CEPT ECC
Electronic Communications Committee

Project Team FM PT 48

3rd Meeting of FM PT 48 **FM48(11)030**
Maisons-Alfort, 13-14 September 2011

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Subject: **Reduction of the number of candidate bands for Direct Air-to-Ground Communication (DA2GC)**

Password protection required? (Y/N)[1] N

Summary

Based on the discussions that took place during the 72nd WG FM meeting this document contains proposals in order to reduce the number of "Candidate bands for Broadband DA2GC". Furthermore, the 2 GHz MSS bands (1980-2010 / 2170-2200 MHz) are proposed to be included in category 2 (see also document FM48(11)029).

Proposal

FM PT 48 is invited to endorse the modifications proposed resulting in the new list of "Candidate bands for Broadband DA2GC" as presented in Annex 1 of this document.

Background (Extract from the Minutes of the 72nd WG FM Meeting)

WG FM also supported the categorisation into four categories as proposed by the project team in principle (Annex 5 of the Progress Report).

Some administrations proposed to remove bands from the tables because they are not suitable for a Broadband DA2GC system from their point of view. WG FM did not decide on the removal of bands but asked FM PT 48 to further consider the categorisation, FM PT 48 should also reconsider the frequency bands with the aim to reduce the number.

[1] ECC policy is that in general all documents should be publicly available unless the author of the document requires that it be restricted to ECC family participants only.

Proposal to reduce the number of candidate bands for Direct Air-to-Ground Communication (DA2GC)

WG FM supported the categorisation into four categories as proposed by FM PT48 in principle. However, it is felt beneficial to reduce the number of bands in order to present a better view on which bands FM PT48 is actually working on, and also to avoid discussions on bands that are not in the primary focus at the moment.

Therefore, it is proposed to remove

- **Category 4: Frequency bands with high regulatory obstacles for an introduction of Broadband DA2GC systems**

from the list of bands as presented to WG FM in document FM(11)090 Annex 5).

Concerning the bands listed under

- **Category 3: Position on frequency bands still open/undecided**

it is proposed to move the band 1452-1492 MHz to category 2 for the following reason:

Broadband DA2GC is one of the candidate applications for the future use in the band 1452-1492 MHz, currently under study within FM PT50. Thus, this band has to be retained in the list of candidate bands, although not discussed further in FM PT 48 prior to a result in FM PT 50.

After this modification, category 3 might also be removed from the list of candidate bands for Broadband DA2GC.

With regard to

- **Category 2: Frequency bands to be considered next or in case the studies for the category 1 bands will not show positive results**

it is proposed to include the 2 GHz MSS bands (1980-2110 / 2170-2200 MHz). The rationale for this proposal is outlined in document FM48(11)029.

The corresponding list of candidate bands for Broadband DA2GC after the modifications as proposed is given in Annex 1 of this document. The so far empty column “(Likely opportunity cost)?” is also removed.

Annex 1 of FM48(11)030

Candidate bands for Broadband DA2GC

Category 1: Frequency bands already submitted to WG SE for compatibility/sharing studies

Frequency band	Existing allocation in the RR suitable for Broadband DA2GC (MS or AMS) ?	Current level of harmonisation ?	Would the bandwidth required (2 x 10 MHz FDD or 20 MHz TDD) fit in the band ?	Proposed or future alternative usage under consideration (within CEPT) ?	Actual usage of the band - national level - within CEPT (- worldwide) for future sharing studies ?	Actual usage of adjacent bands - national level - within CEPT for future compatibility studies ?	Likely time scales (target date 2012)
1670 – 1675 MHz / 1800 – 1805 MHz	yes, yes	high, low	no[1]		MSS, Meteorological Satellites / MS	FS, MSS, Radio Astronomy, Meteorological / MS, FS, PMSE	within
2400 – 2483.5 MHz	yes	high	yes	---	RLANs, SRDs/RFIDs, ISM	Aeronautical Telemetry, Amateur, Mobile applications, SAP/SAB (cordless cameras), MSS, ISM	possibly within
3400 – 3600 MHz	yes	high	yes	band plan under consideration within ECC PT 1	BWA, FSS, FS links, RLS	RLS, FSS, BWA, FS links	possibly within
5855 – 5875 MHz	yes	medium	yes (air to ground)	AI 1.20 WRC-12	BFWA, ITS, SRDs, FSS (uplink), military systems (on a national level), ISM	RLS, RTTT, BFWA, SRDs, ITS	within

[1] unless combined with another band

Category 2: Frequency bands to be considered next or in case the studies for the category 1 bands will not show positive results

Frequency band	Existing allocation in the RR suitable for Broadband DA2GC (MS or AMS) ?	Current level of harmonisation ?	Would the bandwidth required (2 x 10 MHz FDD or 20 MHz TDD) fit in the band ?	Proposed or future alternative usage under consideration (within CEPT) ?	Actual usage of the band - national level - within CEPT (- worldwide) for future sharing studies ?	Actual usage of adjacent bands - national level - within CEPT for future compatibility studies ?	Likely time scales (target date 2012)
1452 – 1492 MHz[2]	no	high	yes	TRA-ECS (Mobile downlink)	Mobile Multimedia (WAPECS), Digital Radio, Satellite Digital Audio, Aeronautical telemetry	Aeronautical telemetry, Fixed Links, Tactical Radio Relay	beyond for some countries
1980 – 2010 MHz / 2170 – 2200 MHz	yes	high	yes	---	MSS	UMTS (FDD), UMTS (TDD) / UMTS (FDD), Defence systems, Fixed links, Radio astronomy, SAP/SAB, Space Research/EESS	possibly within
2483.5 – 2500 MHz	yes	high	yes (ground to air)	AI 1.18 WRC-12	MSS, ISM	RLANs, SRDs/RFIDs, ISM, ECS	possibly within
5150 – 5170 MHz	yes [3] (see also 5.446C)	high	yes		FSS (feeder links), RLANs, BBDR, AMS (Flight Test Telemetry)	MLS, AM(R)S, RLANs, FSS (feeder links) [4]	within

The former categories 3 and 4 are not considered any more for the time being.

[2] Depending on the results of the FM PT50 aiming at determining which future use(s) of the 1452-1492 MHz band would be the most appropriate for CEPT.
[3] The current AMS allocation would need to be modified to allow Broadband DA2GC.
[4] Compatibility studies with MLS, AM(R)S, RLANs and FSS have been completed.