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| **World Radiocommunication Conference (WRC-15) Geneva, 2–27 November 2015** |  |
| **INTERNATIONAL TELECOMMUNICATION UNION** |  |
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| COMMITTEE 5 | **Document 264-E** |
|  | **12 November 2015** |
|  | **Original: English** |
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| Netherlands (Kingdom of the)/Switzerland (Confederation of) | |
| Proposals for the work of the conference | |
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| Agenda item 9.2 | |

9 to consider and approve the Report of the Director of the Radiocommunication Bureau, in accordance with Article 7 of the Convention:

9.2 on any difficulties or inconsistencies encountered in the application of the Radio Regulations; and

Background information

In section 3.2.1.4 of the Director’s Report (Document CMR15/4(Add.2)), under the heading “Launch vehicles and suborbital flights (WRC12 Doc. 4 (Add.2), § 3.3.9)”, the Director of the Radiocommunication Bureau recalls that some administrations have applied the procedure of Article 9 of the Radio Regulations for recording in the MIFR frequency assignments for satellite launch vehicles and suborbital flights. In addition to satellite launchers, the Bureau is witnessing increasing activities and projects under development using suborbital flight vehicles. These objects are not intended to remain in outer space for a long period. Indeed this time may vary from few minutes or hours up to few days before returning back to Earth.

The Director of the Radiocommunication Bureau suggests that “In this regard, the Conference may wish to consider the relevance of existing definitions, service allocations and procedures to be applied and information to be provided for such stations or vehicles and review them accordingly and also to encourage administrations to record the frequency assignments used by such stations.”

This present contribution proposes a course of action in response to this matter as raised by the Director of the Radiocommunication Bureau.

The recent Radiocommunication Assembly RA-15 introduced a new Question ITU-R 259/5, Operational and radio regulatory aspects for planes operating in the upper level of the atmosphere and results of these studies should be included in ITU-R Recommendations and/or Reports;

This contribution proposes the adoption of a WRC-15 Resolution that would invite the ITU-R to conduct studies towards the adoption of a new ITU-R Recommendation, or Report to guide administrations which are planning to execute suborbital flight activities.

ADD HOL/SUI/264/1

Draft New Resolution [HOL/SUI-Space planes intended to perform suborbital flights] (WRC‑15)

Space planes intended to perform suborbital flights

The World Radiocommunication Conference (Geneva, 2015),

considering

*a)* that the radio spectrum is a limited resource;

*b)* that aircraft, commonly referred to as space planes, are being developed which can fly at altitudes of over 100 km;

*c)* that some of the aircraft referred to in *considering b)* use non-orbital trajectories;

*d)* that the boundary between the Earth’s atmosphere and space is usually assumed to be 100 kilometres above the Earth’s surface,

*e)* hybrid space-plane technology based on hybrid jet or rocket engines intended to launch a spacecraft to reach outer-space orbit, and after releasing the spacecraft accelerate away and land on Earth as a suborbital space flight,

recognizing

that from the technical description, operational parameters as well as spectrum requirements, these new projects may not be fitting with the current terrestrial or space service regulatory description and associated procedures for the international recognition of the use of relevant frequency assignments,

noting

Question ITU‑R 259/5 Operational and radio regulatory aspects for planes operating in the upper level of the atmosphere,

resolves to invite ITU-R

1 to conduct studies to identify any required technical, operational and regulatory provisions, including frequency sharing between different radiocommunication services, in relation to space planes intended to perform suborbital flights that could assist to avoid harmful interference between radiocommunication services and in proper utilization of orbit/spectrum resources;

2 to conduct studies to identify any additional spectrum requirements applicable to space planes intended to perform suborbital flight taking into account *resolves* 1;

3 to complete the studies as a matter of urgency, with a view to developing one or more ITU‑R Recommendations, within the next ITU‑R study cycle,

instructs the Director of the Radiocommunication Bureau

1 to bring this resolution to the attention of the ITU‑R Study Groups;

2 to report the results of these studies to the next World Radiocommunication Conference,

invites administrations

to participate actively in the studies by submitting contributions to ITU‑R,

instructs the Secretary-General

to bring this resolution to the attention of the United Nations Committee on the Peaceful Uses of Outer Space (COPUOS) and International Civil Aviation Organization (ICAO) and other international and regional organizations concerned.

**Reasons:** To develop the technical and frequency sharing methods and appropriate regulatory provisions, including the evaluation of spectrum requirements, that could assist in proper operation and utilization of orbit/spectrum resources.

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