**UNITED STATES OF AMERICA**

DRAFT PROPOSALS FOR THE WORK OF THE CONFERENCE

**Agenda Item 1.10**

**Agenda Item 1.10**: *to consider spectrum needs and regulatory provisions for the introduction and use of the Global Aeronautical Distress and Safety System (GADSS), in accordance with Resolution* **426 (WRC-15)**

# Background Information: The 2015 World Radiocommunication Conference (WRC-15) adopted Agenda Item 1.10 in accordance with Resolution 426 (WRC-15). The resolution’s purpose is to consider spectrum needs and regulatory provisions for the introduction and use of the global aeronautical distress and safety system (GADSS).

The International Civil Aviation Organization (ICAO) has developed a concept of operations (ConOps) to support the future development of a GADSS for worldwide aviation use. This ConOps is the guideline for developing ICAO performance-based standards and aircraft must meet, as well as providing technical and operational requirements for aircraft and systems that must communicate with an aircraft.

The current ICAO ConOps describes the following functions:

* Aircraft tracking under normal conditions: Typically leverages existing technologies to assist in the timely identification and location of aircraft. Provides an automated reporting function every 15 mins or less. Aircraft tracking may be accomplished by multiple different systems over the duration of a flight.
* Autonomous distress tracking: An automated method of position reporting at intervals of one minute or less to support search and rescue (SAR), triggered by indications that an aircraft is in distress which may result in an accident. Distress tracking aims to establish the location of a potential accident site within a 6 nautical mile (11.11 km) radius.
* Post flight localization and recovery: A combination of both the immediate need to locate and rescue possible survivors after an accident using methods to an accuracy of <1 nautical mile (<1.85 km), and the timely collection of aircraft components and data that will assist in the accident investigation.
* Procedures and information management: The method of data collection and notification of flight tracking data to the relevant SAR platform, and rescue coordination centers.

Specific systems, and therefore specific technical requirements or spectrum allocations are not proposed under this agenda item because ICAO proposes to use existing systems operating under existing allocations.

However, changes to other portions of the RR are proposed in order to facilitate GADSS implementation. In particular, possible changes to portions of RR Chapters VII [and VIII] have been identified.

To achieve the above, the following approach is proposed:

* No changes to Article **5** of the Radio Regulations.
* To facilitate GADSS introduction, modification of the RR to include GADSS as a distress and safety communications system, within Chapter VII – Distress and Safety Communications in a new Chapterspecific to GADSS.

# Proposals:

**5/1.10/4 Methods to satisfy the agenda item**

*Invites ITU-R* 1 *b)* of Resolution **426 (WRC-15)** calls for the analysis of the existing allocations to the relevant aeronautical services in order to determine whether any additional spectrum is required.

Regarding this question, no additional spectrum is needed to support GADSS, and as a result no changes to Article **5** of the RR are proposed.

*Invites ITU-R* 2 of Resolution **426 (WRC-15)** calls for studies of the existing regulatory provisions to determine whether it might be necessary to apply additional regulatory measures.

Regarding this question, in order to facilitate its introduction, modification of the RR is proposed to include GADSS as a distress and safety communications system in Chapter VII – Distress and safety communications.

**5/1.10/5 Regulatory and procedural considerations**

# NOC USA/1.10/1

ARTICLE 5

Frequency allocations

**Reason**: No modifications are needed as systems operating under existing allocations are to be used.

**MOD USA/1.10/2**

ARTICLE 30

General Provisions

**Section I – Introduction**

30.1 § 1 Nos.**30.4**-**30.13**, and Articles **31**, **32**, **33** and **34** of this Chapter contain the provisions for the operational use of the global maritime distress and safety system (GMDSS), whose functional requirements, system elements and equipment carriage requirements are set forth in the International Convention for the Safety of Life at Sea (SOLAS), 1974, as amended. These Articles contain provisions for initiating distress, urgency and safety communications by means of radiotelephony on the frequency 156.8 MHz (VHF channel 16). (WRC-19)

**ADD**

**30.1A** Article **34A** of this Chapter contains the provisions for the global aeronautical distress and safety system (GADSS), whose functional requirements are set forth in the Convention on International Civil Aviation, as amended.     (WRC‑19)

**Reason**: Modifications to introduce new Article **34A** into Chapter **VII** on Distress and Safety Communications.

ADD USA/1.10/3

ARTICLE 34A

Global Aeronautical Distress and Safety System (GADSS)

**34A.1** The GADSS concept of operations determines performance requirements for the radiocommunication systems being used for conducting aircraft tracking, autonomous distress tracking, and post flight location and recovery. (WRC-19)

34A.2 The type of radiocommunication service to be used by systems contributing to the GADSS depends on the requirements of the specific GADSS function. Systems contributing to the GADSS shall not operate under the provisions of Article 4.4. (WRC‑19)

**Reason**: Introduction of new Article **34A** and its provisionsinto Chapter **VII** on Distress and Safety Communications.

**SUP** **USA/1.10/4**

RESOLUTION **426** **(WRC-15)**

**Studies on spectrum needs and regulatory provisions for the introduction and use of the Global Aeronautical Distress and Safety System**

**Reason**: Consequential. Consideration of the subject issues has been completed.