

## 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 the commission implementing decision and when this legacy use is expected to switch-off?

No

- 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)?

Agreement between the administrations of Italy and Slovenia on frequency planning and frequency usage in border areas for terrestrial systems capable of providing electronic communication services in the frequency bands 791,0 – 821,0 MHz / 832,0 – 862,0 MHz, 880,2 – 960,2 MHz, 1427 – 1518 MHz, 1715,0 – 1785,0 MHz / 1810,0 – 1880,0 MHz, 1920,0 – 1980,0 MHz / 2110,0 – 2170,0 MHz, 2570,0 – 2600,0 MHz TDD, 2510,0 – 2570,0 MHz FDD / 2630,0 MHz – 2690,0 MHz, and future candidate bands for public mobile systems, 694 – 790 MHz, 3400 – 3800 MHz, Rome, 3.10.2018.

HCM agreement applies by default for IMT terrestrial services (including 5G). The field strength value of 41 dBμV/5MHz/m at 10m must be respected according to this agreement. HCM countries are Austria, Belgium, the Czech Republic, Germany, France, Hungary, the Netherlands, Croatia, Italy, Liechtenstein, Lithuania, Luxembourg, Poland, Romania, the Slovak Republic, Slovenia, Switzerland.

- Do these agreements include elements regarding synchronization and frame structures?

No, such elements have to be included in the forthcoming bilateral agreements.

- Is there a difficulty regarding the synchronisation with legacy MFCN networks (e.g. WiMax)?

In the band 3.4-3.6 GHz Italy issued a right of use to WIMAX services and the licenses will expire on 31st of December 2023. Within the WIMAX licenses validity, the 5G NR on 3.6-3.8 must protect the WIMAX services in the band below.

- How the risk of interference from 5G base station to 5G base station at the border is addressed?

All these issues will be managed by agreement between the concerned countries

### 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 ...)?

No position for the time being

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

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

Yes, Italy gives freedom to the operators to negotiate the frame structure between themselves under the umbrella of the Italian administration.

- Could such difficulty impact 5G deployment and why?

Yes, harmful interference between base stations is expected at the border that will affect the network performances of concerned parties in the absence of a common frame structure and until the "DL blanking" feature is developed and implemented in equipment