

**UNITED STATES OF AMERICA**  
**DRAFT PROPOSAL FOR WRC-19**

**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 International Civil Aviation Organization (ICAO) has developed a concept of operations (ConOps) to support future development of a Global Aeronautical Distress and Safety System (GADSS).

That ConOps describes in particular the following functions:

- Aircraft tracking: Typically leverages existing technologies to assist in the timely identification and location of aircraft. Provides an automated reporting function every 15 minutes 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 air accident using emergency location beacons and other methods to an accuracy of less than 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 search and rescue coordination centres.

The ConOps is the guidelines for the development of ICAO performance-based standards, outlining specific technical and operational requirements that an aircraft must meet. It does not identify specific systems proposed to contribute to GADSS; rather ICAO intends to use systems operating under appropriate existing allocations in accordance with the provisions of the Radio Regulations.

In accordance with Resolution **426 (WRC-15)**, ITU-R considered spectrum needs and regulatory provisions for the introduction and use of (GADSS).

**Proposal:**

ARTICLE 5  
**Frequency allocations**

**NOC** USA/1.10/1

**Reasons:** As ICAO has concluded that the GADSS requirements can be satisfied using systems operating within existing aeronautical frequency allocations or distress spectrum, and also that for WRC-19 no additional spectrum allocations are required, then no changes are required to the Radio Regulations Article 5.

**Distress and safety communications**

ARTICLE 30  
**General Provisions**

Section I – Introduction

**MOD** USA/1.10/2

**30.1** § 1 Nos. 30.4-30.13 and Articles 31, 32, 33 and 34 of Tthis Chapter contains 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 also contains provisions for initiating distress, urgency and safety communications by means of radiotelephony on the frequency 156.8 MHz (VHF channel 16). (WRC-0719)

**Reasons:** Distinguish which portions of Articles 30-34 deal with GMDSS and/or distress, urgency and safety communications by means of radiotelephony on the frequency 156.8 MHz (VHF channel 16)

**ADD** USA/1.10/3

**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)

**Reasons:** Introduce provisions for GADSS as a Distress and Safety Communications system.

**ADD** USA/1.10/4

## ARTICLE 34A

### **Global Aeronautical Distress and Safety System**

**34A.1** The GADSS concept of operations determines performance requirements for the radiocommunication systems being used for conducting functions such as aircraft tracking, autonomous distress tracking, and post flight localization 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)

**Reasons:** Introduce provisions for GADSS as a Distress and Safety Communications system.

**SUP** USA/1.10/5

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

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

**Reasons:** Required actions are completed.

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