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| Project Team SE21 | | **SE21(18)78rev1** |
| SE21 web meeting on WI SE21\_19 Unwanted emissions - guidance for coexistence studies  (WI SE21\_20) | | |
| 2nd July 2018:  14:00–16:00. | |  | |
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| Date issued: | 3 July 2018 | |
| Source: | | Convener WI SE21\_19 | |
| **Subject:** | | Minutes of the SE21 webmeeting on the Unwanted emissions - guidance for coexistence studies recommendation and report | |
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1. **Opening of the meeting**

The web meeting was chaired by Craig Scott (Convener) The web meeting was attended by 11 participants from administrations and industry. The list of participants is provided in Annex 1.

1. **Adoption of the agenda and attribution of docs¨**

The agenda in document SE21(18)73\_rev1 was adopted.

1. **Output from last meetings regarding WI SE21\_19**

Documents SE21(18)71A06 (Draft ECC Recommendation) and SE21(18)71A07 (Draft ECC Report) contain the output of the 102nd SE21 meeting.

1. **Input contibutions on WI SE21\_19**

Itron presented an input contribution that drew the attention of SE21 to an input paper in SE7 examining compatibility between SRD and rail systems around 876/921MHz. This work makes particular assumptions / interpretations on spurious emissions that show co-existence concerns. This could be if interest to SE21 particularly under WI\_19 and the work done in ECC Report 249. The meeting noted that the draft Recommendation under WI\_19 seeks to guide ECC groups to investigate unwanted emissions in more detail. It gives guidance that if co-existence cannot be achieved using limits (i.e. REC 74-01) then further work should be done to determine the typical levels of unwanted emissions such as through measurements. There were some views that the recommendation should be strengthened as groups may continue to only base studies on limits. This could be on the basis that is a perceived risk that some present equipment (i.e. equipment not measured) or future equipment could be at the limit. There were other views that the recommendation needs to be flexible as all studies need to be on a case by case basis.

Qorvo contributed a document that gave information on aspects or spurious emissions particulary in shared and licence exempt spectrum. The document drew a linkage onto a previous contribution SE21(18)69 which gave information on dual limits (ie different limits for wideband and narrowband ‘spikes’ related by a peak-to-average ratio). The proposals in italics at the bottom of the contribution were included in the report but further clarification is needed on point 4. Other parts of the contribution also need some discussion. It was noted that this can take place offline or it could be discussed at the next meeting.

Some other points raised on the draft recommendation were the following:

1. Section 5 needs some text above table 2 to explain the difference between filtered and non-filtered systems. It was noted that where there is a filter on the output stage of the transmitter the spurious emissions are very low. This text will be developed by correspondence.
2. There was a view that it could be useful to have a ‘sanity’ check in the process to make sure the study results are realistic. However, it was noted that the judgement of realistic and unrealistic is difficult and can be debated for a long time. It was suggested that some guidance could be developed in annex 4 for discussion
3. There was a view that it could be useful for part of the sensitivity analysis to include a check with and without spurious emissions (i.e. switch off spurious emissions) to give a better understanding (particularly in complex interference models) what the impact of spurious is. It was suggested that text could be developed for Annex 4

The updated working document for the recommendation is provided in Annex 2.

The report was briefly discussed, it was noted that further contributions would be needed to move this forward and this would be discussed at the next meeting. No changes were made to the report.

It was noted that the deadline for the work item is May 2019 and to meet this, the final document needs to be sent to WGSE by the end of the year. In terms of priorities, it could be preferable to complete the recommendation based on ECC Report 249 by the end of the year. It is likely that the report it on a longer time scale and depending on the findings it could be used to update the recordation in due course.

1. **Any other business**

Future dates for web meetings were discussed. Some dates to be proposed on the SE21 reflector. Work to take place by correspondence in the meantime.

1. List of participants

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| **Country** | **First Name** | **Last Name** | **Organization / Company** | **Administrative delegation** |
| Germany | Dietmar | Gaul | Federal Network Agency (BNetzA) | Yes |
| Germany | Uwe | Loewenstein | Telefónica Germany | No |
| Slovenia | META | PAVSEK TASKOV | AKOS | Yes |
| United Kingdom | Simon | Dunkley | Itron | No |
| Denmark | Peter | Faris | ECO | No |
| United Kingdom | Nick | Long | Great Circle Design | No |
| France | Ari | REFIK | TDF | Yes |
| Sweden | Zhanxian | Wang | Ericsson | No |
| United Kingdom | Craig | Scott | Ofcom | Yes |
| France | Philippe | MAGNERON | Hager controls | No |
| Germany | Thomas | Hasenpusch | Bundesnetzagentur | Yes |

1. Updated working document – draft ECC Recommendation

Provided as a separate document: SE21(18)78A02