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Connectivity

Radio Spectrum Policy Group
RSPG Secretariat

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RADIO SPECTRUM POLICY GROUP

28th Progress Report of the RSPG Sub-Group

on cross-border coordination

REPORT

RSPG SUB-GROUP

« GOOD OFFICES »

Web-meeting, 24th November 2021

The Sub-Group has held two web-meeting (20/9, 5/11). The list of participants is attached in annex 2 and 3 and the detailed meeting report is attached in annex 1.

1. Implementation of the Croatia/Italy coordinated solution defined in the RSPG opinion

The good offices reviewed the progress made by Italy in the implementation of the Croatia/Italy solution.

Italy explained the difficulty they face with the transition to DVB-T2 and HEVC and actions taken to ensure the purchase of compatible TV set by the population and the change in the TV refarming table:

- North Italy (Adriatic side) will switch to the final plan in the period from 3/1/22 to 15/3/22
- Central-Southern Italy (Adriatic side) will switch to the final plan from 1/3/22 to 15/5/22

According to Italy, all high-power, high-tower transmitters have been switched in October in channel 50. Channels 51 and 53 have been completely switched-off. On the other hand, Italy was not able to implement a temporary move to a higher channel.

This was partly confirmed by Croatian measurement : no change on the interference level on Channel 52, and the interference level on channels 50, 51 and 53 has improved, although there are still a measurable interference for which exchange of information between Italy and Croatia is planned to identify the reason for this remaining interference.

The good offices thanked Italy for the effort for channels 50, 51 and 53. However, it was noted that situation for channel 52 is now worsen with switch-off in March/May 2022, compared to the initial roadmap for December 2021. Interference in Channel 52 will affect two operators (5 MHz in the block 713-723 MHz and 3 MHz in the block 723-733 MHz) until releasing time. It is understood that the broadcaster may be reluctant in changing twice the channel, due to additional cost (at least staff cost), but, for Croatia, this is at the price of affecting the deployment of the 700 MHz band. Italy will consider re-discussing the issue with them, but stressed that they have to take into account the complete picture of the situation.

The good offices concluded that Italy should carry on implementing the RSPG opinion, put again pressure on its broadcaster for mitigating the channel 52 interference, ie accepting the temporary channel at least for High Power, High Tower transmitters.

Italy stated that channel 52 is part of its GE-06 rights, guaranteed until June 2022 in accordance with the EU UHF Decision and that the time schedule that Italy was able to agree with the broadcasters, in advance of that deadline, is precisely in the spirit of collaboration of the good offices.

Croatia stated that the RSPG opinion requests actions from Italy to ensure interference free operation in Croatia on all channels reflected in RSPG opinion (700MHz and Croatian broadcasting rights), which means that Italy should stop its operation immediately.

The representative of the Commission indicated that Italy has to apply the coordinated solution defined in the opinion to avoid further procedural steps being taken.

In addition, Italy indicated that there was limited progress in migrating interfering transmitters in Croatian channels in the band 470-694 MHz to alternative temporary channels. Italy launched a third window for voluntary release (after May 2020 and March 2021) but without success for the Adriatic area.

Croatia complained that, in this case too, the recommended solution is not followed. For all channels, there is no change in the interference situation. Croatia stated that this long-lasting interference is to be solved urgently. Italy stressed the potential difficulties: cost of reconfiguration, broadcasters may need to buy some equipment while some of them will simply become content providers at the end of the process. The good offices concluded that, while recognizing the effort made by Italy with this new window for voluntary release of channels, Italy should now identify alternative channels for remaining transmitters in order to implement the proposed coordinated solution.

2. C band

Croatia informed the good offices that they have finally opted for the option A frame structure. The updated map for the frame structure in Europe is in annex 4.

3. Interference around Italy in VHF and FM band

For the details of the interference situation, please refer to the meeting report in annex 3.

For the VHF band, the agreement for the Adriatic and Ionian group is being finalized. A new meeting will be scheduled soon for consolidation of the agreement and signature. AGCOM will then be in a position to develop an Italian plan for the VHF band respecting the international rights of Italian neighbours. In the meantime, some measures have been discussed in the good offices to ensure interference free operation of DAB+ in channels operated by Slovenia and in the channels used for the launch of commercial operations in Croatia from 16th November.

For FM interference, no progress was made with Croatia and Slovenia even for the priority cases identified by these two countries.

The good offices re-discussed the potential medium term solution:

- Italy should provide some guarantees that AGCOM will define a plan for the FM band only based on Italian international rights.
- It is understood that, taking into account the huge number of FM programmes, this will require Italy to be able to provide for sufficient number of FM programmes to migrate to the

DAB platform, that in turn, implies that Italy should take action to make available sufficient capacity on the DAB platform for those current FM programmes. Italy would need to take some steps in this direction, noting that, even if this is not possible under the current Italian law, Italy has the obligation to comply with ITU regulations, to manage and use radio spectrum efficiently and to prevent cross-border harmful interference in accordance with the new EECC.

- Only when there will be such perspective of FM plan, Slovenia and Croatia will have sufficient confidence to negotiate how to ensure an interference free operation and an optimization of the capacity for each country under the equitable access principle. This will need further discussion at the next good offices meeting.

In the short term, Italy stated that they will progress on priority cases.

For Malta, the measurements during summer have shown no improvement. The results of measurement sent to Italy should enable a proper analysis by Italy of the interfering stations.

For France, the Italian proposal for a new frequency on Bonifacio was not considered feasible since already authorized in another close location in Corsica and apparently used also in close location in Sardegna.

4. Review of the cross-border negotiation with countries outside EU

- Russian Federation: Again no information on the timing for releasing the 700 MHz band. A meeting on digital issues is planned in the beginning of December between EU and the Russian Federation and, in preparation for this meeting, the Commission is organising a technical meeting with the concerned Member States on 10 November.
- Belarus is switching off the broadcasting in the 700 MHz band according to their plan, ie to be finalized by the end of 2021.
- Ukraine: Ukraine is expected to switch-off 700 MHz by the end of 2022. It is expected that this commitment will be formalized by the EU-Ukraine Association Committee in Trade Configuration on 22-23 November. For financing aspects, the EC cannot finance privately owned organization (broadcasters in Ukraine) but other options are investigated (for example, a loan from the international financing institutions).
- Moldova: the EC representative explained that the same deadline is expected to apply (end of 2022). EU financial support is under discussion.
- The signature of Regional Spectrum Agreement (RSA) for the Eastern Partnership is expected at a high level regional meeting in December. It was noted that Belarus agreed to sign the RSA.
- Balkans: Bosnia and Herzegovina started to switch-off remaining analogue transmitters in the 700 MHz band which could interfere Croatia but this takes time and is not finished yet.
- North Africa: Tunisia already migrated 700 MHz. Libya confirmed that they will use 700 MHz for mobile but the timeline is not known. Malta and Italy do not foresee any difficulty, including for the broadcasting plan below 694 MHz. There will be an opportunity to discuss in January cross-border frequency related issues with these two countries during a meeting organized by the ITU concerning the optimization of the GE84 plan.

The good offices also discussed the issue of the continued use of channel 53 by the Turkish Cypriot community (TC) preventing Cyprus to fully deploy mobile networks in spite of the fact that all the Authorizations (for the whole 700 MHz band) were granted in January 2021, and the first 5G network was in operation since February 2021.

The good offices discussed the solution initially contemplated by the EC, ie moving the programme to the digital platform, which would only be implemented in 2022 and the proposal from Cyprus that the analogue transmitters be tuned immediately to channel 45 without any need to change equipment (as an interim solution). The good offices confirmed the Cyprus view that a switch to channel 45 should be possible, with possible limited requirement for Filters/Combiners (e.g.10 k€) that Cyprus accepted to provide if needed. Two meetings were held between the Commission and Cyprus to qualify this solution and the EC is now ready to come back to TC with this quicker and better solution.

In addition, the EC is well aware that Turkey objects to the recording of a new unified Cyprus plan below 700 MHz under Geneva 06 ITU Plan. As Cyprus requested the EU assistance, the EC raised this in accession negotiations with Turkey. The EU-Turkey subcommittee No 5 meeting held on 1st of October provided an opportunity to raise this matter and Turkey indicated that they will respond in writing to the Commission on this matter.

Next meeting

The next meeting is planned as a web-meeting on 18th January (9H30-12H30)

ANNEX 1

REPORT

RSPG SUB-GROUP

« GOOD OFFICES »

Web-meetings, 20th September and 5th November 2021

5. Implementation of the Croatia/Italy coordinated solution (article 28 opinion)

Italy explained the difficulties for Italy to transition to DVB-T2/HEVC. Too many households are not yet HEVC enabled: about 11.8 million now and still 7 million expected in 6 months, taking into account that there is currently a “bonus” of 100 € decided by the Italian government for the purchase of a new TV set, regardless of income and in exchange of a DVB-T2/HEVC non-compliant equipment. Italy is also conducting a massive communication campaign to ensure HEVC penetration. The effects are noticeable, eg. Multiplication by 4 times of the sale of new TV sets.

As a consequence, the switch to HEVC was postponed to 2023 with an intermediate step using MPEG4 coding and there was a revision of the TV frequency refarming table:

- North Italy (Adriatic side) will switch to the final plan in the period from 3/1/22 to 15/3/22
- Central-Southern Italy (Adriatic side) will switch to the final plan from 1/3/22 to 15/5/22

Based on the preliminary measurements results for the 470 – 694 MHz and 700 MHz frequency bands in the period June – September 2021, which were sent to the September meeting, Croatia reported no progress in relation to the indicated interference situation covered by the RSPG opinion. Croatia also indicated that they received a complaint from the operator in the block 703-713 MHz. They also showed the result of measurement on the 4 TV channels covering the entire uplink band 703-733 MHz.

In addition, Croatia carried out further measurements in October/November on a few test points and these are discussed below. The measurement levels are difficult to compare with previous ones due to different measurement configurations. Also, Croatia conveyed feedback provided by an MNO authorized in the 700 MHz band who reported the presence of some interference.

Croatia will carry out a more complete review of the interference situation in the next few months.

Coordinated solution for interference from Italian TV stations in the 700 MHz band

Italy described the new situation for the channels 50-53 (ie interfering 700 MHz BS reception)

- Ch.50: Italy informed that all High Power – High Tower transmitters were migrated to a sub-700 MHz channel before 7th October 2021. The Croatian measurements show

that the situation has improved although some interference remains (up to 54 dB μ V/m). Italy confirmed that there are still some lower power transmitters in the band.

- Ch.51: San Marino switched off by 29th October 2021 (San Marino and Italy territories). Croatia noted the improvement at that date in their measurements although some interference can still be measured. Italy indicated that there is no more transmitters operating on this channel.
- Ch.52: There was a plan for a temporary move to a higher channel, but supply constraints make it impractical. As a consequence Croatia measured an interference level higher than 60 dB μ V/m.
- Ch.53: Channel 53 is now completely switched-off, including the previously remaining source of interference identified by Croatia.

Italy is requested to provide the list of transmitters (with technical parameters in ITU format) which have been switched-off, as well as the remaining transmitters in operation in the coordination area, in order to enable Croatia to analyse better the source of the remaining interference.

The meeting thanked Italy for the effort for channels 50, 51 and 53. However, it was noted that situation for channel 52 is now worsen with switch-off in March/May 2022, compared to the initial roadmap for December 2021.

Croatia reminded that according point 3.2. of the RSPG opinion, Italy should switch-off all transmitters of the coordination area in channels 50, 51, 52 and 53 until 15th August 2021. Therefore, it is unacceptable for Croatia that interference to new deployed 5G base stations may continue until May 2022 on channel 52.

Interference in Channel 52 will affect two operators (5 MHz in the block 713-723 MHz and 3 MHz in the block 723-733 MHz) until releasing time.

The meeting discussed the reason claimed by the broadcaster for refusing to migrate to a temporary higher channel: lack of supply for combiners, due to the Covid. Doubts were expressed in the meeting on such reason in a period where many countries are transitioning without such difficulty. It was even not clear whether such combiners would need to be changed if the temporary channel is sufficiently close (eg, ch.57). The broadcaster may be reluctant in changing twice the channel, due to additional cost (at least staff cost), but, for Croatia, this is at the price of affecting the deployment of the 700 MHz band. Italy will consider re-discussing the issue with them, but stressed that they have to take into account the complete picture of the situation.

The good offices concluded that Italy should carry on implementing the RSPG opinion, put again pressure on its broadcaster for mitigating the channel 52 interference, ie accepting the temporary channel at least for HPHT transmitters.

Italy recalled that channel 52 is part of its GE-06 rights, guaranteed until June 2022 in accordance with the EU UHF Decision and that the time schedule that Italy was able to agree with the broadcasters, in advance of that deadline, is precisely in the spirit of collaboration of the good offices.

Croatia responded that the RSPG opinion requests actions from Italy to ensure interference free operation in Croatia on all channels reflected in RSPG opinion (700MHz and Croatian broadcasting rights), which means that Italy should stop its operation immediately.

The representative of the Commission indicated that Italy has to apply the coordinated solution defined in the opinion to avoid further procedural steps being taken.

Coordinated solution for interference from Italian TV stations to Croatian TV channels

Italy indicated that there was limited progress in migrating interfering transmitters to alternative temporary channels. Italy launched a third window for voluntary release (after May 2020 and March 2021). Local broadcasters had 30 days from the date of publication, during which they must **first** switch off and **then** apply for anticipated financial compensation, proving that they have actually shut down their stations

A certain number of local broadcasters applied but none of them on the Adriatic side, so that the interference situation did not improve.

Italy reminded that, with the existing national law, the Courts often give reason to the broadcasters refusing to switch channels.

The Commission noted that the only advantage in the compensation offered was the advance payment of a compensation which in any case would be paid at the final deadline. HR regretted that IT refrained from providing sufficient incentive compensation at the expense of interference suffered by HR from IT broadcasters. Commission regretted that no additional financial incentive could be provided. It noted that Italy had difficulty to adopt additional financial measures in a limited time.

Croatia complained that the recommended solution is not followed. For all channels, there is no change in the interference situation. Croatia stated that this long-lasting interference is to be solved urgently.

Italy stressed the potential difficulties: cost of reconfiguration, broadcasters may need to buy some equipment while some of them will simply become content providers at the end of the process.

The good offices concluded that, while recognizing the effort made by Italy with this new window for voluntary release of channels, Italy should now identify alternative channels for remaining transmitters in order to implement the proposed coordinated solution.

6. Review of other interference cases around Italy

VHF

Italy, Croatia and Slovenia explained that the agreement for the Adriatic and Ionian group is being finalized. Adriatic countries checked with other neighbours the consequence for other plans (e.g. SEDDIF) and there is only one case where there is a mismatch between SEDDIF and Adriatic Plan yet to be solved. A new meeting will be scheduled soon for consolidation of the agreement and signature.

AGCOM will then be in a position to develop an Italian plan for the VHF band respecting the international rights of Italian neighbours.

In addition, Slovenia explained that, although Italy moved some transmitters from 12C to 7C, there is still some interference, i.e. there are other transmitters using 12C which would need to be migrated temporarily to 7C. All elements have been forwarded to Italy which will investigate which transmitters are concerned and will make appropriate changes of blocks. Italy will provide the results of this analysis as soon as possible to Slovenia.

Similarly, Italy committed to move channel 10A in Umbria to 10D, and Italian local offices are checking whether the change was effective.

Croatia granted licence in the beginning of October, in channels 11A, 11D and 10C. Commercial operations will be launched with new content by 16th November. There is no harmful level of interference in these channels and it is extremely important for Croatia that these channels remain uninterfered in the future. For the other channels, according to the preliminary measurements results from Croatia, there are still a large number of Italian uncoordinated transmitters operating on channels 12A, 12B, 12C and 12D (network DAB+RAI), as well as on channel 10A.

Italy confirmed that they are bound by law to authorize new transmitters only on channels where Italy has international rights, so that no new transmitters could be put on air in Italy on those Croatian channels.

FM

A law being debated in the Italian Parliament would give the possibility for the Ministry to take action to improve the use of frequency in particular with the aim of eliminating cross-border interference. This would provide some additional power to address FM interference situations.

Croatia and Slovenia

Croatia and Slovenia complained that there is no meaningful progress from the Italian side. Croatia stated that 5 years after having identified priority cases, even the first priority, Biokovo, has not been addressed. Slovenia reminded that they presented to Italy complete FM interference measurements 18 years ago (over 100 reports of harmful interference). For these two countries the situation is really disappointing and frustrating.

The good offices re-discussed the potential medium term solution:

- Italy should provide some guarantees that AGCOM will define a plan for the FM band only based on Italian international rights.
- It is understood that, taking into account the huge number of FM programmes, this will require Italy to be able to provide for sufficient number of FM programmes to migrate to the DAB platform, that in turn, implies that Italy should take action to make available sufficient capacity on the DAB platform for those current FM programmes.

Italy would need to take some steps in this direction, noting that, even if this is not possible under the current Italian law, Italy has the obligation to comply with ITU regulations, to manage and use radio spectrum efficiently and to prevent cross-border harmful interference in accordance with the new EECC.

- Only when there will be such perspective of FM plan, Slovenia and Croatia will have sufficient confidence to negotiate how to ensure an interference free operation and an optimization of the capacity for each country under the equitable access principle. This will need further discussion at the next good offices meeting.

In the short term, Italy stated that they will progress on priority cases.

Malta

Measurements from Malta during summer have shown no improvement and the broadcasting authority is continuing its re-planning exercise.

Malta sent the results of measurement to Italy with all necessary information to enable a proper analysis by Italian ministry of the interfering station. Italy will carry out this analysis.

France

Italy studied a solution for a frequency not causing interference in Corsica nor in Italy. The proposed new frequency for Radio Nostalgie was 107.8 MHz. The implementation was studied based on the current station location as well as the possible new station in Monte Corbu. A Study Report was sent by Italy to France at the end of September.

However, France opposed to the proposal since the channel 107.8 MHz is used in Porto-Vecchio not far from Bonifacio, making it unavailable in Bonifacio. France also stated that Italy is using the channel 107.9 MHz in Sardegna with measured level up to 80 dBµV/m in Bonifacio.

Italy will check this use of 107.9 MHz in Sardegna which was not included in their study. In any case, the use of the channel in Porto Vecchio creates an incompatibility and another solution needs to be studied.

7. Cross border negotiations with countries outside EU

Updated information was provided on several EU borders:

- Russian Federation: Again no information on the timing for releasing the 700 MHz band. A meeting on digital issues is planned in the beginning of December between EU and the Russian Federation and, in preparation for this meeting, the Commission is organising a technical meeting with the concerned Member States on 10 November.
- Belarus has switched off the broadcasting in the 700 MHz band according to their plan.
- Ukraine: the EC representative explained that Ukraine is expected to switch-off 700 MHz by the end of 2022. It is expected that this commitment will be formalized by the EU-Ukraine Association Committee in Trade Configuration on 22-23 November. For financing aspects, the EC cannot finance privately owned organization (broadcasters in Ukraine) but other options are investigated (for example, a loan from the international financing institutions).

- Moldova: the EC representative explained that the same deadline is expected to apply (end of 2022). EU financial support is under discussion.
- The EC representative also provided updated information regarding the Regional Spectrum Agreement (RSA) for the Eastern Partnership Countries. The signature of the RSA is expected at a high level regional meeting in December. It was noted that Belarus agreed to sign the RSA.
- Balkans: Bosnia and Herzegovina started to switch-off remaining analogue transmitters in the 700 MHz band which could interfere Croatia but this takes time and is not finished yet.
- North Africa: Malta and Italy reported that there was a meeting in June with Tunisia and Libya. Tunisia already migrated 700 MHz. Libya confirmed that they will use 700 MHz for mobile but the timeline is not known. Malta and Italy do not foresee any difficulty, including for the broadcasting plan below 694 MHz. Between 24-28th January 2022, there will be an opportunity to discuss any cross-border frequency related issues with these two countries during a meeting organized by the ITU concerning the optimization of the GE84 plan.

The meeting also discussed the issue of the continued use of channel 53 by the Turkish Cypriot community (TC). Cyprus explained that they are not able to fully deploy mobile networks in spite of the fact that the relevant Auction was completed in December 2020, and all the Authorizations (for the whole 700 MHz band) were granted in January 2021, and the first 5G network was in operation since February 2021, due to this remaining analogue transmission on channel 53. They consider that a solution is urgent and indicated that the solution contemplated by the EC, ie moving the programme to the digital platform, does not meet their expectation as it would only be implemented in 2022. Cyprus stated that the analogue transmitters can be tuned immediately to channel 45 without any need to change equipment (as an interim solution) and that in the case the TC states that the quick switch to channel 45 is technically not possible with the existing equipment, Cyprus can provide the relevant equipment.

The EC representatives confirmed that there is an ongoing activity by DG CONNECT and DG REFORM to switch off channel 53, but no conclusion yet and the Project will soon be taken at procurement stage. The estimated value of the Project (2.5 M€) requires to follow legal procedures which must respect specific periods. They stressed that the TC said that the quick switch to channel 45 was technically not possible and that the transmitter was bought in 2004-2005 from a Slovenian manufacturer that is no longer active. They also indicated that Cyprus objected to the Project on the basis that they also wish Turkey to accept the recording of new TV channels rights in ITU/GE-06.

The meeting confirmed the Cyprus view that a switch to channel 45 should be possible, with possible limited requirement for Filters/Combiners (e.g. 10 k€) that Cyprus accepted to provide if needed.

Cyprus said that they would accept the Project as soon as the channel 53 migrates to channel 45.

Two meetings were held between the Commission and Cyprus to qualify this solution and the EC is now ready to come back to TC with this quicker and better solution.

In addition, the EC representative stressed that the EC is well aware that Turkey objects to the recording of a new unified Cyprus plan below 700 MHz under Geneva 06 ITU Plan. As Cyprus requested the EU assistance, the EC raised this in accession negotiations with Turkey (however the EU/EC cannot raise this issue in the ITU, as it is not a member). The EU-Turkey subcommittee No 5 meeting held on 1st of October provided an opportunity to raise this matter and Turkey indicated that they will respond in writing to the Commission on this matter.

8. C band

Croatia indicated that they have finally opted for the option A frame structure.

The updated map for the frame structure in Europe is in annex.

9. Date of next meeting

The next RSPG “good offices” meeting is planned as a web-meeting on 18^h January (9H30-12H30)

ANNEX 2 : List of participants (20/09/2021)

Name	Country
Adrian Galea (MT)	Malta
Amadeo Vella (MT)	Malta
Dainis Valdmanis (LV)	Latvia
Danijel Vidakovic (HR)	Croatia
Danijel Vlahovic (HR)	Croatia
Donato Margarella (IT)	Italy
Elena Nanou (EL)	Greece
Eric Fournier (FR)	France
Ernst CERNY (AT)	Austria
Igor Funa (SI)	Slovenia
Georgios Komodromos (CY)	Cyprus
Janja Varsek (SI)	Slovenia
Jeanette Wännström (SE)	Sweden
Katia Marcantonio (IT)	Italy
Luka Vujevic (HR)	Croatia
Miljenko Pintar (SI)	Slovenia
Mindaugas Žilinskas (LT)	Lithuania
Tom Wikström (FI)	Finland
Umberto Mascia (Italy)	Italy
VARNAITE-KAMSTRA Julija (CNECT)	EC
Verena Hindges (DE)	Germany
VEDRENNE Michel (REFORM)	EC

ANNEX 3 : List of participants (05/11/2021)

Name	Country
Thomas WEBER (AT)	Austria
Mindaugas Zilinskas (LT)	Lithuania
Verena Hindges	RSPG Chair team
Ernst Cerny (AT)	Austria
Eric Fournier (FR)	France
Miljenko Pintar (SI)	Slovenia
Amadeo Vella (MT)	Malta
George Komodromos (CY)	Cyprus
Paul Lippens de Cerf	European Commission
Umberto Mascia (IT)	Italy
Marco Vari (IT)	Italy
Tom Wikström (FI)	Finland
Danijel Vidakovic (HR)	Croatia
Guillaume Delaire (FR)	France
Luka Vujević (HR)	Croatia
Emília Ulelay (HU)	Hungary
Janja Varsek (SI)	Slovenia
Elena Nanou (EL)	Greece
Adrian Galea (MT)	Malta
Abdelhak Fodil (FR)	France
Igor Funa (SI)	Slovenia

ANNEX 4

