

EUROPEAN COMMISSION

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Connectivity
Radio Spectrum Policy Group
RSPG Secretariat

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RADIO SPECTRUM POLICY GROUP

PEER REVIEW REPORT

Foreword

The following 1st Peer Review Report results from the provisions of the Article 35 (8) of the Directive (EU) 2018/1972 of the European Parliament and of the Council of 11 December 2018 establishing the European Electronic Communications Code according to which indicates experiences and best practices collected on draft measures that fall within the scope of the comparative or competitive selection procedure pursuant to Article 55(2) and discussed by Member States and the European Commission through Peer Review Forums. In the period covered by the Report i.e. January 1st – December 31st 2021 four (4) Peer Review Forums were held on the basis of Article 35 of the European Electronic Communications Code:

- 23rd March 2021 Malta
- 10th May 2021 Croatia
- 22nd June 2021 Lithuania
- 24th June 2021 The Netherlands

In all of the above cases neither report according to the Article 35 (7) of the European Electronic Communications Code nor opinion according to the Article 35 (9) were requested by the Member States that asked to organize Peer Review Forum align with Article 35 (1) of the EECC. This Report takes into account the experiences and good practices raised during those Peer Review Forums.

In addition, it has to be noted that the RSPG received also two notifications under Article 35 of the European Electronic Communications Code without a request to convey a Peer Review Forum.

- 28th July 2021 Belgium
- 6th December 2021 Finland (Åland islands).

I. MALTA

1. Compliance of the draft measure with the Article 35 (4) of the European Electronic Communications Code.

The proposed measure foster competition in the implementation of next generation (5G) wireless networks and provision of the associated services on a national scale. In particular, the proposed measure aimed at implementing specific objectives of the European Electronic Communications Code in relation to radio spectrum use. These include, but are not limited to:

- the sharing of infrastructure,
- national roaming,
- joint network rollouts,
- security, and
- the provision of qualitative and quantitative information on the network and services to consumers.

The proposed measure is in line with the applicable radio spectrum harmonization measures adopted pursuant to the Radio Spectrum Decision which ensures that radio spectrum is managed and used efficiently as required by in particular, Article 45 of the European Electronic Communications Code. As a measure to safeguard the efficient use of radio spectrum and the avoidance of harmful interference, the national competent authority emphasised on the obligation of not causing harmful interference to other electronic communications networks including networks using radio spectrum in adjacent frequency bands. The proposed measure has been built on existing national spectrum management frameworks after taking due account of national needs as well as of regimes adopted in other jurisdictions. This ensured that the framework is consistent and provides regulatory predictability leading to enhance the competitive environment in the provision of electronic communications networks and services.

2. Promoting adequate reserve prices which reflect the minimum levels of fees for rights of use of radio spectrum.

- Reserve price benchmarking with other EU jurisdictions.
- 700 MHz band (€224,000 per paired 5 MHz channel). This fee regime is in line with the fees being charged for the grant of rights of use of harmonised

radio spectrum in the 800 MHz band in view of the likeliness of the characteristics of the bands. The entire 700 MHz band is being made available and this corresponds to six frequency blocks of 5 MHz paired spectrum each.

- 3.6 GHz band (€9,000 per 5 MHz channel). The proposed annual licence fee for this band has been determined following a benchmarking analysis of the base prices set across the European Union Member States, with the relevant adjustments to reflect national circumstances. Four frequency blocks of contiguous radio spectrum: 80 MHz is the minimum size of each block and 100 MHz is the maximum size of each block.
- 26 GHz band. In consideration of the fact that (a) the business models and use cases for the 26 GHz band are still emerging and (b) there is lack of market demand for the use of the 26 GHz band, the spectrum pricing analysis based on a benchmarking exercise of the fees paid in other jurisdictions adjusted to national circumstances are ongoing. 1.2 GHz of radio spectrum will be made available for assignment, comprising six lots of 200 MHz each. The remaining part of the 26 GHz band, corresponding to a total bandwidth of 2.05 GHz, will be reserved for future use.

The assignment process for the 5G pioneer bands will be triggered by market demand. A direct assignment procedure will be used if the demand for the radio spectrum will not exceed supply or following brokered meetings. A competitive (auction) procedure will be used if the demand for the radio spectrum will exceed supply. The main objective of the aforesaid brokered meetings is to match the radio spectrum demand with the supply and therefore facilitating the assignment procedure.

3. Avoiding spectrum scarcity by ensuring the assignment of the full amount of radio spectrum harmonised at Union level.

Radio spectrum in most of the bands is not considered as scarce and a considerable amount of radio spectrum remains unassigned in EU harmonised radio spectrum due to lack of market demand (1500 MHz, 1800 MHz, 2600 MHz). The radio spectrum holdings of mobile network operators did not reach the overall spectrum caps established in national spectrum management frameworks. Nonetheless, the entire

700 MHz and 3.6 GHz bands will be available for the provision of wireless broadband electronic communications services.

4. Providing in a non-discriminatory manner the possibility that fees for rights of use of radio spectrum are paid in instalments within the period of those right.

The fees for the rights of use of radio spectrum are paid either in annual or in quarterly instalments. This measure aims to assist spectrum holders by, in particular ensuring that the fees do not jeopardise investments and cash flow.

Spectrum hand-back, although not promoted, is also possible if duly justified and in cases where no spectrum scarcity was registered during the assignment stage. In the case of spectrum hand-back a risk-based adjustment may be levied on the fees paid to-date.

5. Using an individual authorisation regime for the 24,25-27,5 GHz frequency band which promotes its timely use including, in particular, one that is based on fast-track administrative procedures when applied to geographically limited rights of use.

An individual rights of use licensing approach is foreseen to be adopted for the radio spectrum that is being made available in the 26 GHz band.

6. Combining financial incentives with obligations or formal commitments to accelerate or to expand high-quality wireless coverage.

The proposed coverage obligations ensure that next generation wireless networks and services are available nationally by all operators within a twenty-four month time-frame.

7. Providing, subject to competition law, the possibility for the sharing of passive and active infrastructure, as well as for joint roll-out of infrastructure that relies on the use of radio spectrum.

The draft measure foresees that the licence conditions will:

- mandate passive infrastructure sharing where requested;
- allow active infrastructure sharing which can also rely on shared radio spectrum;
- allow commercial roaming access agreements; and
- allow the joint roll-out of infrastructures for the provision of networks or services which rely on the use of radio spectrum.

These conditions aim to incentivise prospective new market entrants and support further network deployment.

II. CROATIA

1. Compliance of the draft measure with the Article 35 (4) of the European Electronic Communications Code.

The proposed measure aims at ensuring spectrum for regional operators to continue and to develop or start a new business. Therefore proposed coverage obligations for underserved settlements and areas of the special interest would provide provision of mobile services to the consumers in a specific rural areas. Passive and active infrastructure sharing, that include national roaming act as an incentive factor to fulfil coverage obligations and distribute the financial burden among market stakeholders. The proposed measure ensures also the effective and efficient use of the radio spectrum as well as predictable investments for radio spectrum users due to the license duration and payment options.

2. Promoting adequate reserve prices which reflect the minimum levels of fees for rights of use of radio spectrum.

- A benchmark analysis of EU and EEA countries was used to calculate the reserve prices with the relevant adjustments to reflect national circumstances.
- Reserve price for 700 MHz band is discounted according to coverage obligations, while reserve prices for 3600 MHz and 26 GHz bands reflect values derived from benchmark analysis.
- 700 MHz band: 6 mln EUR for 2x10 MHz block.

- 3600 MHz band:
 - o 700 000 EUR for 10 MHz block nationwide.
 - o 1,9 -37,3 thsnd. EUR for 10 MHz block regional (depending on the population in each county/region).
- 26 GHz band: 1 mln EUR for 200 MHz block.
- Payment terms: one off payment or payment in maximum 10 instalments (first 10 years of licence duration) with annual interest rate of 3%.
- 3. Avoiding spectrum scarcity by ensuring the assignment of the full amount of radio spectrum harmonised at Union level.

All three Mobile Network Operators expressed high demand for radio spectrum in 700 MHz and 3600 MHz, including additional interest of operators for 3600 MHz regional usage, which was the reason standing by to auction whole available spectrum in these bands. Due to fact that MNO's and other operators expressed very limited demand in 26 GHz, 1 GHz of the radio spectrum in the upper part of this band, will be auctioned.

- 700 MHz band: 3 blocks of 2x10 MHz
- 3600 MHz band:
 - o 8 blocks of 10 MHz regional
 - o 32 blocks of 10 MHz nationwide
- 26 GHz band: 5 blocks of 200 MHz
- 4. Providing in a non-discriminatory manner the possibility that fees for rights of use of radio spectrum are paid in instalments within the period of those right.

General rule: to set annual payment option to ensure that the fees do not negatively affect investments and cash flow. In the proposed measure fees for right of use of radio spectrum would be payable in maximum 10 annual instalments with annual interest rate of 3%.

5. Using an individual authorisation regime for the 24,25-27,5 GHz frequency band which promotes its timely use including, in particular, one that is based on fast-

track administrative procedures when applied to geographically limited rights of use.

The proposed measure foresees an individual rights of use licensing to be adopted for the radio spectrum that is being made available in the 26 GHz, subject to the market demand.

6. Combining financial incentives with obligations or formal commitments to accelerate or to expand high-quality wireless coverage.

The proposed measure introduce such coverage obligations that will ensure that next generation wireless networks and services are available nationwide by all operators within a four year time – frame. Since the significant investment is expected to achieve coverage obligations linked to the radio spectrum in 700 MHz band, reserve price is adjusted accordingly which is considered as a financial incentive factor.

- 5G coverage for all licences in 700 MHz band:
 - o 90% of population in each urban area municipality by 31.12.2025.
 - o 25% of overall rural areas by 31.12.2025.
 - o 50% of overall rural areas by 31.12.2027.
 - o 99% of the total length of the highways by 31.12.2025.
 - o 95% of the total length of the selected international railways.
- Obligation of minimum base stations that have to be put in operation for 3600 MHz nationwide licences:
 - o Minimum 1 base station in each county by 31.12.2022.
 - o Minimum 200 base stations countrywide by 31.12.2025.
- 7. Providing, subject to competition law, the possibility for the sharing of passive and active infrastructure, as well as for joint roll-out of infrastructure that relies on the use of radio spectrum.

The proposed measure foresees that the licence conditions will:

- mandate passive infrastructure sharing where requested,
- mandate to provide MVNO access where requested

- mandate active infrastructure sharing and national roaming in the areas of special interest,
- allow active infrastructure sharing, commercial roaming access agreements,
- allow joint roll-out of infrastructures for the provision of networks or services which rely on the use of radio spectrum.

These conditions are meant to ensure efficient use of radio spectrum, incentivise prospective new market entrants and support further network deployment.

III. LITHUANIA

1. Compliance of the draft measure with the Article 35 (4) of the European Electronic Communications Code.

The proposed measure seeks to foster the development of next generation (5G) technology networks and provision of the 5G services in line with EU regulation. The coverage obligations set in the measure ensure the effective and efficient use of radio spectrum. Long license duration (after public consultation agreed on 20 years), predictable coverage obligations, and payment by instalments ensure stable and predictable investments for radio spectrum users.

2. Promoting adequate reserve prices which reflect the minimum levels of fees for rights of use of radio spectrum.

700 MHz band: A benchmark analysis of EU and EEA countries was used to calculate the reserve prices with the relevant adjustments to reflect a population and a purchasing power as well as considering restrictions stipulated by cross-border coordination. The reserve prices (5 000 000 EUR for 2x10 MHz FDD block and 3 000 000 EUR for 2x5 MHz FDD block) were approved before the auction announcement.

3. Avoiding spectrum scarcity by ensuring the assignment of the full amount of radio spectrum harmonised at Union level.

Part of the spectrum (2x10 MHz) is reserved for governmental emergency network. That is why the full amount of radio spectrum harmonised at EU level by paragraph 1(a) of Article 3 of the Commission Implementing Decision (EU) 2016/687, will not be assigned for mobile operators. However, the possibility to roll-out a hybrid emergency network, that would reduce of spectrum scarcity, is under consideration.

4. Providing in a non-discriminatory manner the possibility that fees for rights of use of radio spectrum are paid in instalments within the period of those right.

The fees for the rights of use of radio spectrum are paid in instalments within the period of license duration with annual adjustment depending on index of consumer prices of the past year.

5. Using an individual authorisation regime for the 24,25-27,5 GHz frequency band which promotes its timely use including, in particular, one that is based on fast-track administrative procedures when applied to geographically limited rights of use.

Taking into account that no demand from the market the 24.25-27.5 GHz frequency band is not going to be auctioned yet.

6. Combining financial incentives with obligations or formal commitments to accelerate or to expand high-quality wireless coverage.

Taking into account the specific situation with restrictions caused by cross-border coordination the combination of financial incentives with coverage obligation is not relevant for Lithuania.

7. Providing, subject to competition law, the possibility for the sharing of passive and active infrastructure, as well as for joint roll-out of infrastructure that relies on the use of radio spectrum.

Passive and active infrastructure sharing and joint rollout of infrastructure are allowed by The Law on Electronic Communications of The Republic of Lithuania (Articles 44 and 45).

IV. THE NETHERLANDS

1. Compliance of the draft measure with the Article 35 (4) of the European Electronic Communications Code.

The proposed measure is safeguarded through the general framework for awarding frequencies for mobile communications: Nota Mobiele Communicatie 2019/Memorandum on Mobile Communications 2019. Policies on spectrum assignments have been laid down in the 2019 memorandum on mobile communications with regards to offering a predictable environment for all stakeholders. Expressing the longer term scheme of spectrum assignments should help (possible) operators to plan their investments years ahead. This overall framework lays down the measures to be worked out in the specific assignment rules (auctions). The framework together with these assignment rules ensure effective and efficient use of the radio spectrum.

2. Promoting adequate reserve prices which reflect the minimum levels of fees for rights of use of radio spectrum.

For 3,5 GHz band: a benchmark analysis of auctions held in EU countries will be used to calculate the market value of the 3.5 GHz licenses. The benchmark will be adjusted to reflect national circumstances. Next step is to set reserve prices at adequate percentages of the market values of the different licenses.

3. Avoiding spectrum scarcity by ensuring the assignment of the full amount of radio spectrum harmonised at Union level.

General framework for awarding frequencies for mobile communications (Dutch Nota Mobiele Communicatie 2019, English version Memorandum on mobile communications 2019) expressed the scheme and planning of the assignment of the 700

MHz, 3.5 GHz and 26 GHz frequencies. The 700 MHz licenses were auctioned in July 2020, together with 1400 and 2100 MHz licenses in a multiband auction. Next step is to auction 300 MHz in the 3.5 GHz band as soon as possible and make available another 100 MHz for local licenses. The planning of making available 26 GHz frequencies are under consideration.

4. Providing in a non-discriminatory manner the possibility that fees for rights of use of radio spectrum are paid in instalments within the period of those right.

Participants in the auction in the multiband auction in 2020 were being offered to choose for payments in two yearly instalments, i.e. one half of the total amount directly after the auction, and the other half one year after the auction. The same arrangement could be used for the 3,5 GHz auction.

5. Using an individual authorisation regime for the 24,25-27,5 GHz frequency band which promotes its timely use including, in particular, one that is based on fast-track administrative procedures when applied to geographically limited rights of use.

The preparation of the consultation on possible authorization regimes for the 26 GHz-band are ongoing. These regimes include national and local licenses. The plans take in consideration the distribution of at least 1 GHz before the end of 2022.

6. Combining financial incentives with obligations or formal commitments to accelerate or to expand high-quality wireless coverage.

Financial incentives are not applied. Acceleration and expansion of high quality wireless coverage is ensured by ambitious coverage and service obligations in the multiband auction for operators that acquired 700 MHz licenses. In practice these obligations ensure nearly full national coverage at high quality levels (at least 10 Mbps for any user anywhere in 2026). Due to the different characteristics of the 3.5 GHz frequencies service obligations will not be applied. The 3,5 GHz frequencies are however subject to a general usage obligation.

7. Providing, subject to competition law, the possibility for the sharing of passive and active infrastructure, as well as for joint roll-out of infrastructure that relies on the use of radio spectrum.

Sharing of passive and active infrastructure is generally allowed, subject to the conditions of competition law. To facilitate the use of these possibilities the Authority for Consumers and Markets has published guidelines for mobile network sharing.