

## Questionnaire on cross-border agreements (EU and non EU) in the 3.4-3.8 GHz band

### 5G / MFCN cross-border agreements:

- Do you have some MFCN use which is not in conformity with EU decision (xx) and when this legacy use is expected to switch-off?

*The Fixed Wireless Access (FWA) TDD MFCN networks are also in operation in the band. No plans reported by the corresponding operators on reconfiguration or switching off the networks.*

- What are the status of cross-border agreements applicable to 5G/MFCN in the 3.4-3.8 GHz with each of neighbouring countries (EU and non EU)? Do these agreements include elements regarding synchronization and frame structures? Is there a difficulty regarding the synchronisation with legacy MFCN networks (e.g. WiMax)?

*Currently there are four bilateral cross-border agreements in force concluded respectively with Lithuania, Estonia, Belarus and Sweden. Coordination negotiations are continuing with the administration of the Russian Federation.*

*The concluded agreements include elements of synchronization of TDD MFCN networks according to ECC/REC/(15)01. It is anticipated that existing agreements would be also updated with elements on the frame structures according to ECC Recommendation (20)03 "Frame structures to facilitate cross-border coordination of TDD MFCN in the frequency band 3400-3800 MHz".*

*According to the available information one legacy FWA TDD network operator would not be able to implement the network synchronisation with the adjacent MFCN networks, therefore other interference mitigation techniques could be considered in case of necessity.*

- How the risk of interference from 5G base station to 5G base station at the border is addressed? Is there any procedure for the case when real interference occurs (e.g. method of measurement, exchange of information, common measures, etc)?

*The use of the frequency band 3400-3800 MHz in border areas is regulated by the corresponding bilateral cross-border agreements and/or in accordance to ITU Radio Regulations.*

*The concluded agreements include clauses on harmful interference cases reporting which is a standard measure derived from ITU Radio Regulations (Article 15 and Appendix 10). To speed up exchange of such information a simplified form of harmful interference report was developed and agreed with some neighboring countries which involves communication by e-mail and other means (this is a general procedure valid for all public land mobile frequency bands and is not specific to 5G).*

### 5G / others services cross-border agreements:

- Could you describe the elements of cross-border agreements regarding the coexistence between 5G and other services in the 3.4-3.8 GHz band, (concerned services, coexistence method, expected impact on 5G deployment ...)?

*The agreements applicable for the frequency band 3400-3800 MHz are based mainly on elements set in ECC/REC/(15)01 and ITU Radio Regulations for the corresponding*

*radiocommunication services (concerned services are mobile service, fixed service, fixed satellite service).*

#### **Cross border negotiation difficulties (EU and non EU)**

- Do you meet any difficulty in current cross border negotiations (EU and non EU)?

*The coordination negotiations with the administration of the Russian Federation is still ongoing for the 3400-3800 MHz band.*

- Could such difficulty impact 5G deployment and why?

*Absence of the cross-border agreement (with acceptable technical conditions of use of the frequency band 3400-3800 MHz) with the Russian Federation could significantly impact 5G deployment in the border area due to necessity of individual coordination of the frequency assignments in mobile service. Moreover the frequency band 3600-3800 MHz according to ITU Radio Regulations is allocated to mobile service on a secondary basis.*