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| Working Group FM | SE(17)082  Doc. FM(17)127 – Annex 14 |

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| To |  |
| Mr Karl Loew  Chairman WG SE  Mail: [karl.loew@bnetza.de](mailto:karl.loew@bnetza.de)  Cc: | |
| Date | Enclosures |
| 23 May 2017 | Doc. FM(17)127 – Annex 15 |
| Our reference | Your reference |
| WGFM#88 |  |
| Subject |  |
| Sharing studies in 960 - 1164 MHz |  |

Dear Karl,

As reported at ECC#43, WGFM created a new work item, FM51\_10, on the Consideration of possible usage of low power audio PMSE in the band 960-1164 MHz. The scope of this work item is in two parts: 1. Identify and scope out the requirements for possible compatibility and sharing studies by WG SE to be presented to the 87th meeting of WG FM for consideration; and 2. Carry out preliminary investigations on regulatory and legal issues and on the feasibility in the band.

Further to the first part, FM PT51 has discussed this issue and prepared the scope for the technical studies that we ask WGSE to carry out and to provide the results in a new ECC Report. We emphasise that no decision has been made about whether there is a case to provide any particular measure on a CEPT-wide basis, and that the incumbent services in this band have particular status relating to safety of life services.

We ask WGSE to carry out technical studies which fulfil the following objectives:

* The studies should consider currently available low power audio PMSE wireless microphone and in-ear monitor technologies operating at a maximum radiated power of 50 mW. Airborne use of PMSE is excluded;
* Define under which conditions, e.g. protection distances, guard bands and other technical constraints and conditions, co-existence between low power audio PMSE in the band 960 – 1164 MHz and incumbent systems in the band 960 – 1215 MHz could be achieved. The set of conditions should allow low power audio PMSE to operate with an acceptable quality of service, while at the same time securing the required protection criteria for the incumbent systems;
* Similarly define under which conditions, co-existence between low power audio PMSE and services in the adjacent bands could be achieved;
* The studies should consider cumulative interference effects;
* The studies should take into account the very high demands of aeronautical systems for an environment free from harmful interference due to the important role that these systems have concerning flight safety/safety of life;
* Perform case studies using derived sharing criteria for scenarios based on realistic DME/TACAN assignments, use of 1030/1090 MHz and deployment scenarios of other incumbent systems to provide estimates of the total amount of spectrum that could be used for low power audio PMSE, also considering likely future expansion in the use of incumbent systems;
* Estimate the impact of systems that use the band even if technical and operational information is incomplete (e.g. military systems) and of potential future aeronautical systems on the usability of the band for low power audio PMSE deployment, considering the likelihood of interference into PMSE.

Background information, assembled by FM PT51 in the course of their work, is provided as attached.

Best regards,

Thomas Weilacher

Chairman WG FM

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