**RIS implementation of ECC/DEC/(14)02 the Harmonised technical and regulatory conditions for the use of the band 2300-2400 MHz for Mobile/Fixed Communications Networks (MFCN)**

Foreword

The ECC has decided that RIS implementations of ECC deliverables should be uploaded to the ECO website in order to help administrations fill out the EFIS database.

This RIS implementation is limited to harmonised frequency arrangements for MFCN in the 2300-2400 MHz bands

**RIG II Template for the harmonized frequency arrangements for MFCN in the 2300-2400 MHz MHz bands**

**Radio Interface Notification by an administration**

**Normative part**

|  |  |  |  |
| --- | --- | --- | --- |
| **Nr**  | **Parameter** | **Description** | **Comments**  |
| **1** | **RadiocommunicationService** | Mobile Service, Fixed Service |  |
| **2** | **Application** | Mobile/fixed communications networks (MFCN) |  |
| **3** | **Frequency band** | 2300-2400 MHz | The harmonised TDD frequency arrangement is given in Annex 1 of ECC/DEC(14)02 and the least restrictive technical conditions (LRTC) are specified in Annex 2 of ECC/DEC(14)02.Annex 3 of ECC/DEC(14)02 provides appropriate sharing framework to introduce MFCN in the band, and maintain the long term incumbent use of the band in their territory implementing Licensed Shared Access (LSA) |
| **4** | **Channelling** | Frequency arrangement should be based on 20 blocks of 5 MHz | An operator can aggregate several channels of 5 MHz to obtain a new channel. |
| **5** | **Modulation / Occupied bandwidth**  | Not specified | Technology neutral approach |
| **6** | **Direction / Separation** | TDD: not applicable  |  |
| **7** | **Transmit power / Power density** | Base stations: regulated on a national basisUser equipment: 25 dBm (recommended upper limit for the in-block power) | In-block requirements for MFCN base stations :* 2300-2390 MHz: An in-block e.i.r.p. limit is not obligatory. In case an upper limit is desired by an administration, a value which does not exceed 68 dBm / 5 MHz e.i.r.p. per antenna may be applied.
* 2390-2400 MHz: The in-block e.i.r.p. limit shall not exceed 45 dBm / 5 MHz to ensure coexistence with systems above 2400 MHz.
* For femto base stations, the use of power control is mandatory in order to minimise interference to adjacent channels.

User equipment: The power limit is specified as e.i.r.p. for UE designed to be fixed or installed and as TRP for the UE designed to be mobile or nomadic. (TRP is a measure of how much power the antenna actually radiates. The TRP is defined as the integral of the power transmitted in different directions over the entire radiation sphere). A tolerance of up to + 2 dB has been included in this limit, to reflect operation under extreme environmental conditions and production spread.  |
| **8** | **Channel access and occupation rules**  | Not specified |  |
| **9** | **Authorisation regime** | Individual authorisationIn case of shared use of the band, requirements for Licensed Shared Access (LSA) to be defined at national level. | The terms of the license for the infrastructure shall include Block Edge Mask (BEM). Emission spectrum has to comply with the BEM (Annex 2 of ECC/DEC/(14)02).LSA is the recognised approach by CEPT for administrations wishing to introduce MFCN while maintaining the current incumbent use. Necessary requirements are to be established by the national regulators to share the band through LSA, assessing the protection of the incumbent use of the band. |
| **10** | **Additional essential requirements according to Art. 3.3 of R&TTE Directive** | None |  |
| **11** | **Frequency planning assumptions** | In the case of synchronised TDD networks and two adjacent operators using their systems, the defined BEM will normally allow direct adjacent operation of the operator’s full-power blocks and the out-of-block region consists both of transitional region and baseline levels. In the case of unsynchronised TDD networks, the compliance of two adjacent operators with the BEM requirements could be achieved by introducing frequency separation (e.g. through the authorisation process at national level) between the block edges of both operators.Another option is to use restricted channels. Operators are then required to limit the power used in the upper or lower part of their assigned spectrum, to limit the interference due to the selectivity of the adjacent operator’s receiver. Assuming standard performance of the interfered receiver, an in-block level of 4 dBm / 5 MHz e.i.r.p. 1  may be used. This limit would be applied to the upper- or lowermost 5 MHz part of an operator’s block to protect the adjacent operator, and may be relaxed in case of bilateral agreements between operators.1 The e.i.r.p. is the total radiated power in any direction at a single location independent of any base station configuration. |  |

**Informative Part**

|  |  |  |  |
| --- | --- | --- | --- |
| **Nr**  | **Parameter** | **Description**  | **Comments**  |
| **12** | **Planned changes** |  |  |
| **13** | **Reference** | ECC/DEC/(14)02 |  |
| **14** | **Notification number**  |  |  |
| **15** | **Remarks**  |  |  |