALILEO, GPS and GLONASS programmes and by global search-and-rescue services at appropriate COSPAS-SARSAT fora;

RECALLING the Declaration of Intent for Co-operation on the Development and Evaluation of the Medium-Altitude Earth Orbit Search-and-Rescue (MEOSAR) Satellite System between the Co-operating Agencies of the International COSPAS-SARSAT Programme and the Galileo Joint Undertaking, thereafter assigned to the European GNSS Supervisory Authority, and then to the European Commission, which was signed in 2006;

NOTING the Regulation (EU) N°1285/2013 of the European Parliament and the Council of the European Union on the implementation and exploitation of European satellite navigation systems and in particular the obligations of the European Commission defined in it;

NOTING FURTHER that the European Union, through the implementation of the GALILEO Programme, aims to become one of the core providers of segments of the future COSPAS-SARSAT MEOSAR system;

DECLARE their intent as follows:

1. Definitions

- "**Agreement**" means the International COSPAS-SARSAT Programme Agreement, done at Paris on 1 July 1988.

- **"Compatibility"** means that the MEOSAR components are capable of orderly and efficient integration and operation with the COSPAS-SARSAT System, and that they are able to coexist on a non-interfering basis with each other and with the existing COSPAS-SARSAT System.

- **"Co-operating Agencies"** means the agencies designated by the four COSPAS-SARSAT Parties for the purpose of implementing the Programme.

- **"COSPAS-SARSAT Parties"** means the Parties to the Agreement.

- **"COSPAS-SARSAT System"** means the satellite-aided search-and-rescue (SAR) system comprising:

  a) the low-altitude Earth-orbiting satellites of the LEOSAR space segment described in Article 3 of the Agreement;

  b) the medium-altitude Earth-orbiting satellites of the MEOSAR space segment, as decided by the Council pursuant to Article 3.2 of the Agreement;

  c) the geostationary Earth-orbiting satellites of the GEOSAR space segment, as decided by the Council pursuant to Article 3.2 of the Agreement;

  d) the ground segment established by the COSPAS-SARSAT Parties or by Ground Segment Providers under the terms of the Agreement, including Local User Terminals operating with the LEOSAR, MEOSAR and GEOSAR satellites and Mission Control Centres (MCCs); and

  e) radiobeacons operating at 406-MHz frequencies as described at Article 3 of the Agreement, including the radiobeacons authorized by User States under the terms of the Agreement, or by other States that avail themselves of the System.

- **"Council"** means the COSPAS-SARSAT Council established pursuant to the Agreement.

- **"Declaration"** means the present Declaration of Intent Between the Co-operating Agencies of the International COSPAS-SARSAT Programme and the European Commission for Co-operation on the Initial Operational Capability of the Medium-altitude Earth Orbit Search and Rescue (MEOSAR) Satellite System.

- **"Definition and development phase"** means the phase during which the Signatories focused on identifying MEOSAR system functional and performance requirements, creating detailed technical specifications, and on matters relating to MEOSAR and COSPAS-SARSAT system compatibility.

- **"Demonstration and evaluation phase" (D&E)** means the phase during which the MEOSAR component providers, and States and Organizations associated with COSPAS-SARSAT under the Agreement, focus on characterising the technical and operational performance of the MEOSAR system as determined by on-orbit trials, evaluating the operational effectiveness and the benefits to SAR services, and providing a basis for a Council decision on the use of the MEOSAR system operationally.

- **"GALILEO"** means the planned medium-altitude Earth-orbit global navigation satellite System established under the Galileo Programme being developed and implemented by the European Union.

- **"Global Positioning System (GPS)"** means the medium-altitude Earth orbit global navigation satellite system operated and maintained by the United States of America.

- **"GLONASS"** means the medium-altitude Earth orbit global navigation satellite system operated and maintained by the Russian Federation.

- **"Interoperability"** means that the components of the MEOSAR system conform to a common architecture and comply with mutually decided upon performance standards, and that similar satellite downlink characteristics allow ground stations to track satellites and process signals from all MEOSAR constellations.

- **"MEOSAR component provider"** means the European Commission and the COSPAS-SARSAT Parties that contribute to the MEOSAR space segment.

- **"MEOSAR system"** means the 406-MHz SAR instruments on GALILEO, GLONASS, and GPS medium-altitude Earth orbit navigation satellite systems, and the ground stations for receiving and processing 406-MHz radiobeacon transmissions.

- **"MEOSAR Initial Operational Capability (IOC) phase"** means the MEOSAR operational phase prior to Full Operational Capability (FOC), declared by the Council, with the following characteristics and capabilities:

    - SAR transponders installed aboard medium-altitude Earth orbit (MEO) satellites, relaying 406-MHz radiobeacon signals to Local User Terminals of the MEOSAR system

(MEOLUTs), when such facilities have been formally commissioned into the COSPAS-SARSAT system;

- MEOLUTs generate detection and localisation data provided to the COSPAS-SARSAT network of MCCs for use operationally by those MCCs to support SAR operations;

- the MEOSAR IOC coverage may not be global and therefore the COSPAS-SARSAT system relies on the complementarity among the LEOSAR, GEOSAR and MEOSAR system components.

- **"MEOSAR Full Operational Capability (FOC) phase"** means the operational phase of the MEOSAR system, declared by Council, with the following characteristics and capabilities:

  - SAR transponders installed aboard MEO satellites, relaying 406-MHz radiobeacon signals to MEOLUTs, when such facilities have been formally commissioned into the COSPAS-SARSAT system;

  - MEOLUTs generate detection and localisation data provided to the COSPAS-SARSAT network of MCCs, commissioned for MEOSAR, for use operationally by those MCCs to support SAR operations;

  - the MEOSAR FOC coverage is global and therefore the COSPAS-SARSAT system can rely entirely on the MEOSAR system for the provision of COSPAS-SARSAT services.

- **"Programme"** means those activities carried out by the COSPAS-SARSAT Parties under the terms of the Agreement, to provide, operate and coordinate the COSPAS-SARSAT System in accordance with the Agreement.

2. Objective and Scope of the Declaration

2.1 The Signatories intend to co-operate in the IOC phase of the MEOSAR system in order to make available on an operational basis the detection and localization data from commissioned MEOSAR system facilities and provide related services such as the Return Link Service (RLS), and ultimately deploy a fully operational MEOSAR system.

2.2 The scope of this Declaration is limited to the IOC phase of the MEOSAR system implementation. The Signatories intend to conduct discussions regarding a follow-on instrument for co-operation on MEOSAR system operations which would apply when the transition from the MEOSAR IOC phase to the MEOSAR FOC phase is satisfactorily completed.

3. Principles of Co-operation

3.1 Nothing in this Declaration is intended to imply any required exchange of resources or technology among the Signatories for the implementation of their co-operation in the MEOSAR IOC phase.

3.2 The Signatories understand that there will be no exchange of funds under this Declaration to implement the MEOSAR IOC phase.

3.3 The Signatories intend to carry out the co-ordination and actions necessary to achieve compatibility with the existing COSPAS-SARSAT System and interoperability between MEOSAR components as outlined in document C/S R.012 "COSPAS-SARSAT 406 MHz MEOSAR Implementation Plan".

4. Radio Frequency Coordination

4.1 The Signatories intend to co-operate to ensure that MEOSAR space segment is designed and developed to successfully process the transmissions of 406-MHz radiobeacons that meet the requirements of document C/S T.001 "Specification for COSPAS-SARSAT 406 MHz Distress Beacons", and to ensure that their contributions:

a) do not cause harmful interference to the existing LEOSAR and GEOSAR systems;

b) do not cause harmful interference to other components of the MEOSAR system;

c) do not cause harmful interference to other existing systems operating within or outside the downlink frequency band; and

d) allow interoperability at both the ground station and user levels.

4.2 The Signatories note that the interoperability parameters are given in document C/S R.012 "COSPAS-SARSAT 406 MHz MEOSAR Implementation Plan".

4.3 The Signatories intend to co-operate in accordance with the legal framework of the International Telecommunication Union, including as well as with its recommendations.

5. COSPAS-SARSAT MEOSAR IOC phase

5.1 The Signatories intend to exchange status and implementation-progress information during the MEOSAR IOC phase. The Signatories intend to work jointly to update the document C/S R.012 "COSPAS-SARSAT 406 MHz MEOSAR Implementation Plan" to maintain it in the most current state practicable.

5.2 To contribute to the COSPAS-SARSAT MEOSAR IOC phase, the European Commission intends:

a) to deploy 406-MHz SAR transponders embarked on the GALILEO satellites and achieve a minimum constellation size of twelve operational SAR/GALILEO transponders at the time of entry into the MEOSAR IOC phase;

b) to deploy the SAR/GALILEO Ground Segment, consisting of three MEOLUTs and the MEOLUT Tracking Coordination Facility (MTCF);

c) to establish the Return Link Service Provider (RLSP) for the generation of acknowledgment messages to RLS enabled radiobeacons; and

d) to commission the SAR/GALILEO space and ground segments according to the COSPAS-SARSAT commissioning standards.

5.3 In the context of the COSPAS-SARSAT MEOSAR IOC phase, the Co-operating Agencies intend:

a) to co-operate in the commissioning of the SAR/GALILEO ground segment within the COSPAS-SARSAT system including co-operation in the preparation of necessary Council documents once demonstration has been made of the compliance of the SAR/GALILEO ground segment with the MEOLUT specifications and commissioning standards;

b) to co-operate with the European Commission in its objective to declare, when ready, the SAR/GALILEO service at IOC status, in anticipation of the formal MEOSAR IOC declaration by the Council, and to recognize commissioned SAR/GALILEO facilities as an operational contribution to the COSPAS-SARSAT System; and

c) to ensure the integration of the SAR/GALILEO RLS within the COSPAS-SARSAT System, which involves in particular the implementation of necessary upgrades within the MCCs, and updated specifications and standards for approval of current and future beacons to allow this integration.

6. Modalities

6.1 The Signatories recognize that their co-operation under this Declaration is intended to be implemented within the framework of the existing Programme management structure, defined by the Council and detailed in document C/S P.011 "COSPAS-SARSAT Programme Management Policy". For the purposes of carrying out the activities envisioned in this Declaration, the Co-operating Agencies intend to have the European Commission invited to participate in Programme meetings, including those of:

a) the Closed and Open meetings of the Council sessions, only with respect to program evolution and planning matters;

b) the Joint Committee, only to address technical and operational activities, to include the creation or modification of specifications and documents concerning the MEOSAR space and ground segments;

c) Task Groups established to address specific technical and operational matters of joint interest; and

d) Experts Working Groups to address matters of specific interest to the Signatories.

6.2 When the European Commission has been invited in accordance with 6.1, the European Commission may submit papers to the meetings addressing points of the agenda related to matters under its competence or within its field of expertise in accordance with document C/S P.011 "COSPAS-SARSAT Programme Management Policy". Contributions to Closed sessions of the Council may only take the form of information papers, unless the Council specifically has invited another form of contribution (e.g., a working paper). Co-operating Agencies intend to have the European Commission invited to make interventions addressing points of the agenda related to matters under its competence or within its field of expertise. Consistent with Article 8 of the Agreement, the European Commission will not participate in Council decision-making.

7. International Fora

The Signatories also intend to co-operate on matters of mutual interest related to satellite-aided search-and-rescue which are considered within the framework of the International Civil Aviation Organization, the International Maritime Organization, the International Telecommunication Union, and other relevant organizations.

8. Status

This Declaration is not a binding international agreement and does not create for the Signatories rights and obligations governed by international law.

9. Final Provisions

9.1 This Declaration applies on the date on which the Council declares the start of the MEOSAR IOC phase.

9.2 This Declaration may be amended by the Signatories by their mutual written consent.

9.3 A Signatory may cease its activities within the scope of this Declaration by a written notice to the other Signatories.

Signed in 6 (six) originals in each of the English, French and Russian languages, each version being equally valid.

For the European Commission

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For the National SAR Secretariat (NSS), Co-operating Agency of Canada

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For the Centre National d'Etudes Spatiales (CNES), Co-operating Agency of the French Republic

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For Federal State Unitary Enterprise Morsviazsputnik, Co-operating Agency of the Russian Federation

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For the National Oceanic and Atmospheric Administration, Co-operating Agency of the United States of America

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