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Electronic Communications Networks and Services
Radio Spectrum Policy Group
RSPG Secretariat

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RADIO SPECTRUM POLICY GROUP

21st Progress Report of the RSPG Working Group on cross-border coordination

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on cross-border coordination

The Working Group has held one meeting, 10th May in Dublin, at the kind invitation of the Irish administration, 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 on channels 21, 39, 41, 45 and 51. Investigations are ongoing to identify interfering transmitters on channels 21, 39, 41, 45, but there are contradictions in interference levels between Italian simulations and Croatian measurements. Channel 51 corresponds to San Marino right in GE-06 but Italy had agreed additional transmitters on its own territory provided the interference to other countries are within the envelope of San Marino GE-06 Plan entry. Italy and Croatia will request San Marino to provide the actual power of all transmitters in Italy and San Marino. See also below (700 MHz implementation) for the request from Croatia to Italy to make available additional channels to enable transition to the final plan below 694 MHz
- For TDAB interference, AGCOM will develop the T-DAB plan which will be fully in line with Italian international rights (GE-06 + coordination agreements). Coordination meetings are necessary with all neighbouring countries in order to discuss requirements from both sides. This TDAB plan should be implemented as early as possible to solve the interferences. In the meantime, Italy is discussing with Croatia and Slovenia some projects to alleviate interference from existing uncoordinated Italian transmitters
- For FM interference, the discussion is progressing slowly on the protection of priority channels declared by neighbouring administrations. Malta is exploring the feasibility of carrying out a re-planning exercise of its FM sound broadcasting transmissions to strengthen the local signal in the interfered areas and at the same time minimising any spill-over effect on neighbouring countries. The discussion regarding Slovenia showed that some of the project from Italy for the Trieste area are based on unrealistic antenna pattern (114 dB null in the direction of Slovenia) and that Slovenia intends to increase the power of some transmitters to compensate interference, so that there is an urgent need for Italy and Slovenia to have a coordination meeting to investigate the issue in this area and to define solutions other than increase of power to solve the interference to Slovenia. About Croatia, the same contradiction regarding the interference Croatian measurement results and the Italian simulated level was noted and information will be exchanged to investigate the

reasons for such contradiction and discuss Italian projects to protection Croatian priority channels.

Review of the progress in the implementation of the 700 MHz band within EU

Croatia indicated that they did not yet approve the national 700 MHz roadmap. The proposal of the text of the national roadmap was prepared and was following Governmental procedure for adoption. The outcome of the activity between Italy and Croatia impacts the implementation/feasibility of the roadmap, although this should not delay the publication of the roadmap.

The working group discussed the request from Croatia to Italy to make available additional channels to enable transition to the final plan below 694 MHz. Nine channels (in two phases, see the report in annex) would need to be protected on the whole Adriatic part of Croatia. Italy will need to consider this request and the good offices concluded that a coordination meeting between Italy and Croatia needs to take place as early as possible in order to accommodate to the maximum extent possible the protection of all these channels in the Adriatic part of Croatia.

The Working Group has considered an update of the response to the questionnaire from Italy, which will be published. Turkey also informed that there is a slight delay in the end of migration date, from 2018 to 2019. Croatia will need to update the response to the questionnaire when the roadmap will be published.

Additionally, The EC received an official letter from Poland informing about a delay in migrating their broadcasting services to below 694 MHz until 2022 due to the cross-border issues. This delay may impact EU Member states and Denmark already expressed such concerns. **An updated map of the dates for the end of migration of the TV below 694 MHz is attached in annex.**

All RSPG members should consider the impact of such delay and, as appropriate, discuss the matter with Polish administration.

Review of the cross-border negotiation with countries outside EU

Russia did not change its position and therefore there is no guarantee that Russia will cease its broadcasting transmissions in the 700 MHz band. The representative of the Commission reported on a meeting with the Russian Vice-Minister where its “safety” issues (i.e. ARNS) were mentioned. A video-conference has been scheduled between Russia and the Commission on the 27th May and the representatives of the concerned administrations were also invited to join. It was pointed out that during WRC-15, protection of ARNS in Russia from EU countries was achieved through bilateral agreements. However, some national issues (i.e. protection of ARNS from operators or refarming costs) may still need some national Russian considerations.

With respect to North African countries, Italy reported no progress. Malta explained that it had submitted comments to a draft frequency coordination agreement with Libya and expressed concerns on possible delays in the finalisation of this agreement due the current situation in Libya.

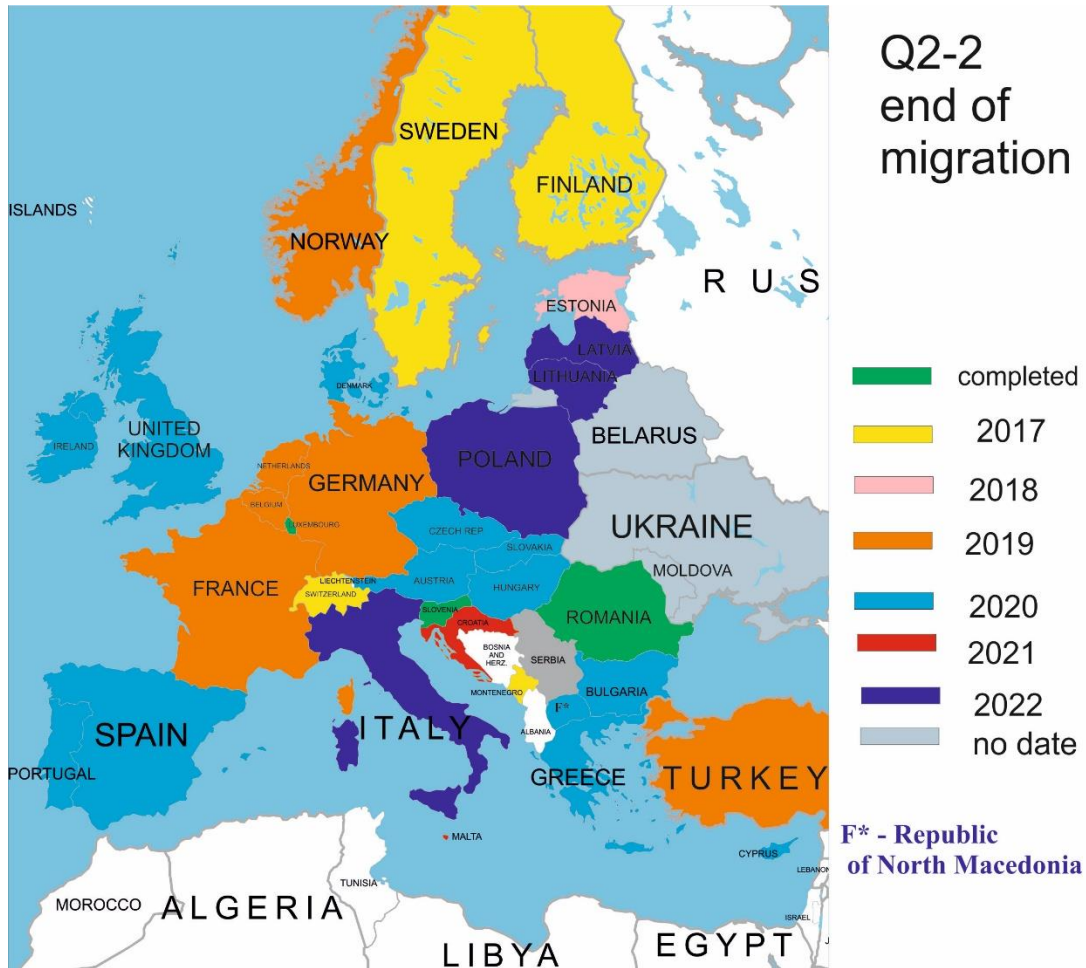
With respect to Balkan countries, Hungary informed the WG that they get the information from Bosnia and Herzegovina that although still using analogue TV, they will make effort to take the necessary steps for not causing interference in the use of MFCN. Concerning Serbia, Hungary got the information from Serbia that, there is still uncertainty on the timing for transitioning to the 470-694 MHz plan since there is a need for the Serbian government to adopt the new Allocation Plan and the procedure just started. Concerning Ukraine, a coordination has been started on MFCN bands but there is no information regarding when the transition will take place.

Next meeting

A meeting is planned on 19th September 2019 in Zagreb (HR).

ANNEX 1

Modified map of the foreseen dates for the end of migration



ANNEX 2

REPORT

RSPG WORKING GROUP
« GOOD OFFICES »
DUBLIN, 10th MAY 2010, 9H30

1. Situation regarding interference around Italy

TV interference issues

Actual interference from Italy to Croatia

Italy presented its list of actions to identify interference sources on channels 21, 39, 41, 45, and 51, which were commented by Croatia

- For channel 51 (San Marino GE-06 rights and HRV GE-06 rights), Italy explained that, for the stations located in Italy (not part of GE-06), the power of the stations allowed by Italy has to be within the envelope of Montalbo Rocca, so that the interference to Croatia will not be higher than the GE-06 envelope. According to Croatian measurements the levels from the stations in the area of Bologna, Ferrara, Pesaro, Padova, Treviso, Puglia or North Basilicata are between 10 and 20 dB higher than the GE-06 envelope. Italy and Croatia will request San Marino to provide the actual power of all transmitters in Italy and San Marino (including Montalbo Rocca) and check what is the simulated interference level received in Croatia.
- For channels 45, 21, 39, and 41 (regional programmes, subject to the Decreto Legge), Italy has started to identify the interfering sites, but this work is still ongoing. For certain identified sites, Italy simulated the interference scenario on the Croatian test points which is less than 28 dB μ V/m (using P.1546 with 1%). The results of the Italian simulations contradict the results of measurements carried out by Croatia since the measurements provided a higher level. Croatia provided, for several years, multiple harmful interference reports for these channels which detailed the measured interfering field strength levels with the identification of the interfering transmitters. AGCOM will provide the technical details of the test points to Croatia. The following two reasons could be possible if the simulation results will be confirmed:
 - Either the interference is due to exceptional propagation conditions;
 - Or the characteristics of the interfering transmitters are exceeding the authorized characteristics. Italy is therefore requested to investigate the matter.

It was noted that Italy will be switching off TV channels 50 to 53 in the Adriatic region, between the 1st September and 31st December 2021

- Italy will send the list of geographic coordinates and technical details of all transmitters that use channels 21, 39, 41, 45, 51 within the Italian Adriatic Regions to Croatia.

Request from Croatia to Italy to make available additional channels to enable transition to the final plan

Croatia will grant new licences to the public broadcaster (2 national MUX and 1 regional) in 2019 and needs several channels free of interference in the Adriatic part of Croatia.

- Channels 21, 22, 23, 43 - Phase 1 operation will start on 15 May 2019.
- Channels 27, 29, 34, 35, 41 - Phase 2 operation will start 1 October 2019.

These channels, except channel 43, were subject to the Decreto Legge, but Italy emphasized that at the time of the Decreto Legge, each channel was operated only in some parts of the Croatia's Adriatic coast.

These channels are going to be used along the Adriatic coast, so Croatia needs these channels to be released in all Italian Adriatic Regions (inside vector). Additionally, Croatia emphasized that they will continue operating the channels released through the Decreto Legge process and therefore these channels are not to be used by Italy for releasing the channels mentioned above. Croatia explained that they have changed the broadcasting plan in the Adriatic part of Croatia, i.e. with more frequency re-use, which explains the request for protection over the entire Adriatic part of Croatia.

For the private broadcasters (2 MUX), the term of the current authorizations is until 2021 and Croatia will use channels already used.

Italy indicated that, following a public consultation, some broadcasters announced that they could release some channels in advance, which could provide some flexibility with regard to the Croatian request. Italy will send the list of geographic coordinates and technical details of all transmitters that operate on channels 21, 22, 23, 43, 27, 29, 34, 35 and 41 within the Italian Adriatic regions, to Croatia.

It was concluded that a coordination meeting between Italy and Croatia needs to take place as early as possible in order to accommodate to the maximum extent possible the protection of all these channels in the Adriatic part of Croatia.

Other countries

Slovenia, Malta and France confirmed that they currently do not experience any interference problems.

France mentioned the need for coordination with Italy on channel 35. A meeting will be taking place next week.

TDAB interference issues

Italy stressed that AGCOM will develop the T-DAB plan which will be fully in line with Italian international rights (GE-06 + coordination agreements). AGCOM stressed that the final plan will therefore be dependent on the cross-border negotiations and urged any administration

having specific request regarding this final plan to coordinate with Italy (i.e. additional rights, conversion from DVB-T to T-DAB, etc.). Nonetheless, Italy was urged to undertake frequency coordination with other administrations to confirm any intention to use, in the future, any VHF assignments additional to the GE-06 or cross-border agreements.

Italy was reminded that their current T-DAB deployments are not in conformity with their GE-06 rights and consequently it was necessary for Italy to implement the T-DAB plan as early as possible.

Italy stated that some years ago, DAB “experimental” authorizations for some non GE-06 channels were given for nationwide use, without coordination with neighbouring countries and it is essential to maintain these authorizations for ensuring the DAB development.

T-DAB interference between Italy and Slovenia

Italy and Slovenia are currently discussing the protection of Slovenia from two interfering sites, Monte Porzus and Monte Grappa, with the aim of defining new projects for these two sites.

T-DAB interference between Italy and Croatia

Regarding the Italian projects on channels 12A, 12B and 12C and usage of these channels in Italy cross wide, Croatia sent a letter (CLASS: 344-07/18-05/08, REG. NO.: 376-09-18-0415. October 2018) to the Italian administration. According to this letter, the Croatian Regulatory Authority for Network Industries reported on the results of uncoordinated Italian T-DAB transmissions measured from July to September 2018. Such uncoordinated operation of Italian T-DAB transmitters was causing interference and was preventing the Croatian administration from introducing T-DAB networks in accordance with the international rights stemming from the GE-06 Plan.

Furthermore, in the same letter harmful interference on T-DAB block 10A (TRENTINO DAB1) was also reported.

Italy reported that it has submitted three projects concerning frequency blocks 12A, 12B and 12C to Croatia, which projects are deemed to protect Croatia (less than 40 dB μ V/m). Croatia will study how the effect of these projects on the interference situation.

T-DAB interference between Italy and France.

It was noted that channels 9B and 9C will be used soon for T-DAB in the South of France, while channel 9 was currently being operated by Italy at the border.

FM interference issues

Italy stressed that the solution for the FM plan is very much depending on the progress concerning T-DAB coverage and penetration.

FM interference between Italy and Slovenia

Italy sent to Slovenia a Pilot case regarding a new antenna project for the sites of Muggia and Beli Kriz. The Italian study shows that by applying the two new antenna patterns, the two sites can operate simultaneously without reducing their respective service areas.

Slovenia presented a document analyzing the Italian project. It was pointed out that the project for the Italian station was using an attenuation in the direction of Slovenia of 114 dB. This value was deemed to be unrealistic. Slovenia therefore stressed that the only solution to the interference problem was to change the operating frequency of the Italian station.

Italy stated their concerns about new AKOS authorizations to increase the power of some FM broadcasting stations from 5 to 40 dBW (Kuk, Beli Kriz, Nanos and Priloga) as shown in the documents made available by the Italian Judge of Trieste due to the legal dispute between Italian and Slovenian broadcasters. Slovenia responded that this is currently the only way to mitigate interference from Italy.

The meeting concluded that there was an urgent need for Italy and Slovenia to have a coordination meeting to investigate the issue of Muggia and Beli Kriz and to define solutions other than increase of power to solve the interference to Slovenia. Considering the current lack of enforcement power of Italy in the FM band, it was emphasized that broadcasters need to be involved in order to achieve win-win solutions.

FM interference between Italy and Croatia

Croatia provided proposals to limit the interference on 4 priority channels (Biokovo), focusing on co-channel interference. Italy will be considering these proposals and will be providing its response to Croatia. The Italian administration provided results of simulated field strength analysis for just 8 cases of interference to the Croatian station BLOKOVO but, according to the list of priority FM frequencies for Croatia annexed to the minutes of the last 'Good Office' working group meeting held in Rome, there were in total 33 cases of interference to Croatian station BLOKOVO. Out of this figure, a total of 13 co-channel interference cases are included.

Italy stressed that they do not understand certain Croatian measurement results with field strength above 70 dB μ V/m while the simulation values, after verification of the transmitter parameters are below 40 dB μ V/m. Italy and Croatia will exchange parameters of the simulation to investigate the reasons for these differences. Italy will provide the technical parameters of sound radio stations with Programme ID on which Croatia reported interference. In resolving reported interference case, Italy should focus on co-channel interference cases as already agreed in previous meetings.

FM interference between Italy and Malta

Malta is exploring the feasibility of carrying out a re-planning exercise of its FM sound broadcasting transmissions to strengthen the local signal in the interfered areas and at the same time minimising any spill-over effect on neighbouring countries. In this regard Malta is currently carrying a study to assess the technical and financial feasibility of implementing such a measure. Any political and social implications will also be assessed during the course of this study.

As a matter of course and prior to implementing any measure Malta will be seeking the frequency coordination approval of any affected country as required by international regulations.

The meeting welcomed this way ahead and invited Italy and Malta to hold bilateral discussions on this issue.

2. 700 MHz band (questionnaire and roadmap)

Croatia indicated that they did not yet approve the national roadmap. The proposal of the text of the national roadmap was prepared and was following Governmental procedure for adoption. HAKOM is not actively involved in the adoption procedure and thus it did not know the timing of its publication.

The outcome of the activity between Italy and Croatia impacts the implementation/feasibility of the roadmap. However, the EC representative stated that the publication of the roadmap should not be made dependent of the progress on coordination activity with Italy and that other countries facing such difficulties (ie, with countries outside EU) did not delay the publication of the roadmap.

The EC representative stressed that the roadmap is also important for other Croatia neighbouring countries. Hungary emphasized that they have already the necessary information and that this delay does not impact them.

An update of the questionnaire has been received from the Italian administration specifying new published elements. It will be posted on the RSPG website. Italy also explained that they will have to carry out an auction for 4 half-Mux in order to take into account the ratio of 1:2 which was used in the conversion of DVB-T rights into DVB-T2 rights. In some cases, the new rights will not correspond to a whole number.

Italy mentioned that AGCOM has on the 7th February 2019 published the new national plan for DTT transmission (PNAF 2019, decision 39/19/CONS), which substitutes the previous one (PNAF 2018) adopted on the 31.5.2018 (decision 280/18/CONS). The new plan, in accordance with the Budget Acts 2018 and 2019, GE06 and the Coordination agreements is fully in line with the Italian international rights. It can be found at:

<https://www.agcom.it/visualizza-documento/49fb9ca8-f42e-444c-9837-00ec497053d8>

It was noted that Croatia will also need to update its response, at least when the national roadmap will be published.

3. Cross border negotiations with countries outside EU

It was explained the Russia did not change its position and therefore no guarantee could be provided that Russia will cease its broadcasting transmissions in the 700 MHz band.

The representative of the Commission reported on a meeting with the Russian Vice-Minister where its "safety" issues (i.e. ARNS) were mentioned. A video-conference has been scheduled between Russia and the Commission on the 27th May and the representatives of

the concerned administrations were also invited to join. It was pointed out that during WRC-15, protection of ARNS from EU countries was achieved through bilateral agreements. However, some national issues (i.e. protection of ARNS from operators or refarming costs) may still need some national Russian considerations.

The EC received an official letter from Poland informing about a delay in migrating their broadcasting services to below 694 MHz until 2022 due to the cross-border issues. Some measurements and simulations from Poland showed that the interference from broadcasting on the channels 50 to 53 may result in Poland being unable to deploy IMT.

The EC representative stressed that Denmark expressed concerns about this delay. The meeting decided that the RSPG meeting should be made aware of this delay in order to ensure that all neighbouring countries would be made aware and would be in a position to discuss with Poland.

With respect to matters with North African countries, Italy reported no progress. Malta explained that it had submitted comments to a draft frequency coordination agreement with Libya. Malta expressed concerns on possible delays in the finalisation of this agreement due the current situation in Libya.

Hungary informed the WG that they get the information from Bosnia and Herzegovina that although still using analogue TV, they will make effort to take the necessary steps for not causing interference in the use of MFCN. Concerning Serbia, Hungary got the information from Serbia that, there is still uncertainty on the timing for transitioning to the 470-694 MHz plan. There is a need for the Serbian government to adopt the new Allocation Plan and the procedure just started. Concerning Ukraine, a coordination has been started on MFCN bands but there is no information on when the transition will take place.

4. AOB

Italy raised an issue regarding medium wave broadcasting, where a minor modification of the GE-75 right of Italy (move of less than 5 km) was rejected by Slovenia.

The meeting asked Italy and Slovenia to negotiate in good faith on this issue and to include this issue in the list of items to be discussed in their coordination meeting.

5. Date of next meeting

The next RSPG “good offices” meeting is planned the 19th September 2019 in Zagreb.