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RADIO SPECTRUM POLICY GROUP

20th Progress Report of the RSPG Working Group

on cross-border coordination

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The Working Group has held one meeting, 22nd January in Rome, since the previous RSPG meeting

TV, T-DAB and FM interference around Italy

For the details of the interference situation, please refer to the meeting report in annex:

- For TV interference, there is no more interference to channels in operation except with Croatia, which are under investigation. There is also an issue regarding the interference on channels currently not in operation but necessary for Croatia for transition of TV below 694 MHz. Italy will investigate possibilities of transitional plans and discuss possible solutions with Croatia.
- For TDAB interference, Italy announced that the band III would be used in priority for DAB (ie TV would only be used locally if not impacting DAB deployment) and AGCOM will soon develop the DAB plan (as soon as the DVB-T planning is finalized). This plan will use GE-06 Italian rights in band III and additional rights from bilateral coordination agreement. Current interference is stemming from DAB “experimental” authorizations for channels 12A, 12B and 12C for nationwide use without coordination with neighbouring countries. Italy stated that it is essential to maintain these authorizations for ensuring the DAB development until the new plan is used. On the 1st January 2020, all sound radio equipment put on the market should include a digital receiver, which will allow fast development of DAB and facilitate, at a later point of time the migration of some FM programmes to the DAB platform. Italy is preparing some new projects for existing DAB transmissions to reduce the interference to Slovenia and Croatia.
- For FM interference, there is an agreement to coordinate on the basis of real data transmitters (rather than GE-84 characteristics). Discussions with Italy to address priority FM channels identified by Slovenia, Malta and Croatia are progressing quite slowly.

Review of the progress in the 700 MHz band

The Working Group has considered additional information from EU countries not having finalized coordination agreements or not having published the national roadmap at the time of the 6th questionnaire. The updated results of the questionnaire are summarized in a separate powerpoint document.

With the signature of coordination agreements between Belgium and Germany and between Belgium and the UK, all intra EU coordination agreements have been signed.

27 countries have agreed their national roadmap for making available the 700 MHz for mobile services. The national roadmap is not yet agreed in Croatia. EC launched an infringement procedure with The Netherlands, since they are considering the roadmap to be insufficient, and with Croatia.

The date for planned end of migration date is exceeding 2020 for Italy, Latvia and Lithuania (2022) as well as Croatia and Malta (2021). All countries have specified the planned **authorization date before 2020**. The date remains uncertain for HR (between 2020 and 2022).

The group also analyzed the cases where EU assistance has been requested for coordination with countries outside EU (Albania, Libya, Tunisia, Algeria, Turkey, Russian Federation). See annex for further details

RSPG representatives are requested to inform the “good offices” about any revision of the national roadmap and any progress on the cross-border coordination with countries outside EU, as soon as available, by contacting the good offices co-chairmen and the RSPG secretariat.

Next meeting

A meeting is planned on 28th May 2019 in Maisons-Alfort (F).

REPORT

RSPG WORKING GROUP

« GOOD OFFICES »

ROMA, 22nd JANUARY 2010, 10H00

1. Situation regarding interference around Italy

TV interference issues

Italy reminded that they will switch off channels 50 to 53 before 31st December 2021 while the complete migration of DTT below the 700 MHz band will be finalized on the 30th June 2022.

Slovenia, Malta, Austria and France confirmed that they do not have any more interference cases in the UHF band. However, some Slovenian GE06 channels that are currently not in operation are still used by Italy. The meeting noted that this was owing to the implementation of the Italian Decreto Legge on the switch off of interfering regional programmes.

Croatia has finalized its 2018 measurement campaign of the TV, FM and T-DAB bands and sent harmful interference reports with details of the measurements to Italy with copy to ITU in October 2018. There were 58 harmful interference reports sent for the HRV TV channels in operation and 51 records for the HRV TV channels not in operation.

In particular, the previously reported interference on HRV coordinated TV channels in operation (e.g. channels 21, 39, 41 and 57) was confirmed, which remains a significant problem for network operators and broadcasters.

Also several channels for which Croatia has rights in GE-06, but not currently in operation, are still in use by Italy. These channels are important for Croatia in order to use them while releasing the 694-790 MHz ('700 MHz') frequency band for terrestrial systems capable of providing wireless broadband electronic communications services in line with Decision (EU) 2017/899.

Two licences for TV network operators will be expiring in 2019 and HRV will issue new licences with TV channels below 700 MHz. The start of the transition, planned for the beginning of the 2019 is delayed, due to the interference from Italy on channels below 694MHz and to the unclear situation on the actions to be taken by Italy to eliminate it. Therefore, the availability of sub-700 MHz channels is of vital importance, since until the uncoordinated operation of Italian stations below 694 MHz channels are present, Croatia will have difficulty in making available 700 MHz band in the Adriatic region.

The group discussed in details the interference cases from Italy to Croatia.

1) Concerning actual interference cases on channels 21, 39, 41, 45, 51 and 57

- For channels 51, Italy explained that San Marino has the right in GE-06 for this channel but that they have an agreement to extend the coverage within the Italian territory. The interference is likely to result from these additional transmitters for which the group considered that they are under the Italian responsibility. Italy committed to identify the actual interfering transmitter and to raise this issue with the San Marin administration in order to identify solutions.
- For channel 45 and 57, Italy indicated that the interfering transmitter is outside the coordination zone defined in the bilateral agreement, eg in Campania region for channel 45, so that there is normally no specific constraint for the use of this channel by Italy. Therefore, there are two possibilities:
 - Either the interference is due to exceptional propagation conditions;
 - Or the characteristics of the interfering transmitters are exceeding the authorized characteristics. Italy is currently investigating the matter.
- For channels 21, 39, and 41 which were used by regional programmes and which were subject to the Decreto Legge, Croatia noted that the interfering transmitters may be coming from regions which are in the coordination area but for which both countries considered that switch off was not necessary (case of the continued use of channel 21 in Emilia Romagna interfering with the south Dalmatia). Croatia has sent the interference report, including the ID of each interferer, so that the Italian administration should be able, in such cases, to identify the interfering transmitters and to define new projects to alleviate the interference.

2) Concerning interference on several channels that Croatia does not currently operate but which are necessary for them to start the migration below 694 MHz (the intention is Q3 of 2019), Croatia will forward to Italy the information on the channels that they would like to be cleared before starting the migration and Italy will investigate possibilities of transitional plans and discuss possible solutions with Croatia.

TDAB interference issues

Italy reported that AGCOM will develop the DAB plan as soon as the DVB-T planning is finalized. This plan will use GE-06 Italian rights in band III and additional rights from bilateral coordination agreement. The priority would be for DAB, ie TV would only be used locally if not impacting DAB deployment. In particular the channel 5, currently used for TV will be used for DAB. In the whole country there are at least 5 DAB blocks (more in some regions) and the AGCOM plan would primarily be based on 5 nationwide MUX.

It is noted that the implementation of this DAB plan will require finalizing the migration of channel 5 MUX to the UHF band.

Some years ago, DAB “experimental” authorizations for channels 12A, 12B and 12C were given for nationwide use, without coordination with neighbouring countries. Italy stated it is essential to maintain these authorizations for ensuring the DAB development. On the 1st January 2020, all sound radio equipment put on the market should include a digital receiver, which will allow fast development of DAB and facilitate, at a later point of time the migration of some FM programmes to the DAB platform.

Croatia reminded that DAB development should not have been at the expense of interference to neighbouring countries.

TDAB interference between Italy and Slovenia

The situation has not changed, with strong signals on channel 12C which is intended to be used for the 2nd DAB MUX in Slovenia.

Italy is going to prepare some new projects for existing DAB transmissions to reduce the interference to Slovenia. They will be forwarded soon to Slovenia.

The meeting pointed the fact that one solution could also be for Slovenia to use, for the 2nd MUX, the other GE-06 VHF rights (7 DAB blocks in total if 1 TV block is converted into 4 DAB blocks). Slovenia noted that one of this right is block 12B and that first DAB mux already used block 10D. 4 other blocks are currently planned as a TV channel and there is some possibility for optimization of allotments. However, Slovenia will investigate this possibility and a meeting may be organized between Slovenia, Austria, Hungary, Croatia and Italy in order to optimize the GE-06 plan in this respect.

TDAB interference between Italy and Croatia

Following finalization of the 2018 measurement campaign, Croatia, in October 2018, sent 12 records of interference for the HRV T-DAB channels not in operation, which confirmed previously reported interference cases in the VHF band III. There is large number of Italian transmitters already operating on channels 12A (network EuroDAB Italia), 12B (network DAB+RAI), 12 C (network *DAB ITALIA*) and 12D (network DAB+RAI). Prior to these measurements, after a meeting held in Rome meeting in June 2018, Croatia provided additional measurements’ data concerning interference on T-DAB, but to date have not received feedback from Italy if or when these uncoordinated transmitters are to be switched off.

Such uncoordinated operation of T-DAB services in Italy already prevented use of Croatian GE’06 T-DAB channel 12B in the Istria region. Croatia reminded the previous good offices conclusion which considered to be extremely important for Italy

and its neighbours to conclude all necessary frequency coordination agreements for the VHF band III and, for Italy, to only make use of those T-DAB channels which are in conformity with its rights.

Italy has already prepared some new projects for existing DAB transmissions on channels 12A, 12B and 12C, to reduce the interference to Croatia, which will be forwarded soon.

FM interference issues

FM interference between Italy and Slovenia

Slovenia reported that there is no improvement in the interference.

Italy presented an example of a solution for one interference case (ARS at Beli Kriz at 96.1 MHz and Virgin Radio at Muggia in 96.2 MHz). The proposed solution would require the change of the antenna of both transmitters in order to limit the interference to the neighbouring country. Slovenia reminded that they are operating under GE-84 and that they consider that Italy should not have a high power (12 kW erp) transmitter with overlapping frequency, located at 200 m far from the border and proposed Italy to shift the frequency by at least 100 kHz. Italy responded that this solution is not possible due to the high number of programmes in the Trieste region and that they have a good experience of planning using only 100 kHz offset.

The meeting encouraged Slovenia and Italy to further discuss the proposed solution and detailed simulations and assumptions will be sent to Slovenian administration.

FM interference between Italy and Croatia

Croatia has sent 859 harmful interference reports with details of the measurements to Italy with copy to ITU in October 2018 which confirmed that there is no improvement in number of interference cases and levels of interference from Italian transmitters. During the multilateral meeting held in Rome, in October 2017, a priority list of 40 interference cases to be resolved was given to Italy. This list is provided in Annex.

Additionally, prior to the RRB meeting in November 2018, as requested by RRB, BR consolidated the list of priority for sound broadcasting stations of neighbouring countries of Italy for which harmful interference must be mitigated (file R18-RRB18.3-C-0005!R1-A2-R1-N1!XLS-E). So far, Croatia has not noticed any progress on the solving interference cases and has not received action plan which had to be proposed by Italy to solve the priority cases.

In respect to solving and tracking these cases it would be most efficient to treat interferers on the priority lists focusing on the main interferers from the detailed list which HRV provided to Italy, as contained in ITU BR consolidated list.

Italy noted that Croatia has not provided the information on real characteristics of the stations, including precise geolocation data, which are necessary for modelling interference and identifying solutions.

Croatia provided during the meeting such detailed characteristics for the Biokovo station, which is among the highest priority and will provide characteristics for other priority stations as soon as possible.

FM interference between Italy and Malta

The priority interference cases for Malta relate to transmissions on 92.7 MHz, 102.6 MHz and 105.9 MHz. Malta reported that there is no improvement of the situation since the previous meeting. Malta will also try to correct the GE-84 information for 92.7 MHz.

Italy provided the same request as for Croatia. Malta will provide detailed characteristics of FM stations as soon as possible.

FM interference between Italy and France

Regarding the last pending case, a joint measurement was done on 19th September 2018. France reported that an antenna default had corrupted the results but that they are studying a possible frequency shift of their transmitter to solve the interference. Information will be given to Italy as soon as possible.

2. Update of the responses to the question on the 700 MHz

Following direct contact with concerned administrations, additional updates on the responses to the questionnaire has been prepared. In particular:

- Cross-border agreement has been finally signed between Belgium and the UK as well as between Belgium and Germany.
- Concerning the national roadmap and the timing for migration and authorization, the Group has received updated information from the concerned Member states. All EU member states have published their roadmap except Croatia which intends to publish it before the end of March 2019.

EC noted that they launched an infringement procedure with The Netherlands since they are considering the roadmap to be insufficient. Another procedure was launched against Croatia, for failure to adopt a roadmap.

The meeting decided that the RSPG representatives should be requested to inform the “good offices” about any revision of the national roadmap and any progress on the cross-border coordination with countries outside EU, as soon as available, by contacting the good offices co-chairmen and the RSPG secretariat.

As discussed under the item on TV interference from Italy, interference to the Croatian channels below 694MHz would prevent Croatia from making its own migration since some of these channels are to be used for the migration and release of 700 MHz. Italy will investigate possibilities of transitional plans and discuss possible solutions with Croatia.

3. Cross border negotiations with countries outside EU

Croatia reported that a coordination agreement has been signed with Serbia and measurements until now are showing that this country will not create significant transition issues. For Albania, similarly, no major difficulty is expected. Croatia is discussing with Bosnia which is still using analogue TV and it is not clear yet whether a solution will be identified in particular, in terms of transition.

Italy reported that they still do not have contact with Albania. This country was involved in the Adriatic group but delayed the signature of the agreement until they can review their national situation. In terms of broadcasting the only difficulty would be channel 46, currently an Albanian right, which would become Italian right if the agreement was signed, but there is currently no TV transmission on this channel in Albania. Also channels 51 and 53 are also Albanian rights and Italian mobile networks could be interfered until Albania would migrate to the new plan. Italy noted that mobile operators complained in the past with a similar situation in the 800 MHz band.

Italy sent a request for assistance in respect to Albania and informal discussion has taken place at the political level, Albania not objecting to discuss the matter.

With Libya, the agreement with Italy is under signature process but they appear to be a difficulty in terms of alignment of the text between the English and the Arabic versions. The coordination agreement is also progressing between Libya and Malta, with the technical elements being stable but the other elements of the agreement are still in discussion.

Tunisia requested, during the coordination meeting organized by the EC in May 2018 to be provided with the real characteristics of the transmitters. Italy will send the information once AGCOM will publish its plan. Malta had sent such information to Tunisia in September 2018. Tunisia’s response was received in November where it

has only accepted two channels among 8 which were identified for use by Malta. No information was provided by Tunisia justifying its objections.

Lithuania reported that the Russian Federation did not respond to their request. However, the RCC Council recommended the implementation of the 700 MHz band for mobile by the end of 2021, which is a positive sign for the future use of the 700 MHz in Russia, although the implementation deadline set by RCC Council are often resulting in delays. The EC also noted that the RCC recommendation still refer to “potential” use of the 700 MHz band for mobile and the use of this adjective may be interpreted as meaning that the Russian Federation does want to commit itself to a precise deadline. Belarus is currently using channels 51 to 53 for broadcasting, and interference may limit mobile networks deployment in Lithuania. The EC will organize a video conference with the new vice minister as soon as possible which may clarify the situation.

The EC indicated having put a number of specific questions to Turkey about Cyprus but without responses yet.

4. Date of next meeting

The next RSPG “good offices” meeting is planned the 28 May 2019 in Paris.