MULTI- COUNTRY INPUT TO RSCOM #83 : Austria, Belgium, Croatia, Estonia, Finland, France, Hungary, Lithuania, Malta, Poland, Slovakia, Slovenia, Spain

Making mandatory both application of strengthened radio altimeters specifications and a retrofit for all radio altimeters not compliant with these specifications in a reasonable and ambitious timeframe

5G is largely deployed in 3.4-3.8 GHz in EU based on EU harmonised technical conditions (Decision (EU) 2019/235) under Radio Spectrum Decision) and supported by a coordinated timing assignment (art.54 of Directive (EU) 2018/1972 - European Electronic Communications Code).

Moreover, the launch of 5G in US up to 3.98 GHz has triggered intensive work in that country since end 2021/beginning 2022. Federation Aviation Administration<sup>1</sup> is actively engaged in this process. This results in various measures including retrofit of Radio Altimeters operating in 4.2-4.4 GHz to ensure better resilience to 5G.

In addition, aeronautical standardisation (RTCA/Eurocae) initiated development of new Minimum Operations Performance Specifications (MOPS) for radio altimeters. A public consultation took place recently. Final deliverables will serve as long term requirements for drafting strengthened specifications on Radio Altimeters including resilience to 5G operating below 4.2 GHz.

From European side, due to the launch of 5G below 3.8GHz, some Member States are implementing RA national protection measures around some airports. In addition, CEPT is engaged on studying compatibility between 5G systems operating in 3400-3800 MHz and Radio Altimeters (RA) operating in 4200-4400 MHz. CEPT informed EASA accordingly and highlighted a need for new Radio Altimeters specifications more compatible with current and future use of spectrum in adjacent frequency bands<sup>2</sup>.

Others CEPT activities in order to response to <u>EC mandate 3.8-4.2 GHz</u> under Radio Spectrum Decision are on-going. CEPT informed European Commission that protection of Radio Altimeters will be also studied accordingly in response to this EC mandate<sup>3</sup>.

It is expected that relevant updates on the progress of these CEPT activities could be provided to Radio Spectrum Committee as appropriate by ECC.

Once strengthened radio altimeters specifications are available, above CEPT studies will be assessed and updated as needed. In particular, it is expected that CEPT may review harmonized conditions for Wireless Broadband Low medium power (WBB LMP)<sup>4</sup> in 3.8-4.2

<sup>&</sup>lt;sup>1</sup> https://www.faa.gov/5g

<sup>&</sup>lt;sup>2</sup> <u>ECC(22)039 Annex 19</u> : LS from ECC to EASA including "Technical parameters of 5G IMT systems" It refers to the current deployments in 3.4-3.8GHz in some European countries with a transmit power up to 78 dBm EIRP in a bandwidth of 40 MHz.

<sup>&</sup>lt;sup>3</sup> RSCOM22-39 Interim report to EC mandate on "technical conditions regarding shared use of the 3.8-4.2 GHz frequency band for terrestrial wireless broadband systems providing local-area network connectivity in the Union"

<sup>&</sup>lt;sup>4</sup> Wireless Broadband Low Medium Power refers to "terrestrial wireless broadband systems providing localarea (i.e. low/medium power) network connectivity"

GHz to assess whether this allows for any restrictions to be relaxed in the future. In the current phase, only WBB LMP parameters<sup>5</sup> for studies in response to EC mandate are available.

In order to enable EU Member States to protect efficiently radio altimeters, in particular around airports, to reduce any national measures constraining 5G deployment in 3.4-3.8 GHz, to relax any restrictions to future WBB LMP in 3.8-4.2 GHz deployment, the signatories invite European Commission to ensure that EASA will make mandatory the application of a strengthened radio altimeters specifications and will put in place a mandatory retrofit for all radio altimeters not compliant with these specifications in an reasonable and ambitious timeframe.

Moreover, the European Commission is invited to regularly report, as appropriate, to Radio Spectrum Committee on EASA initiative, progress of the work on both application of strengthened radio altimeters specifications and requested above mandatory retrofit and its timeframe.

<sup>&</sup>lt;sup>5</sup> WBB LMP : On-going studies at 3.8-4.2 GHz are based on WBB LMP parameters described in <u>ECC PT1(23)135</u> <u>ANNEX VIII-09</u> including parameters for the incremental studies for non-AAS and AAS Medium Power Base stations (table 8)