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|  | ASIA-PACIFIC TELECOMMUNITY | **Document No:** |
| **The 5th Meeting of the APT Conference Preparatory****Group for WRC-19 (APG19-5)** | **APG19-5/OUT-03****(Rev.1)** |
| 31 July – 6 August 2019, Tokyo, Japan | 5 August 2019 |

Working Party 5

**APT VIEW AND PRELIMINARY APT COMMON PROPOSAL**

**on WRC-19 agenda item 1.10**

**Agenda Item 1.10:**

*to consider studies on spectrum needs and regulatory provisions for the introduction and use of the global aeronautical distress and safety system, in accordance with Resolution* ***426 (WRC-15)****;*

**1. Background**

Recent tragedies of aircraft flight highlighted limitation of the current air navigation system and stressed the necessity of timely identification and location of aircraft on distress occasions. To address issues, the International Civil Aviation Organization (ICAO) held a Special Meeting on global flight tracking (GFT) of Aircraft in May 2014 and formed two groups. One of them was an ICAO ad hoc Working Group tasked to develop a concept of operations (ConOps) to support the development of a global aeronautical distress and safety system (GADSS). GADSS was designed to address all phases of flight under all circumstances including distress.

The ConOps is the guideline for the development of ICAO performance-based standards, outlining specific technical and operational requirements that an aircraft must meet. Based on these requirements, the aircraft operators will determine which specific systems need to be installed on an aircraft. The ConOps for the GADSS does not identify specific systems proposed to contribute to GADSS.

The version 6.0 of the ConOps describes in particular the following functions:

* Aircraft Tracking Function;
* Autonomous Distress Tracking function;
* Post Flight Localization and Recovery function; and
* GADSS Information Management and Procedures

With regards to spectrum needs and regulatory provisions necessary for the implementation of the GADSS, WRC-15 adopted Resolution 426 (WRC-15) and WRC-19 agenda item 1.10.

ITU-R Working Party (WP) 5B which is the responsible group of this agenda item has completed its work on GADSS. Draft CPM report has been submitted to the CPM Chapter Rapporteur after WP 5B meeting in May 2018 and the Report ITU-R M.2436-0 “The global aeronautical distress and safety system” has been completed and afterwards approved by Study Group (SG) 5 in November 2018. Report ITU-R M.2436-0 concludes that “studies within ICAO have determined that the GADSS requirements can be satisfied using existing systems operating within existing aeronautical frequency allocations and distress spectrum (e.g. 406.1 MHz).

Three methods have been identified in the CPM report, all of which states that no changes to Radio Regulations (RR) Article 5 is required in addition to suppression of Resolutions **426 (WRC-15)**. Method A and Method B propose modification to RR Article 30 and a new RR Article 34A to recognize GADSS. However, Method B is different from Method A as it proposes to develop a new Resolution, which invites ITU-R to develop the relevant Recommendation(s) to reflect frequency bands used by GADSS, system elements and technical characteristics. Method C proposes no change to the RR. Details of each method are described in section 5/1.10/4 and 5/1.10/5 of the CPM report.

**2. Documents**

* Input Documents APG19-5/INP-20 (NZL), INP-46 (AUS), INP-53 (INS), INP-69 (CHN), INP-85 (J), INP-110 (MLA,THA)
* Information Documents APG19-5/INF-02 (ICAO), APG19-5/INF-18 (CEPT), INF-19 (ATU), INF-20 (CITEL), INF-22 (RCC)

**3. Summary of discussions**

**3.1 Summary of APT Members’ views**

**3.1.1 New Zealand - Document APG19-5/INP-20**

New Zealand is of the view that no additional spectrum is needed to facilitate the implementation of GADSS and therefore no change to Article **5** of the Radio Regulations is required. New Zealand supports Method A as outlined in the CPM Report.

**3.1.2 Australia - Document APG19-5/INP-46**

Australia supports Method A of the CPM Report. GADSS is a system of systems using existing frequency allocations. Method A allows GADSS to evolve with minimal need to change the Radio Regulations.

**3.1.3 Indonesia - Document APG19-5/INP-53**

Indonesia is of the view that no changes to Article **5** of the Radio Regulations (RR) are required. (Furthermore), Indonesia supports Methods **A** in the CPM Report which propose modification to RR Article **30** and a new RR Article **34A** to recognize GADSS in the RR.

**3.1.4 China (People’s Republic of) - Document APG19-5/INP-69**

China is of the view that:

1) Systems composing the GADSS shall only operate in primary allocations when used for safety purposes.

2) The system elements of the GADSS including their operating frequency bands and technical characteristics should be included in a future ITU-R Recommendation.

China supports Method B of the CPM Report.

**3.1.5 Japan - Document APG19-5/85**

Japan supports ITU-R studies for the introduction of GADSS in accordance with Resolution **426 (WRC-15)** and it is desirable to follow the policy of Method A to implement GADSS.

**3.1.6 Malaysia and Thailand - Document APG19-5/INP-110**

Malaysia and Thailand support Method A of the CPM Report. This method is supported due to:

1. require no future WRC action for any regulatory modification to update or modify GADSS requirements/ systems,
2. does not require changes to Article 5; and
3. GADSS is included as distress and safety communications system in Chapter VII – Distress and safety communications (addition of Article 34A) in the Radio Regulations.

**3.2 Summary of issues raised during the meeting**

There was a general consensus that no additional spectrum allocation is required and modifications in provisions other than Article 5 of Radio Regulations are needed.

During the discussion, some APT Members supported Method A and one APT member supported Method B of the CPM Report.

**4. APT View(s)**

APT Members support the ITU-R studies being undertaken for the introduction and use of Global Aeronautical Distress and Safety System (GADSS) in accordance with Resolution **426 (WRC-15)**.

APT Members are of the view that:

* no additional spectrum allocations and no changes to Article 5 of the Radio Regulations are required
* modification of Chapter VII in the Radio Regulations to facilitate introduction of GADSS is required including modification of Article 30 General provision and addition of Article 34A
* the details of the GADSS elements are defined in Annexes to the ICAO Convention
* any studies on regulatory provisions required for the implementation of GADSS should take into account the GADSS concept provided by ICAO

APT Members support Method A contained in the CPM report regarding this agenda item.

**5. Preliminary APT Common Proposal(s)**

