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INTERNATIONAL CIVIL AVIATION ORGANIZATION
A UN SPECIALIZED AGENCY

ICAO WRC-27 Preparatory Workshop
Agenda item 10: New agenda items

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Presentation Overview

01 **Background and potential issues**

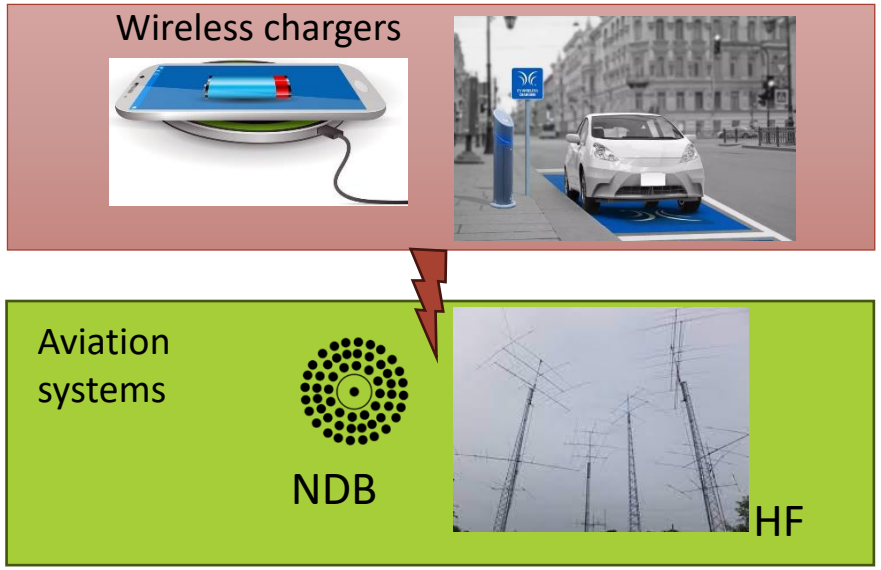
02 **ICAO Position**

03 **Conclusion**

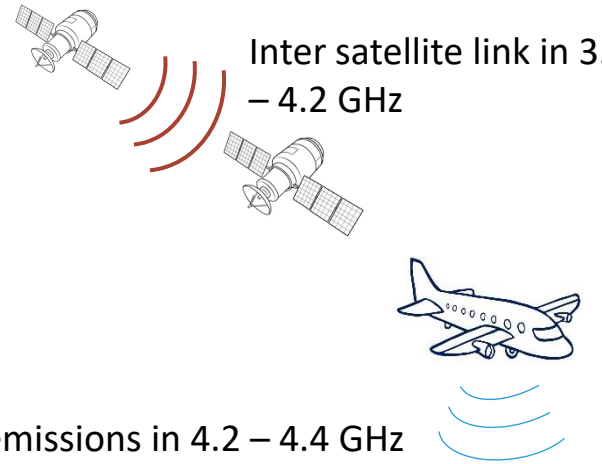
Background and potential issues

5 preliminary agenda items may potentially impact civil aviation applications.

2.2: [to consider the possible [frequency bands] for [non-beam and beam] wireless power transmission to avoid harmful interference to the radiocommunication services caused by wireless power transmission, in accordance with Resolution 910 (WRC-23)]



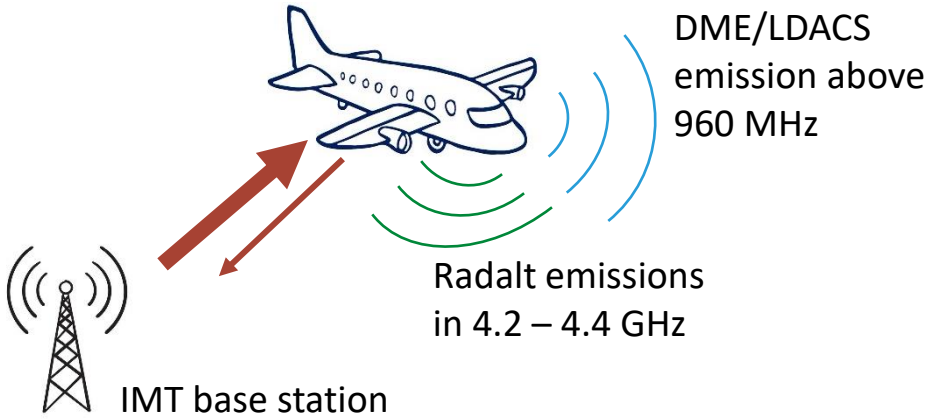
2.4: to consider, based on the results of ITU Radiocommunication Sector studies, support for inter-satellite service allocations in the frequency bands 3 700-4 200 MHz and 5 925-6 425 MHz, and associated regulatory provisions, to enable links between non-geostationary orbit satellites and geostationary orbit satellites, in accordance with Resolution **683 (WRC-23)**



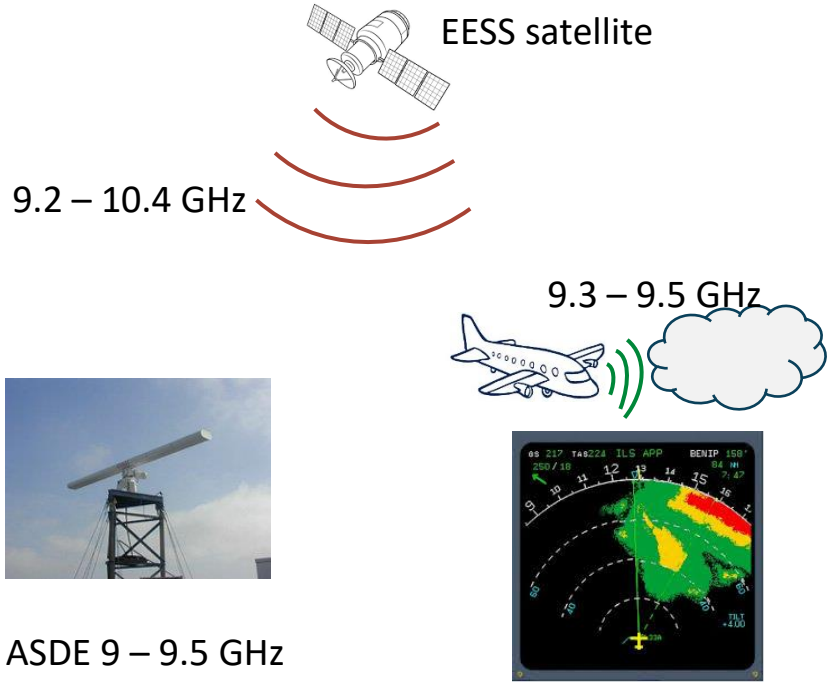
Background and potential issues

5 preliminary agenda items may potentially impact civil aviation applications.

2.5: to consider a possible primary allocation in the frequency bands [694-960 MHz, or parts thereof, in Region 1], 890-942 MHz, or parts thereof, in Region 2, and [3 400-3 700 MHz, or parts thereof, in Region 3] to the aeronautical mobile service for the use of International Mobile Telecommunications (IMT) user equipment in terrestrial IMT networks by non-safety applications, in accordance with Resolution **251 (Rev.WRC-23)**



2.11: to consider studies on coexistence between spaceborne synthetic aperture radars operating in the Earth exploration-satellite service (active) and the radiodetermination service in the frequency band 9 200-10 400 MHz, with possible actions as appropriate, in accordance with Resolution **722 (WRC-23)**

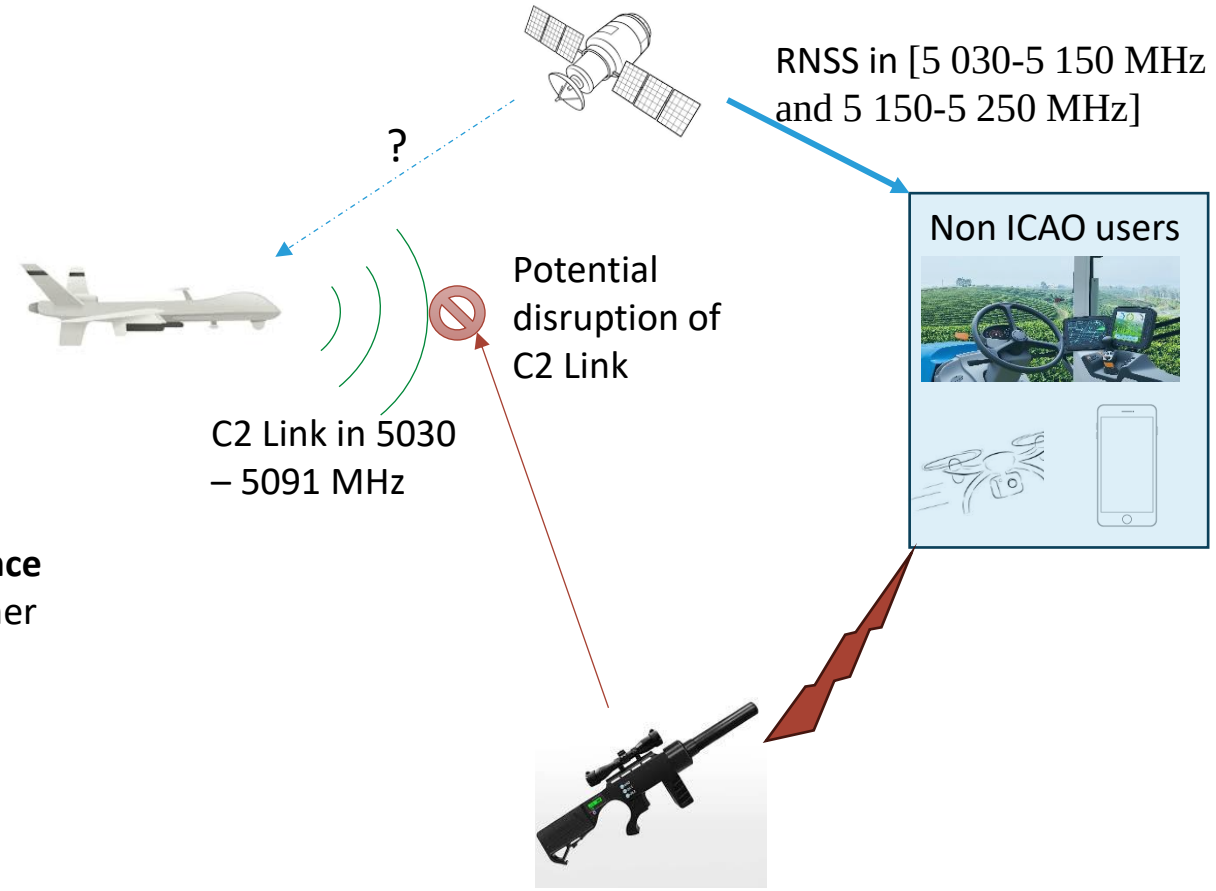


Background and potential issues

2.9: to consider possible allocations to the radionavigation-satellite service (space-to-Earth) in the frequency bands [5 030-5 150 MHz and 5 150-5 250 MHz] or parts thereof in accordance with Resolution **684 (WRC-23)**

Civil aviation usage in the band
- C2 Link in the 5030 – 5091 MHz band
- Aeromacs in the 5091 – 5150 MHz band

This preliminary agenda item is a serious concern for civil aviation because RNSS is often targeted by jamming and spoofing
➔ **Civil aviation systems may be impacted by interferer targeting RNSS**



Potential consequences of RPAS being collateral victim of RNSS interference
- Loss of C2 Link, initiation of Lost C2 Link procedures with impact on other aircraft
- Potentially all RPAS in a given area are impacted
- In case the impacted RPAS uses the C-band RNSS, it may be unable to apply the Lost C2 Link procedure.

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ICAO Position

To ensure that any new agenda item approved for WRC-31 will provide sufficient guarantees that civil aviation systems will be protected.

To oppose the inclusion of preliminary Agenda Item 2.9 into the WRC-31 Agenda, because of the inherent interference risk that intentional jammers to the RNSS would cause to aviation safety systems operating in the same frequency band used by civil aviation systems.

Conclusion

On a general basis, ICAO must be careful that any new agenda items asks for the protection of civil aviation systems when they are concerned.

C band RNSS

- In recent years, RNSS bands have been severely impacted by interference.
- A new allocation of RNSS to be used for several applications, including military, in the same frequency band than other aeronautical systems, would be unfortunate for the safe operation of those aeronautical systems.
- A new allocation of RNSS in a frequency band encompassing the 5030 – 5091 MHz C2 Link band may jeopardize the whole RPAS concept. This band is indeed key for the RPAS standardization.

Thank You

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