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RADIO SPECTRUM POLICY GROUP

Progress Report of the RSPG Sub-Group

on “Good offices” to assist in bilateral negotiations between Member States

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Progress Report of the RSPG Sub-Group on

“Good offices” to assist in bilateral negotiations between Member States

The “Good offices” Sub-Group (SG) held one meeting since the 59th meeting of the Radio Spectrum Policy Group. The detailed report of this meeting, which was held virtually on the 13th January 2023, is being provided at Annex I. An executive summary of the key discussion points is being provided below.

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

Key points

- Italy confirmed that no Italian transmitters are in operation on TV channels 22 and 31 in the coordination zone with Croatia.
- Based on radio monitoring, Italy confirmed that no Italian transmitters are in operation on TV channels 21, 27, 28 and 29 in the coordination zone with Croatia. Any possible interference could be caused by stations located outside the coordination zone and pursuant to the Adriatic UHF agreement such interference shall not be considered as harmful. The technical parameters of Italian stations will be shared with Croatia so that the necessary verifications may be made.
- Italy will also be sharing the technical information for TV channel 41 with Croatia for further analysis.

In response to a question raised in the SG meeting held in October 2022 concerning interference to Croatian TV channels 22 and 31, Italy confirmed that no Italian transmitters are in operation on these channels in the coordination zone. Croatia accepted this explanation but committed to repeat its measurements and to update the SG at its next meeting.

Regarding the other cases reported by Croatia concerning possible interference on TV channels 21, 27, 28 and 29, Italy reported that no Italian transmitters are using these channels within the coordination zone. The source of any interference on these channels could be located outside the coordination zone and according to the Adriatic agreement for the UHF band, such interference cannot be considered as harmful. In order to bring this matter to closure Italy agreed to share the relevant technical information of stations with Croatia in order to undertake the necessary verifications and compare the results with actual measurements.

Regarding the Croatian claim of interference on TV channel 41, both countries agreed to exchange information on the bearing and other related parameters towards this interference source.

2. DAB interference around Italy

2.1 *Update on the development of the Adriatic and Ionian regional agreement for DAB*

Key points

- No significant progress was registered as regards the finalisation of the Adriatic and Ionian agreement for DAB primarily due to the following reasons:
 - Cross-border coordination problems between Albania and North Macedonia in relation to the use of some channels which are affecting the partitioning of the DAB frequency plan for the Adriatic and Ionian countries; and
 - Issues raised by Slovenia as regards the lack of common understanding of ITU rules by Italy, Italy's objections to Slovenia's request to register additional stations in the GE84 plan and the aspects concerning the migration of Italian FM stations to DAB to resolve FM interferences.
- Italy was requested by Slovenia to provide it with the necessary clarifications as regards the interpretation of ITU rules and the technical reasons supporting their objections to Slovenia's frequency coordination request so that progress may be made on the signature of the DAB agreement.
- Italy and Slovenia continued to share divergent views on the inclusion of FM related provisions in the DAB agreement.
- Croatia considered that the DAB agreement shall reflect the principle that DAB shall be part of the solution towards resolving FM interferences.
- Italy's legal framework does not provide for the migration of interfering FM stations to DAB and therefore the possibility for migration will be offered on a voluntary basis. This voluntary approach was deemed not to be effective.
- The SG has once again encouraged the parties to continue their discussions within the Adriatic and Ionian group and to compromise in order to agree on the text of the DAB agreement. In particular, Italy and Slovenia were invited to hold bilateral discussions in order reach agreement on the various open issues which are impeding the parties to progress on the finalisation of the said agreement.
- Italy was once again requested to take into account the strong appeal of the SG and adopt a regime based on the forced migration of FM stations to DAB.

No significant progress was registered as regards the finalisation of the Adriatic and Ionian agreement for DAB. Despite the holding of several meetings, discussions came to a deadlock due to:

- a) Cross-border coordination problems between Albania and North Macedonia in relation to the use of some channels which are affecting the partitioning of the DAB frequency plan for the Adriatic and Ionian countries.
- b) The position taken by Slovenia due to a lack of a common understanding of the ITU rules as defined by the Radio Regulations, as well as Italy's objections to Slovenia's request to register additional stations in the Geneva 1984 (GE84) plan. Slovenia also expects that some interfering FM frequencies shall be released due to migration to DAB.

Regarding point (a), the EC is assisting in the matter and has provided all relevant details to the negotiators with Albania in the framework of accession negotiations. The discussions still have to take place. Moreover, the SG supported the suggestion to invite Albania and North Macedonia to participate in the next SG meeting in order to facilitate the technical exchanges with the concerned EU countries.

As to point (b), Slovenia requested Italy to provide it with information on how it interprets the applicable provisions of ITU rules and agreements since both countries have a different understanding on the application of these instruments. Italy was also requested by Slovenia to provide it with the technical reasons supporting their objections to Slovenia's request to register additional stations in the GE84 plan so that calculations can be compared, and any potential incompatibilities resolved. Slovenia emphasised that it will be difficult to make progress on the signature of the DAB agreement unless clarity will be provided on this matter.

Italy considered that it was not appropriate to include FM related provisions in the DAB agreement and that there were worst consequences if the DAB agreement is not signed, especially since it will not allow the relevant countries to continue develop their DAB services. Slovenia shared a different view and considered that DAB and FM issues were closely connected because they are based on the fundamental principles enshrined in the Radio Regulations.

Croatia considered that the DAB agreement shall reflect the principle that DAB shall be part of the solution towards resolving FM interferences, in line with past discussions within the SG as well as within the ITU multilateral group dealing interferences around Italy. In this context reference was made to the multilateral meeting organised by the ITU in October 2017 where Italy proposed an action plan consisting of two phases, namely (i) case-by-case elimination of the interference problems, and (ii) preparation of a DAB plan and a revision of the FM plan by which Italy would be migrating to DAB and freeing FM frequencies and in doing so only FM stations complying with the GE84 Agreement would remain operational. It was desirable to reflect this approach in the DAB Agreement being prepared for the Adriatic and Ionian region.

Italy explained that its legal framework does not provide for the migration of interfering FM stations to DAB and therefore the possibility for migration will be offered on a voluntary basis. This approach was deemed not to be effective.

The SG has once again encouraged the parties to continue their discussions within the Adriatic and Ionian group and to compromise in order to agree on a text of the DAB agreement which is mutually acceptable to all and hence progress may be made towards the efficient use of radio spectrum and the resolution of harmful interference problems. In particular, Italy and Slovenia were invited to hold bilateral discussions in order reach agreement on the various open issues which are impeding to progress on the finalisation of the said agreement. Furthermore, Italy was once again requested to take into account the strong appeal of the SG and adopt a regime based on the forced migration of FM stations to DAB.

2.2 Resolution of DAB interference problems

Key points

- Italy proposed an interim solution to resolve the harmful interference on frequency blocks 12A, 12B, 12C and 12D by migrating its stations to frequency blocks 7C and 7D. This measure will be temporary until the Adriatic and Ionian agreement for DAB is signed. An immediate implementation of this measure was foreseen by Italy and the interference on 12A and 12C will be resolved by June 2023. The use of frequency blocks 7C and 7D will not be impacting Croatia and Slovenia.
- Croatia and Slovenia expressed concerns to the proposed solution but were willing to examine Italy's plans on the implementation of temporary measures aimed to resolve DAB interference.
- The SG requested Italy to share the technical parameters of the DAB stations identified to be migrated to 7C and 7D to Croatia and Slovenia for their examination. In the event that Croatia and Slovenia give their consent, Italy shall proceed to implement the temporary measures immediately.

Italy proposed an interim solution to resolve the harmful interference on frequency blocks 12A, 12B, 12C and 12D. This includes usage of frequency blocks 7C and 7D instead of the aforesaid blocks on channel 12. This measure may be implemented immediately and will remain until the Adriatic and Ionian agreement for DAB is signed. Italy considered that frequency blocks 7C and 7D will not be impacting Slovenia and Croatia. If this proposal is accepted the interference on frequency blocks 12A and 12C will be resolved by June 2023.

Croatia and Slovenia noted that part of the proposed solution was already being implemented but without the necessary acceptance of the neighbouring countries. Both countries requested Italy to provide a plan detailing all the transmitters they intend to switch-off and the associated technical parameters.

The possibility for Italy to use any of the currently unused GE06 rights was explored. However, Italy confirmed that this was not possible since according to its national DAB plan all of the Italian GE06 rights, including those which are currently not in use, will be used.

The SG requested Italy to share the technical parameters of the DAB stations identified to be migrated to 7C and 7D to Croatia and Slovenia for their examination. In the event that Croatia and Slovenia give their consent, Italy shall proceed to implement the temporary measures immediately.

3. FM interference around Italy

3.1 *Croatia and Slovenia*

Key points

- Further to the letter submitted by Croatia to RSPG#59 requesting mediation and to issue an opinion proposing a coordinated solution to cross-border harmful interference caused by Italy to Croatian FM stations, in December 2022 Slovenia requested the RSPG Good offices support in resolving FM cross-border harmful interference caused by Italian radio stations. In line with the direction given by RSPG#59, the SG will be developing an action plan, with timelines, addressing the problems concerned.
- In the GE84 plan, Italy has 4,644 registered assignments, however, the actual number of Italian FM broadcasting stations is around 16,000. These stations operate in accordance with a national authorisation granted in around 1990.
- The Italian Government wants to develop DAB and to revive analogue radio and therefore it has no intention to switch-off FM broadcasting. The Italian Government intends to hold discussions with the operators and their association, and this may provide a forum to have a dialogue on the issues concerning FM.
- Pursuant to article 50 (paragraph 10) of Decreto Legislativo 208/2021, the Italian working group is analysing the national regulatory framework, assessing the current situation and developing short-term actions whilst looking for a more general and feasible solution. This activity will in particular determine the level of Italy's compliance with international obligations including the Radio Regulations, ensure that the database of FM stations available at the Ministry reflects the actual situation, study the efficiency of the networks and rationalise the use of FM radio frequencies where possible.
- Following completion of the assigned tasks, the working group will submit a report to the Minister including a set of recommendations. Political approval will be required prior to implementing any of the recommendations.
- The Italian working group is considering solutions which include, compensation schemes, mandatory migration to DAB and the switching-off of the majority of FM stations.
- Italian FM stations cannot be forced to migrate to DAB and therefore only migration on a voluntary basis is currently foreseen. For Italy, the option to switch-off FM stations is not feasible.
- There is general agreement between the parties that there is a lack of available FM frequencies, and this fact is limiting the potential by Italy of resolving certain cross-border harmful interference problems.
- Slovenia will be sending a letter to Italy highlighting its understanding of the common principles and expects that Italy endorses such, so that a common agreement may be made. Regarding the open issues concerning FM coordination, it expects that Italy replies to the coordination requests sent in the last few years.
- The SG reaffirmed its position that the voluntary migration of FM to DAB is not an effective solution towards resolving FM interference and the Italian working group dealing with FM issues should recommend a solution based on mandatory migration.

- The SG directed Italy to provide the timelines by when its working group is expected to finalise its work to the next SG meeting. Based on these dates, the SG will be in a better position to start deliberating on the action plan which needs to be prepared, in line with the direction given by RSPG#59.

The letter submitted by Croatia to RSPG#59 requesting mediation and issuance of an opinion proposing a coordinated solution to cross-border harmful interference caused by Italy to Croatian FM stations was considered. The SG also considered a letter sent by Slovenia to RSPG in December 2022 requesting the support of the RSPG Good offices in resolving FM cross-border harmful interference caused by Italian radio stations. In line with the direction given by RSPG#59, it was agreed to develop an action plan, with timelines, highlighting when the harmful interference problems affecting Croatia and Slovenia will be resolved. It was acknowledged that these problems are not new and were subject to various discussions in previous SG meetings.

Italy highlighted that all of its stations are operating in accordance with a national authorisation granted in around 1990. Since this period, no new authorisations were granted other than to stations acting as gap-fillers. Modifications to the current authorisations may be possible, such as to respect environmental regulations. In terms of numbers, the total number of Italian FM broadcasting stations is around 16,000 and the number of Italian GE84 registered assignments is 4,644. Hence, most of the Italian FM stations are operating on uncoordinated frequencies.

Italy considered the letters submitted by Croatia and Slovenia as a request to switch-off the Italian FM stations, which request is not feasible and a realistic one. A solution should allow the FM sector to provide services without any social, cultural and economic implications. The Italian Government wants to develop DAB and to revive analogue radio and therefore it has no intention to switch-off FM broadcasting. The Italian Government intends to hold discussions with the operators and the association of operators and this may provide a forum to have a dialogue on the issues concerning FM.

Pursuant to article 50 (paragraph 10) of Decreto Legislativo 208/2021, the Italian working group is analysing the national regulatory framework (e.g. to determine the level of compliance with international obligations including the Radio Regulations), assessing the current situation (e.g. to ensure that the database of FM stations at the Ministry reflects the actual situation, to study the efficiency of the networks, to rationalise the use of FM radio frequencies where possible) and developing short-term actions whilst looking for a more general and feasible solution.

Following completion of the assigned tasks, the working group will submit a report to the Minister including a set of recommendations. Political approval will be required prior to implementing any of the recommendations.

The solutions/actions which are being considered by the Italian working group include:

- compensation schemes, but which must be supported legally and provided with adequate financing;

- mandatory migration to DAB, but which requires a law; and
- switching-off of the majority of FM stations, but this will be jeopardising the Italian FM sector and market.

Italy reiterated that currently its FM stations cannot be forced to migrate to DAB and therefore only migration on a voluntary basis may be possible. The option to switch-off FM stations is not feasible for Italy.

Slovenia argued that its FM sector and market are being jeopardised by Italian interference. The main difference is that the Italian FM sector and market is using frequencies registered to other countries internationally. This situation is causing damage to the stations experiencing this interference and to the countries in general.

The EC representative stated that from a legal point of view, Croatia's request falls under article 45 of the EECC which obliges compliance with international laws. The EC would like to see concrete progress in order to avoid any action against Italy. The EC representative added that the EC was surprised by some judgements made in Italian courts that did not consider Italy's obligation to comply with international law.

By way of example, Italy referred to the interference situation affecting the Croatian stations at Biokovo and stated that it was not possible to find a solution due to a lack of available radio frequencies within a span of 400 kHz. 291 Italian stations are potentially affecting the stations at Biokovo (4 GE84 registered stations), and out of this number 140 Italian stations are transmitting with a power exceeding 1 kW. Due to the legal authorisation which the Italian FM stations enjoy, alternative frequencies must be offered in lieu of the frequency impacting the stations in Biokovo. Italy also stated that out of the 206 frequencies in the FM band, 120 Italian frequencies are causing harmful interference to Croatia and similarly, 100 to Slovenia. Croatia expressed reservations on these numbers and considered that finding a solution was complex but deemed to be feasible.

Slovenia suggested that this problem will be resolved if the interfering stations are switched-off and the remaining stations migrated to an alternative frequency in a manner not to causing interference to other countries. The requirement to protect all stations, even those which are not coordinated, is not feasible due to the same issue, i.e. lack of frequency resources.

Slovenia stated that it will be sending a letter to Italy highlighting its understanding of the common principles and expects that Italy endorses such, so that a common agreement may be made. Regarding the open issues concerning FM coordination, it also expects that Italy replies to the coordination requests sent in the last few years so the calculations can be compared and potential incompatibilities resolved.

The SG reaffirmed its position that the voluntary migration of FM to DAB is not an effective solution towards resolving FM interference and the Italian working group dealing with FM issues should recommend a solution based on mandatory migration. Furthermore, the SG directed Italy to provide the timelines by when its working group is expected to finalise its work to the next SG meeting. Based on these dates, the SG will be in a better position to start

deliberating on the action plan which needs to be prepared, in line with the direction given by RSPG#59.

3.2 *France*

Key points

- No progress was made as regards the resolution of the interference of the French station at Bonifacio.
- The joint measurement campaign which had to be carried out in 2022 to assess the potential of causing interference to the Italian station RAI in Sardinia had to be cancelled due to a lack of agreement on the measurement protocol.
- The SG encouraged the parties to continue with their bilateral discussions so that progress may be registered on this interference case.

France is only experiencing one case of harmful interference being caused by Italy on its station in Bonifacio on 88.4 MHz. As part of the solution, joint measurements had to be carried out in November 2022 to verify if interfere will be caused to the Italian station RAI in Sassari and San Teodoro (Sardinia). France had presented a measurement protocol to Italy prior to the measurement campaign but these were not agreed to by Italy.

In accordance with simulations carried out by France, its station will not be affecting Italy. The technical characteristics of the French station were also provided to Italy. The finalisation of the minutes of a meeting held between France and Italy on this issue are long overdue.

Italy was not in full agreement with the results of the simulation and considers that the location where France proposed to move the station is not expected to provide adequate coverage in the city of Bonifacio due to some hills between the transmitter and the city. Italy recognised that the discussion with France must continue although it expressed doubts on reaching agreement based solely on simulations. Italy expressed its commitment to continue working with France towards finding a solution to the interference problem in Bonifacio.

A bilateral meeting will be scheduled to discuss the simulations and to demonstrate that the proposed site is adequate to cover Bonifacio city. Italy was encouraged to reply to the minutes of the meeting with France.

The SG encouraged the parties to resume discussions in order to progress on the resolution of this interference case.

3.3 *Malta*

No improvements to the harmful interference situation were noted.

4. **Cross border activities with non-EU countries concerning the 700 MHz and 3.6 GHz band**

The European Commission representatives updated the SG with the latest situation on the following issues:

- **Albania:** There are two outstanding issues concerning Albania: (i) unresolved coordination issues between Albania and the Republic of North Macedonia concerning the VHF band III and (ii) the release of the 700 MHz band in Albania. These issues are being raised in the framework of Albania's EU accession negotiations.
- **Regional Spectrum Agreement (RSA):** Due to Russian war of aggression against Ukraine, the latest version of the draft RSA was amended to omit Belarus and Ukraine from the list of signatory parties. Subsequent, Moldova also expressed its reservations to the signing of the RSA. As half of the six Eastern Partnership countries are not in a position to sign the RSA, it appears that the signature of the RSA will be postponed and in the meantime the discussion is ongoing on a possible extension of the scope of the RSA, to potentially include the 2.3 GHz, 2.6 GHz, and 26 GHz frequency bands.
- **Cross-border coordination meeting of Nov 2022:** On 10 November 2022, a coordination meeting took place online between DG CNECT and Estonia, Finland, Latvia, Lithuania and Poland, to discuss on cross-border frequency coordination issues with Russia, as well as with Belarus and Ukraine (as applicable), primarily in relation to the authorisation of the 700 MHz and the 3.6 GHz 5G pioneer bands, and the 5G network deployment in those Member States. In this context, there was an exchange of information regarding the state of cross-border frequency coordination and agreements between the participating Member States and their non-EU neighbouring countries, namely Russia, Belarus and Ukraine, taking also into account the current Russian war of aggression against Ukraine. In particular, Finland shared their experience and recommendations on their coordination with Russia, including on the bilateral agreements they have settled with Russia for the use of the abovementioned frequency bands. The next coordination meeting has been tentatively scheduled to take place in 6 months' time (as of Nov 22).

5. **Date of next meeting**

The next SG meeting of the 'Good offices' is planned to be held virtually on the 21th March 2023 (9:30-11:30 hrs.). The discussions of this meeting will be limited to FM related issues only.

The full meeting of the SG will be held on 16th May 2023 (9:30-12:30 hrs.).

ANNEX I

REPORT

RSPG SUB-GROUP

“Good offices” to assist in bilateral negotiations between Member States

Web-meeting, 13th January 2023

The draft agenda of the meeting was presented and agreed by the meeting without amendments.

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

In response to the question raised in a previous meeting of the Sub-Group, on interference to Croatian TV channels 22 and 31, Italy confirmed that all these channels were switched off by June/July 2022 and no Italian transmitters are in operation on these channels in the coordination zone. This was also confirmed through radio monitoring activities for the coordination zone. Croatia accepted this explanation, expressing some doubt about the dates of the measurements and the switch-off date of the Italian TV stations. Croatia however committed to repeat the measurements on these channels and update the subgroup accordingly.

Regarding the other cases reported by Croatia concerning possible interference on TV channels 21, 27, 28 and 29, Italy informed the Sub-Group that radio monitoring was undertaken and it was determined that no Italian stations were in operation within the coordination zone. Hence it indicated that Italian stations causing any possible interference could be located outside the coordination zone. Italy clarified that according to the Adriatic agreement, there are no restrictions to the parameters of TV stations located outside the coordination zone and hence any interference cannot be considered as harmful.

Regarding the reported interference on TV channel 37, Italy noted that in accordance with the Adriatic agreement this channel was exclusively assigned to the Western side of the Adriatic and it was not possible for countries in the Eastern side of the Adriatic to claim harmful interference on this channel. It was indicated that a swap of channels could have taken place with Albania. Italy and Croatia agreed to analyse the situation bilaterally after the meeting.

In response, Croatia referred to previous reports of the Sub-Group concerning interference on TV channels 21, 27, 28, 29, 41 and 45 where it expressed some doubts on whether the interference was coming from the coordination zone. Croatia accepted the explanation provided by Italy that any possible interference could be coming from outside the coordination zone. However, in order to bring this item to a closure Italy agreed to share the relevant technical information with Croatia (via email) in order to undertake the necessary verifications and

compare the results with actual measurements. Regarding the Croatian claim of interference to TV channel 41, both countries agreed to exchange information on the bearing and other related parameters towards this interference source.

2. DAB interference around Italy

Update on the development of the Adriatic and Ionian regional agreement for DAB

No significant progress was registered as regards the finalisation of the Adriatic and Ionian agreement for DAB. Although discussions on this area commenced in 2019 and various meetings were held since then (7 web-meetings held in 2022), the discussion is in a deadlock situation. The key reasons being:

- a) Cross-border coordination problems between Albania and North Macedonia in relation to the use of some channels which are affecting the partitioning of the DAB frequency plan for the Adriatic and Ionian countries.
- b) The position taken by Slovenia due to a lack of a common understanding of the ITU rules as defined by the Radio Regulations, as well as Italy's objections to Slovenia's request to register additional stations in the Geneva 1984 (GE84) plan. Slovenia also expects that some interfering FM frequencies shall be released due to migration to DAB.

Regarding point (a), in line with the actions of the October meeting of the Sub-Group, Italy provided all the relevant details to the European Commission (EC) which offered to support in this matter. The EC representative informed the Sub-Group that the information provided by Italy was duly received and forwarded to the negotiators with Albania in the framework of accession negotiations. The discussions still have to take place and the Sub-Group will be updated when any feedback is received.

As to point (b), Italy clarified that the problems associated with the FM band are well known and is of the opinion that the adoption of certain conditions made by Slovenia will be harmful for the development of DAB in the region. It was noted that the solution for regularising the FM band is long to be found but DAB is a key option towards resolving the FM interferences. Italy emphasised that following signature of the DAB agreement for the region, it will immediately align its frequency assignments with those established in the same agreement and therefore resolve all DAB related interference problems.

Slovenia confirmed that it would like to receive information from Italy on how it interprets the applicable provisions of ITU rules and agreements. In its views, it seems that both countries have a different understanding of these ITU instruments. Although some letters were exchanged on this matter, some further clarifications are required in order to be precise on how certain open questions are to be addressed. Reference was also made to past frequency coordination requests sent by Slovenia to Italy for the registration of FM stations. Although Slovenia is confident that these stations will not cause harmful interference to Italy, these stations received an objection. Slovenia appealed to Italy to provide the technical reasons supporting their

objections so that calculations can be compared, and any potential incompatibilities resolved. Slovenia emphasised that it will be difficult to make progress on the signature of the DAB agreement unless clarity is received on this matter.

Italy clarified that the cases referred to by Slovenia are for the pre-coordination stage and in some cases these requests were resubmitted following comments made by Italy previously. Some other requests were published in the ITU BR IFIC and Italy followed the procedures foreseen in the GE84 Agreement. Italy reiterated that in its views it's not appropriate to include FM related provisions in the DAB agreement. It considered that there are worst consequences if the DAB agreement is not signed, especially since it will not allow the relevant countries to continue develop their DAB services.

Slovenia shared a different view and considered that DAB and FM issues were closely connected because they are based on the fundamental principles enshrined in the Radio Regulations regarding the use of radio frequencies. Reaching some common understanding on the rules was imperative in order to resolve current litigation cases and to prevent new ones.

Croatia deemed that all countries within the Adriatic and Ionian region are aware that they will benefit from the finalisation of the DAB agreement as regards, in particular, the resolution of FM and DAB harmful interference. It argued that the agreement shall reflect the principle that DAB shall be part of the solution towards resolving FM interferences, in line with past discussions within the Sub-Group as well as the ITU multilateral group. As regards the issues with Albania and North Macedonia, Croatia stated that these countries need assistance so that a solution may be found.

The EC representative suggested to invite Albania and North Macedonia to participate in the next Sub-Group meeting of the Good offices in order to facilitate the technical exchanges with the concerned EU countries. This suggestion was welcomed by the meeting as long as their participation will be in line with the relevant rules.

It was underlined that in a multilateral meeting organised by the ITU in October 2017 addressing cases of harmful interference between Italy and its neighbours, Italy had proposed an action plan consisting of two phases, namely (i) case-by-case elimination of the interference problems, and (ii) preparation of a DAB plan and a revision of the FM plan by which Italy would be migrating to DAB and freeing FM frequencies and in doing so only FM stations complying with the GE84 Agreement would remain operational. Croatia stated that it wishes to reflect this approach in the DAB Agreement being prepared for the Adriatic and Ionian region.

Italy clarified that the solution proposed in 2017 is not in contradiction with its current plans and recognised that the widespread availability of DAB platforms will be key to resolve FM interferences. However, given that Italy's legal framework does not foresee such an approach, the migration from FM to DAB will be offered on a voluntary basis.

Croatia and Slovenia argued that the application of a voluntary approach for the migration of FM stations to DAB will not be successful. Hence a forced migration similar to what was done for the UHF band with strict timelines was deemed to be the most appropriate solution together with a compensation scheme to free capacity in the FM band.

The Sub-Group has once again encouraged the parties to continue their discussions within the Adriatic and Ionian group and to compromise in order to agree on a text of the DAB agreement which is mutually acceptable to all and hence progress may be made towards the efficient use of radio spectrum and the resolution of harmful interference problems. In particular, Italy and Slovenia were invited to hold bilateral discussions in order reach agreement on the various open issues which are impeding progressing on the finalisation of the said agreement. Furthermore, Italy was once again requested to take into account the strong appeal of the Sub-Group and adopt a regime based on the forced migration of FM stations to DAB.

Resolution of DAB interference problems

In line with the direction given by the Sub-Group meeting held in October 2022, Italy proposed an interim solution to resolve the harmful interference on frequency blocks 12A, 12B, 12C and 12D. In the concerned area, these frequency blocks are being used by two Italian national networks. The proposal includes usage of frequency blocks 7C and 7D instead of the aforesaid blocks on channel 12 immediately, which use will remain until the Adriatic and Ionian agreement for DAB is signed. It considers that frequency blocks 7C and 7D will not be impacting Slovenia and Croatia. If this proposal is accepted the interference on frequency blocks 12A and 12C will be resolved by June 2023.

It was clarified that in the northern regions facing the Adriatic (from Friuli to Marche), Italy has no vacant Geneva 2006 (GE06) registered channels. At the same time, Slovenia and Croatia have no rights in the GE06 plan on frequency blocks 7C and 7D in the coordination area and consequently Italy proposed to use these blocks as a temporary measure, without any real impact on neighbouring countries. On the other hand Italy recalled that channel 7 is an Italian right in the GE06 plan for the central and southern regions facing the Adriatic.

Italy also highlighted that the GE06 plan allocates channel 7 to San Marino and through a bilateral agreement (with San Marino), Italy is allowed to use this channel in its territory.

Croatia requested clarifications on the arrangement between Italy and San Marino on the use of channel 7 since for San Marino, the power of the station using this channel is low. San Marino's rights under the GE06 cannot be used by Italy outside San Marino. Italy responded that pursuant to its bilateral agreement with San Marino, San Marino agreed to no longer use this channel and in the context of the Adriatic and Ionian agreement, this channel is exclusively designated for use in the Eastern side of the region.

As regards the proposed solution, Croatia noted that part of the proposed solution was already being implemented but without the necessary acceptance of the neighbouring countries. Further, Croatia indicated (via email in December 2022) that Italian interference was measured on frequency blocks 7C and 7D with levels up to 70 dB μ V/m.

Croatia requested Italy to provide a plan detailing all the transmitters they intend to switch-off and the associated technical parameters. A transparent and clear process should be adopted by Italy when proposing solutions affecting neighbouring countries.

Italy agreed to make available information on the stations to be migrated, including the associated technical parameters.

Regarding the arrangement between Italy and San Marino, Slovenia considered that San Marino's rights cannot be implemented within Italy's territory such as Veneto and Friuli Venezia Giulia. It was also stated that the Italian stations in Conconello and Muggia were only put into operation recently on frequency block 7D. Moreover, Slovenia considers that as a measure to resolve the said interference on channel 12, Italy may use channels 5 and 8, which channels are GE06 rights registered to Italy and according to measurements these channels are vacant. It was willing to examine any technical measures, even temporary ones, as long as the relevant frequency coordination procedures are adopted.

Italy stated that for temporary measures it tries to find solutions not having any impact. Regarding the comment concerning the vacant channels, Italy made reference to its provisional national plan for DAB which foresees the establishment of national DAB networks, which networks have been designated and will be deployed in due course. Italy assured that all of its GE06 rights are included in the said plan. Channel 5 is designated to be used for television in Italy.

As regards the adoption of the GE06 frequency coordination procedures, Italy considered that it was not practical to follow this procedure in view of the temporary nature of the proposed measure.

The Sub-Group requested Italy to share the technical parameters of the DAB stations identified to be migrated to 7C and 7D to Croatia and Slovenia for their examination. In the event that Croatia and Slovenia give their consent, Italy will proceed to implement the temporary measure immediately.

3. FM interference around Italy

Croatia and Slovenia

The co-chairs introduced the letter submitted Croatia to RSPG, requesting mediation and to issue an opinion proposing a coordinated solution to cross-border harmful interference caused by Italy to Croatian FM stations. RSPG#59 (November 2022) considered this request and directed the Good Offices Sub-Group to develop an action plan addressing the problems concerned. It was also underlined that at RSPG#59 the EC urged for a solution to be found addressing the breach of international and European Union law and reserved its right to take appropriate action if necessary.

A letter sent by Slovenia to RSPG in December 2022 requesting the support of the RSPG Good offices in resolving FM cross-border harmful interference caused by Italian radio stations was also introduced.

It was agreed that the direction given by RSPG#59 to the Sub-Group shall apply to both requests. Consequently, the Sub-Group will be developing an action plan, with timelines, highlighting when the reported harmful interference problems will be resolved. It was acknowledged that these problems are not new and were subject to various discussions in previous Sub-Group meetings.

Italy stated that an action plan must be based on the actual situation so that it may be implementable. For Italy and the other countries, FM broadcasting is a market which has social, cultural and economic implications. It considered that the main issue was that whilst Slovenia's and Croatia's FM stations are operating on coordinated frequencies, Italy had very few coordinated frequencies and hence most of its stations were operating on uncoordinated frequencies. All of its stations are operating in accordance with a national authorisation granted in around 1990. Since this period no new authorisations were granted other than to stations acting as gap-fillers. Modifications to the current authorisations may be possible, such as to respect environmental regulations.

Italy stated that in line with Croatia's and Slovenia's requests, the easiest solution would be a total switch-off of the stations, which solution is not a realistic one. A solution should allow the FM sector to provide services without any social, cultural and economic implications. The FM sector is a pillar of radiocommunications and the new Italian Minister has recently recognised that its Government wants to develop DAB and to revive analogue radio. Hence, Government has no intention to switch-off FM broadcasting. The Italian Government also intends to hold discussions with the operators and the association of operators and this may provide a forum to have a dialogue on the issues concerning FM.

Italy has then referred to article 50 (paragraph 10) of Decreto Legislativo 208/2021 stating that the Ministry may carry out activities aimed at eliminating/mitigating cross-border interference, using radio spectrum efficiently, protecting investments and promoting innovation. The two goals of eliminating interference and protecting investment are difficult to balance. Nonetheless, the Sub-Group pointed out that operating FM stations on coordinated spectrum as required by international regulations may be considered as a way to protect investments.

Slovenia stated that Italy ratified the Radio Regulations and is therefore bound to implement the provision concerning the avoidance of harmful interference. Hence the provision included in Italian laws concerning harmful interference is not new. Italy responded that while its FM sector is not respecting some aspects of the Radio Regulations, the switching-off of its uncoordinated stations is not feasible.

Italy has then referred to the work being done within the national working group composed on the Ministry and the Authority (AGCOM). It was emphasised that this working group has no power to create new laws. Following completion of the assigned tasks, the working group will submit a report to the Minister including a set of recommendations. Political approval will be required prior to implementing any of the recommendations.

This working group is analysing the national regulatory framework (e.g. to determine the level of compliance with international obligations including the Radio Regulations), assessing the current situation (e.g. to ensure that the database of FM stations at the Ministry reflects the actual situation, to study the efficiency of the networks, to rationalise the use of FM radio frequencies where possible) and developing short-term actions whilst looking for a more general and feasible solution.

Italy has then highlighted the proposed solutions/actions which are being considered by the said working group, which are:

- compensation schemes, but which must be supported legally and provided with adequate financing;
- mandatory migration to DAB, but which requires a law; and
- switching-off of the majority of FM stations, but this will be jeopardising the Italian FM sector and market.

Italy also stated that currently, the forced migration of FM stations to DAB is not possible and therefore incentives have to be founded on how to encourage migration on a voluntary basis. Further, Italy considers that the option regarding the switching-off of FM stations is not feasible. No new initiatives to increase the market share of DAB are currently foreseen.

Slovenia argued that the last option being considered by Italy reflects what the Italian interference is causing to Slovenia, where Slovenia's FM sector is being jeopardised by the Italian interference. The main difference is that the Italian FM sector and market is based on frequency resources which do not belong to Italy. In the border area, the Italian stations are using the frequencies registered to other countries internationally. This situation is causing damage to the stations experiencing this interference and to the countries in general.

The EC representative stated that from a legal point of view, Croatia's request falls under article 45 of the EECC which obliges compliance with international laws. The EC would like to see concrete progress in order to avoid any action against Italy. The EC representative added that the EC was surprised by some judgements made in Italian courts that did not consider Italy's obligation to comply with international law.

Italy then referred to the interference situation affecting the station at Biokovo (Croatia) as an example. It considered that the main problem is associated with the fact that there are no available radio frequencies where to relocate the potential stations causing the interference within a span of 400 kHz (due to co- and adjacent channel interference). Biokovo has four GE84 registered frequencies and the total number of Italian stations potentially affecting the stations at Biokovo is 291. Out of this number, 140 Italian stations transmit with a power exceeding 1 kW. Due to the legal authorisation which the Italian FM stations enjoy, alternative

frequencies must be offered in lieu of the frequency impacting the stations in Biokovo. Italy also stated that out of the 206 frequencies in the FM band, 120 Italian frequencies are causing harmful interference to Croatia and similarly, 100 to Slovenia. In Italy's view, this situation highlights the problem of lack of frequency resources.

Slovenia agreed to the fact that the main problem is associated with the lack of frequency resources. Slovenia stated that there is no solution to around 80% of the stations causing harmful interference due to lack of frequency resources. This problem will be resolved if the interfering stations are switched-off and the remaining stations migrated to an alternative frequency in a manner not to causing interference to other countries. The requirement to protect all stations, even those which are not coordinated, is not feasible due to the same issue, i.e. lack of frequency resources. Italy's goal should be to reduce resources thereby being able to resolve cross-border interference.

Croatia stated that the fact that Italy's authorisations grant rights to use FM radio frequencies registered to other countries is not acceptable. Whilst the Italian FM industry is benefiting from these authorisations, the Italian state is also profiting economically (from taxes) as well as from a social and cultural point of view. Reference to the Biokovo station operating on 89.7 MHz, two Italian stations operating on the same frequency were identified (i.e. Play Capital and Radio Kiss Kiss). Although 73 Italian stations are operating within a 400 kHz range, the discussed solution focused on the migration of these two co-channel stations since it was not possible to implement a power reduction. Six Italian broadcasting stations are contributing to the adjacent channel interference situation in this band. Finding a solution is complex but is deemed to be feasible. The requirement for the other stations (out of the 73) to switch-off is at this stage not considered necessary.

Italy referred to the comments made by Slovenia on the need to switch-off 80% of the Italian stations. Italy considered that switching-off stations without giving an alternative frequency is not a feasible option and will be disruptive to the FM sector.

Italy has then presented an analysis comparing the total number of registered GE84 assignments to density in terms of area per assignment (France 7,668 assignments and 71 km² per assignment, Italy 4,644 assignments and 65 km² per assignment, Croatia 877 assignments and 65 km² per assignment, Slovenia 623 assignments and 33 km² per assignment, etc.). Italy stated that the new requirements from for example Slovenia, besides the technical aspect, will be reducing the opportunity to Italy to find and subsequently register alternative frequencies in the FM band.

Croatia considered the arguments made by Italy as regards the density of GE84 registered frequencies as irrelevant since Croatia is not using uncoordinated assignments. Croatia stated that Italy was using around five times more assignments than what it has registered under the GE84. This means that the density for Italy is much lower, around 10 km² per assignment. In addition, to the total number of assignments the transmit power, location, height and other factors also need to be taken into account.

Slovenia considered Italy's comments as misleading. It noted that various GE84 stations registered under Slovenia are low power stations due to the hilly terrain. However, the Veneto region in Italy is flat and the area may be covered by a single transmitter.

Slovenia stated that it will be sending a letter to Italy highlighting its understanding of the common principles and expects that Italy endorses such, so that a common agreement may be made. Regarding the open issues concerning FM coordination, it also expects that Italy replies to the coordination requests sent in the last few years so the calculations can be compared and potential incompatibilities resolved.

The Sub-Group was informed that the Italian Working Group dealing with FM related issues did not establish a timeframe by when their work is expected to be completed. Nonetheless, a date is expected to be established at its next working group meeting to be held on the 17th February. In parallel, Italy committed to provide solutions addressing specific cases of FM interference. A consensus with the concerned Italian operator would need to be found prior to implementing any proposed action. Italy highlighted that the total number of FM broadcasting stations operating in Italy was around 16,000 (i.e. around three times those registered under the GE84 plan). Italy clarified that currently, it does not plan to develop a national FM plan due to the unavailability of sufficient coordinated frequencies.

In conclusion, the Sub-Group reaffirmed its position that the voluntary migration of FM to DAB is not an effective solution towards resolving FM interference and the Italian working group dealing with FM issues should recommend a solution based on mandatory migration. Furthermore, the Sub-Group directed Italy to provide the timelines by when its working group is expected to finalise its work to the next Sub-Group meeting. Based on these dates, the Sub-Group will be in a better position to start deliberating on the action plan which needs to be prepared, in line with the direction given by RSPG#59.

France

France referred to past discussions within the Sub-Group concerning the interference being experienced by its station in Bonifacio on 88.4 MHz. As part of the solution, joint measurements had to be carried out in November 2022 to verify if interference will be caused to the Italian station RAI in Sassari and San Teodoro (Sardinia). A measurement protocol was presented to Italy prior to the measurement campaign and France was surprised with the response received that the measurements had to be carried out in France first. France also provided Italy with the technical characteristics of its station and as per the calculations/simulations done, these will not be affecting Italy. The finalisation of the minutes of the meeting held between France and Italy on this issue are long overdue. France emphasised that the aim of the measurements is to find a solution to this problem and looks forward to reach a common understanding on the measurement protocol.

Italy clarified that it was not in full agreement with the results of the simulation and considers that the location where France proposed to move the station to is not expected to provide adequate coverage in the city of Bonifacio due to some hills between the transmitter and the city. Hence it wanted a confirmation that the proposed solution was capable of meeting the expectations of the project by providing adequate coverage to Bonifacio city. Italy recognised that the discussion with France must continue although it expressed doubts on reaching agreement based solely on simulations. Italy expressed its commitment to continue working with France towards finding a solution to the interference problem in Bonifacio.

France welcomed Italy's commitment and encouraged Italy to reply to the minutes of their meeting. A bilateral meeting will be scheduled to discuss the simulations and to demonstrate that the proposed site is adequate to cover Bonifacio city. France recognised that the new site is inferior to the old one but expects that around 80-90% of the Bonifacio city will be covered.

The Sub-Group encouraged the parties to resume discussions in order to progress on the resolution of this interference case.

Malta

No improvements to the harmful interference situation were noted.

4. Cross border activities with non-EU countries concerning the 700 MHz and 3.6 GHz band

The European Commission representatives updated the Sub-Group with the latest situation on the following issues:

- **Albania:** There are two outstanding issues concerning Albania: (i) unresolved coordination issues between Albania and the Republic of North Macedonia concerning the VHF band III and (ii) the release of the 700 MHz band in Albania. These issues are being raised in the framework of Albania's EU accession negotiations.
- **Regional Spectrum Agreement (RSA):** Due to Russian war of aggression against Ukraine, the latest version of the draft RSA was amended to omit Belarus and Ukraine from the list of signatory parties. Subsequent, Moldova also expressed its reservations to the signing of the RSA. As half of the six Eastern Partnership countries are not in a position to sign the RSA, it appears that the signature of the RSA will be postponed and in the meantime the discussion is ongoing on a possible extension of the scope of the RSA, to potentially include the 2.3 GHz, 2.6 GHz, and 26 GHz frequency bands.

- **Cross-border coordination meeting of Nov 2022:** On 10 November 2022, a coordination meeting took place online between DG CNECT and Estonia, Finland, Latvia, Lithuania and Poland, to discuss on cross-border frequency coordination issues with Russia, as well as with Belarus and Ukraine (as applicable), primarily in relation to the authorisation of the 700 MHz and the 3.6 GHz 5G pioneer bands, and the 5G network deployment in those Member States. In this context, there was an exchange of information regarding the state of cross-border frequency coordination and agreements between the participating Member States and their non-EU neighbouring countries, namely Russia, Belarus and Ukraine, taking also into account the current Russian war of aggression against Ukraine. In particular, Finland shared their experience and recommendations on their coordination with Russia, including on the bilateral agreements they have settled with Russia for the use of the abovementioned frequency bands. The next coordination meeting has been tentatively scheduled to take place in 6 months' time (as of Nov 22).

5. Any other business

Nil.

6. Date of next meeting

The next Sub-Group meeting of the 'Good offices' is planned to be held virtually on the 21th March 2023 (9:30-11:30 hrs.). The discussions of this meeting will be limited to FM related issues only.

The full meeting of the Sub-Group will be held on 16th May 2023 (9:30-12:30 hrs.).

List of participants

No. of participants: 18

Country	Organisation
Austria	Austrian Federal Ministry of Finance
Austria	Austrian Regulatory Authority for Broadcasting and Telecommunications (RTR)
Croatia	Croatian Regulatory Authority for Network Industries (HAKOM)
France	National Frequency Agency (ANFR)
France	French Regulatory Authority for Electronic Communications, Postal and Print media distribution (ARCEP)
Greece	Hellenic Telecommunications & Post Commission (EETT)
Hungary	National Media and Infocommunications Authority (NMHH)
Italy	Ministry of Economic Development
Italy	Italian Communications Regulatory Authority (AGCOM)
Lithuania	Communications Regulatory Authority of the Republic of Lithuania
Malta	Malta Communications Authority (MCA)
Slovenia	Agency for Communication Networks and Services of the Republic of Slovenia (AKOS)
Sweden	Swedish Post and Telecom Authority (PTS)
-	European Commission