

## RESOLUTION 426 (WRC-15)

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

The World Radiocommunication Conference (Geneva, 2015),

*considering*

- a)* that the International Civil Aviation Organization (ICAO) has developed the initial version of the concept of operations for the Global Aeronautical Distress and Safety System (GADSS);
- b)* that GADSS is intended to address the timely identification and location of an aircraft during all phases of flight as well as distress and emergency situations;
- c)* that GADSS is intended to use existing and new applications to support search and rescue (SAR) and flight data retrieval;
- d)* that GADSS is intended to include terrestrial and satellite components supporting different terrestrial and space applications;
- e)* that not all requirements in the concept of operation for GADSS are currently fulfilled by existing technologies;
- f)* that future systems based on new technologies are being developed to contribute to fully meeting the GADSS requirements;
- g)* that, as stated by ICAO, “the full GADSS concept can be realized in an evolutionary manner”, and some applications may be developed after 2019;
- h)* that the performance-based elements of the GADSS are still being defined by ICAO, and should be provided by ICAO in time to use them in ITU Radiocommunication Sector (ITU-R) studies;
- i)* that the introduction of the GADSS needs to ensure the protection of, and impose no additional constraints on, all existing services,

*recognizing*

- a)* that there are provisions in the Radio Regulations, including frequency band allocations, related to aeronautical services that support distress and safety systems;
- b)* that Annex 10 to the Convention on International Civil Aviation is a part of International Standards and Recommended Practices (SARPs) for aeronautical telecommunication systems used by international civil aviation,

*noting*

that the concept of operations and requirements for GADSS is general, its components and applications currently provide only scenarios, and it is being developed in an evolutionary manner in ICAO,

*resolves to invite the 2019 World Radiocommunication Conference*

- 1 to take appropriate actions, taking into account the results of ITU-R studies;
- 2 to analyse the necessity for further studies, and consider whether this matter should be brought to the attention of a future competent conference,

*invites ITU-R*

1 to conduct the relevant studies, taking into account information and requirements provided by ICAO for both the terrestrial and satellite components, including:

- a) quantification and characterization of radiocommunication requirements related to GADSS, such as:
  - data traffic requirements for different system components of GADSS (such as the aircraft tracking, autonomous distress and flight data recovery systems) and their terrestrial and satellite components at each phase of the operation;
  - information on the radiocommunication requirement related to safety-of-life applications;
  - performance criteria for terrestrial and satellite systems;
- b) analysis of the existing allocations to the relevant aeronautical services and determining whether any additional spectrum is required;
- c) studies on sharing and/or compatibility with the existing services;

2 to undertake studies of the existing regulatory provisions to determine whether it might be necessary to apply additional regulatory measures,

*invites the International Civil Aviation Organization*

to participate actively in the studies by providing requirements and information that should be taken into account in ITU-R studies, in particular those mentioned in *invites ITU-R 1a*),

*instructs the Secretary-General*

to bring this Resolution to the attention of the ICAO, the International Air Transport Association (IATA) and the International Maritime Organization (IMO).