**Comments on “Draft ECC Report 358”**

**1. Sources**

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**2. General Comments**

Due to the large quantity of technical work that has gone into developing this draft ECC Report, the studies have had to be contained in standalone appendices, while the main body of the report contains summaries of the studies. Annexes 1 and 2 in the Report contain hyperlinks to the individual appendices so that each of the studies can be opened separately.

Considering that final version of ECC Report, which will be published at [ECO Documentation Database](https://docdb.cept.org/home), should not point to the documents used when developing the deliverable, there is a need to find another way.

One possible solution would be to convert appendices into the Annexes and incorporate them into the main document. However there are circa **330 pages** in appendices so this does not seem practical. Moreover, not all appendices were developed using proper template and that would require additional efforts to adjust.

Since the main body of the report contains summaries of the studies it is proposed to keep the studies as standalone documents and publish them together with the main body.

The publication of ECC Report 331 (<https://docdb.cept.org/document/22509>) could serve as an example:

A screenshot of a computer

Description automatically generated

In order to apply such approach it is proposed to adjust the main body and appendices of draft ECC Report 358 as follow:

* Rename appendix file names in the format of “Attachment xx – Title” (see the table below for the list of files),
* Remove the cover page from the appendices and include the header in the document with the corresponding number of attachment,
* Replace the cross-references in sections 6 and 7 of the main body with the text “Detailed study can be found in Attachment xx”,
* Delete Annex 1 and Annex 2 in the ECC Report as they would become redundant.

The list of attachments containing the studies to the ECC Report 358 could be as follow:

|  |  |  |
| --- | --- | --- |
| Attachment number | Title of attachment | Corresponding ECC PT1 document |
| Attachment 01 | Between 3GPP WBB LMP | [ECC PT1(24)008 Annex 1 App 1.1.1](https://api.cept.org/documents/ecc-pt1/81269/ecc-pt1-24-008-annex-1-app-1_1_1_nokia_between-wbb-lmp-co-ch-unsynch) |
| Attachment 02 | Between 3GPP WBB LMP | [ECC PT1(24)060 Annex 12 App 1.1.2](https://api.cept.org/documents/ecc-pt1/81631/ecc-pt1-24-060-annex-12-app-1_1_2_orange_in-band-wbb-lmps) |
| Attachment 03 | 3GPP WBB LMP vs FS | [ECC PT1(24)008 Annex 1 App 1.2.1](https://api.cept.org/documents/ecc-pt1/81271/ecc-pt1-24-008-annex-1-app-1_2_1_germany_wbb-lmp-vs-fs) |
| Attachment 04 | 3GPP WBB LMP vs FS | [ECC PT1(24)008 Annex 1 App 1.2.2](https://api.cept.org/documents/ecc-pt1/81272/ecc-pt1-24-008-annex-1-app-1_2_2_italy_wbb-lmp-vs-fs) |
| Attachment 05 | 3GPP WBB LMP vs FS | [ECC PT1(24)060 Annex 12 App 1.2.3](https://api.cept.org/documents/ecc-pt1/81632/ecc-pt1-24-060-annex-12-app-1_2_3_ericsson_wbb-lmp-vs-fs) |
| Attachment 06 | 3GPP WBB LMP vs FSS | [ECC PT1(24)008 Annex 1 App 1.3.1](https://api.cept.org/documents/ecc-pt1/81274/ecc-pt1-24-008-annex-1-app-1_3_1_intelsat_wbb-lmp-vs-fss-co-ch) |
| Attachment 07 | 3GPP WBB LMP vs FSS | [ECC PT1(24)008 Annex 1 App 1.3.2](https://api.cept.org/documents/ecc-pt1/81275/ecc-pt1-24-008-annex-1-app-1_3_2_nokia_wbb-lmp-vs-fss-co-ch) |
| Attachment 08 | 3GPP WBB LMP vs FSS | [ECC PT1(24)008 Annex 1 App 1.3.3](https://api.cept.org/documents/ecc-pt1/81276/ecc-pt1-24-008-annex-1-app-1_3_3_france_wbb-lmp-vs-fss-co-ch) |
| Attachment 09 | 3GPP WBB LMP vs FSS | [ECC PT1(24)008 Annex 1 App 1.3.4](https://api.cept.org/documents/ecc-pt1/81277/ecc-pt1-24-008-annex-1-app-1_3_4_ericsson_wbb-lmp-vs-fss-co-ch) |
| Attachment 10 | 3GPP WBB LMP vs FSS | [ECC PT1(24)060 Annex 12 App 1.3.5](https://api.cept.org/documents/ecc-pt1/81633/ecc-pt1-24-060-annex-12-app-1_3_5_luxembourg_wbb-lmp-vs-fss-co-ch) |
| Attachment 11 | 3GPP WBB LMP vs FSS | [ECC PT1(24)008 Annex 1 App 1.3.6](https://api.cept.org/documents/ecc-pt1/81279/ecc-pt1-24-008-annex-1-app-1_3_6_germany_wbb-lmp-vs-fss-co-ch) |
| Attachment 12 | 3GPP WBB LMP vs FSS | [ECC PT1(24)060 Annex 12 App 1.3.7](https://api.cept.org/documents/ecc-pt1/81634/ecc-pt1-24-060-annex-12-app-1_3_7_ericsson_wbb-lmp-vs-fss-co-ch) |
| Attachment 13 | DECT-2020 NR vs other radio applications | [ECC PT1(24)060 Annex 12 App 1.4](https://api.cept.org/documents/ecc-pt1/81635/ecc-pt1-24-060-annex-12-app-1_4_dect-forum_dect-nr-studies) |
| Attachment 14 | 3GPP WBB LMP vs VGOS | [ECC PT1(24)008 Annex 1 App 1.5.1](https://api.cept.org/documents/ecc-pt1/81282/ecc-pt1-24-008-annex-1-app-1_5_1_germany_wbb-lmp-vs-gow-co-ch) |
| Attachment 15 | 3GPP WBB LMP vs MFCN | [ECC PT1(24)008 Annex 1 App 2.1.1](https://api.cept.org/documents/ecc-pt1/81283/ecc-pt1-24-008-annex-1-app-2_1_1_nokia_wbb-lmp-vs-mfcn-unsynch) |
| Attachment 16 | 3GPP WBB LMP vs MFCN | [ECC PT1(24)008 Annex 1 App 2.1.2](https://api.cept.org/documents/ecc-pt1/81284/ecc-pt1-24-008-annex-1-app-2_1_2_orange_wbb-lmp-vs-mfcn-unsynch) |
| Attachment 17 | 3GPP WBB LMP vs MFCN | [ECC PT1(24)060 Annex 12 App 2.1.3](https://api.cept.org/documents/ecc-pt1/81636/ecc-pt1-24-060-annex-12-app-2_1_3_orange_wbb-lmp-vs-mfcn-100m-unsynch) |
| Attachment 18 | 3GPP WBB LMP vs MFCN | [ECC PT1(24)008 Annex 1 App 2.1.4](https://api.cept.org/documents/ecc-pt1/81286/ecc-pt1-24-008-annex-1-app-2_1_4_qualcomm_wbb-lmp-vs-mfcn-semi-synch) |
| Attachment 19 | 3GPP WBB LMP vs MFCN | [ECC PT1(24)008 Annex 1 App 2.1.5](https://api.cept.org/documents/ecc-pt1/81287/ecc-pt1-24-008-annex-1-app-2_1_5_orange_wbb-lmp-vs-mfcn-indoor) |
| Attachment 20 | 3GPP WBB LMP vs MFCN | [ECC PT1(24)067 Annex 04 App 2.1.6](https://api.cept.org/documents/ecc-pt1/82169/ecc-pt1-24-067_annex-04_app-2_1_6_france_wbb-lmp-vs-mfcn-unsynch) |
| Attachment 21 | 3GPP WBB LMP vs MFCN | [ECC PT1(24)008 Annex 1 App 2.1.7](https://api.cept.org/documents/ecc-pt1/81289/ecc-pt1-24-008-annex-1-app-2_1_7_ericsson_wbb-lmp-vs-mfcn-unsynch) |
| Attachment 22 | DECT-2020 NR vs MFCN | [ECC PT1(24)008 Annex 1 App 2.2](https://api.cept.org/documents/ecc-pt1/81291/ecc-pt1-24-008-annex-1-app-2_2_dect-forum_dect-nr-vs-mfcn) /  [ECC(24)025](https://api.cept.org/documents/ecc/82194/ecc-24-025_update-on-studies-between-dect-2020-nr-and-adjacent-mfcn-below-3_8-ghz) |

**3. Proposals related to the ECC Deliverable**

| **Comment number** | **Section number / Clause** | **Paragraph / Figure / Table** | **Type of comment** (General / Technical / Editorial) | **Comment** | **Proposed change** |
| --- | --- | --- | --- | --- | --- |
| LTU/1 | 2.1.4 | 2nd paragraph | Editorial | Text in brackets is superfluous, it is proposed to be deleted | The approach could be implemented with either one of the frame structures recommended in ECC Recommendation (20)03 [2]. |
| LTU/2 | 4.2.1 | Table 4 | General | Explanation of Pmax is missing. It is proposed to reuse from Table 5. | Note: Pmax is the maximum mean carrier power in dBm for the base station measured as e.i.r.p. per carrier, interpreted as per antenna |
| LTU/3 | 4.2.1 | Table 6 | General | Improvement how to account for MIMO processing gain when addressing NF | 13 (subtract 5 for MIMO processing gain) dB  10 (subtract 5 for MIMO processing gain) dB |
| LTU/4 | 4.2.1 | Table 9 | General | 3GPP standard reference is missing | Note 1: From 3GPP standard  Note 2: From 3GPP standard |
| LTU/5 | 5.1.1 | Last paragraph | Editorial | Adjustment to the text | A suitable case study should be accompanied with the reasonings on the assumptions. |
| LTU/6 | 5.2.1.1 | Tables 23 and 24, Title | Editorial | Adjustment of the titles of tables | Table 23: Antenna characteristics for 5G commercial AAS base station to be used in the coexistence studies  Table 24: 5G commercial characteristics and deployment related parameters |
| LTU/7 | 6, 7 |  | General | Remove contributors affiliations from the sections 6 and 7 | See Annex |
| LTU/8 | 6, 7 |  | General | Add reference to the relevant Attachment | See Annex |
| LTU/9 | 6.1.1 | Figure 2, title | Editorial | To correct that figures are for both LP and MP | Figure 2: The minimum separation distance between two WBB LMPs to satisfy the I/N=-6dB protection criterion |
| LTU/10 | 6.1.2 |  | Editorial | Improvement of readability | See Annex |
| LTU/11 | 6.2.2 |  | Editorial | Use term “terrain” instead of “altimetry” | See Annex |
| LTU/13 | 6.3.2 |  | Editorial | Instead of abbreviation ES to use full term “earth station” | See Annex |
| LTU/14 | 6.4 | Title | Editorial | The adjustment of section headings and some other minor editorials. It is proposed to remove the heading for subsection 6.4.1 as it does not reflect the content | See Annex |
| LTU/15 | 6 |  | General | VGOS study is only referenced in the Annex 1 (section A1.5) and not summarised in the main body, hence it is proposed to create a **new** **section** with the short summary, as for other studies, for completeness. | **6.5 Between 3GPP WBB LMP and other applications**  **6.5.1 Study 1 – Sharing study between WBB LMP and VGOS in 3.8-4.2 GHz**  Detailed study can be found in Attachment 14.  Separation distances for the protection of the GOW from WBB LMP base stations (BS) are calculated via worst case Minimum Coupling Loss (MCL). The protection criterion of -135 dBm/MHz is used.  The results in this sharing study indicate that the maximum required separation distances to protect the GOW from WBB LMP may go up to 125 km for medium power BS and up to 100 km for low power BS for a worst-case scenario. The results for the medium power BS also show that a cross-border interference could occur. |
| LTU/16 | 7.1.1 | 4th paragraph | Editorial | Improved readability | The results of the study indicate that to satisfy the I/N protection criterion of MFCN, the separation distances between MFCN BS and WBB LP BS are below 250 m when both are located at an urban environment and approximately 850 m when both are located in a rural environment. Separation distance between MFCN BS and WBB MP networks with EIRP 49dBm/100MHz and 51dBm/100MHz located in urban and dense sub-urban environments is below 250 m. When both networks were located in rural environments, the separation distance to protect MFCN services was approximately 1 km. |
| LTU/17 | 7.1.2 | 2nd paragraph | Editorial | The sentence refers to another study for comparison but the section should remain within its objective hence it is proposed to delete the comparison | This study provides Monte-Carlo simulations results of interference from WBB LMP BS to 5G MFCN BS by modelling the local area network as a single BS and 5G MFCN network as a single BS. The 5G MFCN BS out-of-band blocking characteristics used in the simulation is a type 1-H (-15 dBm7 at frequency offset from the band edge). This single BS to single BS simulation scenario does not take into account the inter-cell interference within 5G MFCN network. |
| LTU/18 | 7.1.3 |  | General | Removing the word “regulatory” as the study should provide the results of simulations | See Annex |
| LTU/19 | 7.1.3 | Tables 43 and 44 | General | Aligning table headers and OOBE column wrt to “per cell” text |  |
| LTU/20 | 7.1.3 | 3rd paragraph | General | The sentence is proposed to be incorporated into Table 43 as the note to be associated with the OOBE for AAS BS case. In addition the text has been amended to clarify the applicability of values for the specific environment following the study assumptions. | See Annex |
| LTU/21 | 7.1.3 | 4th paragraph | General | This seems a repetition of what is provided at the beginning of section and in Tables 42-45 (but in different form) hence it is proposed to keep only the material in tables and delete the paragraph |  |
| LTU/22 | 7.1.3 | 5th paragraph | General | If the study has not been updated before launching public consultations it is suggested to keep only the factual information in the report. | It should be that two major European 5G MFCN vendors have confirmed that the 5G AAS MFCN BSs deployed in Europe within 3400-3800 MHz belong to another category (1-H) more robust to interference due to blocking.. |
| LTU/23 | 7.1.6 | Table 48 | General | Convert table into bullets | The examples of the calculated field strength levels at border of WBB LMP licensed area to be measured at the 5G MFCN BS antenna height are:  34.5 dBµV/m/ 100 MHz for urban environment  32.8 dBµV/m/ 100 MHz for suburban environment  32.2 dBµV/m/ 100 MHz for rural environment |
| LTU/24 | 7.1.6 | Table 48 | Editorial | Pending resolution of comment LTU/23, correct, if table remains, the format of the units (using text instead of equation) | dBµV/m/ 100 MHz |
| LTU/25 | 7.1.7 | 6th paragraph | General | The paragraph compares some assumptions with other studies. Either to be deleted or moved to the section 7.1.8 with appropriate adjustments to fit that section |  |
| LTU/26 | 7.1.8 | “Issue 1” | General | Square brackets around the text. Remove the square brackets or remove the text within the square brackets together with the brackets | [if the reference throughput (over which the loss is calculated) did not cover the intra-network intercell interference and the associated conclusion (e.g. -43dBm/5 MHz TRP for WBB MP AAS, -40dBm/MHz EIRP for WBB LMP non-AAS) would appear to be very pessimistic and then not realistic.] |
| LTU/27 | 7.1.8 | “Issue 2” | General | To be consistent with the resolution of comment LTU/20 | See comment LTU/20 for consistent approach |
| LTU/28 | 7.1.8 | Table 57 | General | Alignment of table caption and heading with Table 48 | See comment LTU/23 for consistent approach |
| LTU/29 | Annex 1, Annex 2 |  | General | After converting individual appendices into the attachments and adding references to them into sections 6 and 7 there is no need to keep Annexes 1 and 2 | Delete Annexes 1 and 2 |
| LTU/30 | Annex 1 | 1st paragraph | General | Same text is incorporated in 3rd paragraph therefore it is a duplication and not required. |  |
| LTU/31 | Annex 3 |  | General | Change langue from using third person into using general | See Annex |
| LTU/32 | Appendices |  | General | Remove cover pages, references to PT1 documents, comments and references to the CG activities, correct grammar and spelling | See Attachments |