# Commission Recommendation on a common Union Toolbox for Connectivity

# Need for urgent action to boost connectivity

**Connectivity proved a pillar of resilience and recovery for economy and society in times of crisis; It is a key asset of Europe's competitiveness**

**Political imperative for action:**

Council of the European Union

**Telecom Council** Conclusions (9 May 2020) call on the Commission and the Member States to improve investment conditions, including through: […]

(ii) awarding 5G spectrum frequencies by the end of 2020

(iii) accelerated roll-out of very high capacity infrastructures, including fibre and 5G"

**State of the Union** Address 2020 (16 September 2020)

"If we are striving for a Europe of equal opportunities, it is unacceptable that 40% of people in rural areas still do not have access to fast broadband connections.[…]

The investment boost through NextGenerationEU is a unique chance to drive expansion to every village. This is why we want to focus our investments on secure connectivity, on the expansion of 5G, 6G and fiber."

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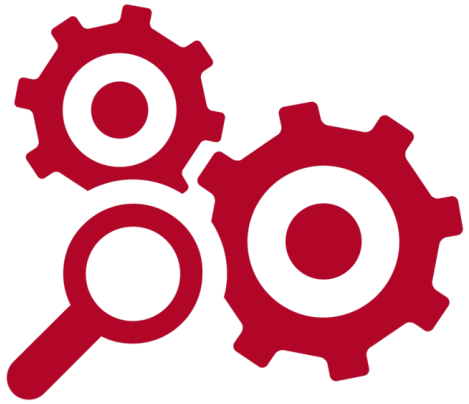
# Investment-related issues to be urgently addressed

## Network cost reduction

- Cumbersome permit granting procedure
- High permit fees
- SIP not used to its full potential
- Limited access rights
- Lengthy and inefficient procedures for dispute resolution.



## Coordinated spectrum authorisation

- Delays and inefficiency in assigning 5G pioneer bands
- Financial burden on operators from auctions
- Promoting cross-border industrial use cases (transport, manufacturing)

# Five areas to reduce the cost and increase the speed of VHCN deployment

**Permit granting**

- Compliance with 4 months DDL for all permits including rights or way, tacit approval
- Fast track and permit exemptions
- SIP as single entry point & active role in coordinating and monitoring
- Electronic applications
- Permit fees objectively justified, transparent, non-discriminatory and proportionate

**Transparency of physical infrastructure**

Enhanced Single Information Point:

- More information: georeferenced location, spare capacity
- More contributors: public sector bodies and network operators
- Integration of information from different sources

**Environmental Sustainability**

- Criteria for assessing the environmental sustainability of future networks
- Incentives for green deployment
- Efficient fulfilment of environmental impact assessment requirements

**Access to physical infrastructure**

- More access rights, to physical infrastructure controlled by public bodies

**Dispute resolution**

- Shorter timeframe, publication
- Guidance on conditions and charges

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# Three areas of enhanced spectrum coordination

**Timely assignment of 5G pioneer bands**

- Avoid delays
- No impact on adjacent Member States
- Use Peer Review

**Pro-investment terms of award procedures**

- Appropriate pricing
- Payment in instalments
- Fast-track procedure for mm-waves
- Incentivise coverage

**Authorisation of cross-border 'vertical' use cases**

- Identify use cases (transport, smart factories)
- Agree on spectrum bands and award conditions (best practice)
- Conduct joint authorisations (Art. 37, Code)

# Process for developing the toolbox led by Member States

## Development and application of the toolbox

- **Member States to identify/share** best practices
- **BEREC/RSPG** input as appropriate & from NRAs, BCO network and SIPs
- **Member States** to agree on the toolbox of (common) best practices
- **Member States** to conduct joint authorisations for cross-border use cases

## Member States to report on

- National roadmap for toolbox implementation
- Toolbox implementation

# Light Deployment Regime for Small-Area Wireless Access Points (SAWAPs or Small Cells)

# Implementing Regulation (IR) of small cells

# (EU) 2020/1070 of 20 July 2020

# EMF AND IR OF SMALL CELLS

With regard to the exposure of the general public to electromagnetic fields (EMF), we would like to reaffirm that this IR does not interfere with the right of national competent authorities to set and enforce national limits on EMF in accordance with Article 45(2)(h) and Article 58 of the Code.

# Emission Power (technical parameter)

- Reference to the relevant EU standards for SAWAP compliance (when put into service) with the EMF exposure limits set out in the Council Recommendation 1999/519/EC.
- EU harmonized standard EN 50401:2017. EU standard EN 62232:2017.
- No use of active antenna systems (future review).
- Only installation classes E0, E2, and E10 in Section 6.2.4, Table 2, of the EN 62232:2017 are included, namely:
  - Class E0 for touch-compliant SAWAPs of very low power (≤**250 mW EIRP**)
  - Class E2 specifies a power limit of **2W EIRP** and a distance threshold for the antenna of a few centimetres from people.
  - Class E10 specifies a power limit of **10W (EIRP)** and a minimum antenna height above the general public walkway of 2.2 m.
    - Class E10 imposes the overall output power limit of **10W EIRP**

# Aesthetics (physical constraint)

Two categories of SAWAPs:

1. **Fully integrated (invisible to the general public)** - not subject to further physical limitations.

2. **Visible and mounted** to the supporting structure) – subject to specific physical constraints – a maximum volume of **30 litres**, including the antennae (which may be separately installed or not), low visual impact and weight which would not impose structural reinforcement of the supporting structure.

- **Installation class E10** shall be only deployed outdoors or in large indoor spaces, which have a ceiling height of at least 4 m.

- The increased volume limit of 30 litres is considered appropriate taking into account the results of the relevant study, industry input and current market practice. The choice of this limit it should facilitate colocation (e.g. a neutral host model) and innovation.

# Notification mechanism

The imposition of a notification mechanism aids enforcing the implementation of the output power and volume limits in the implementing regulation.

In particular:

- It would ensure that EMF limits are respected and give the means to the Member States to effectively control the EMF exposure, including the cumulative exposure which may be caused by the installation of several small cells.
- It would allow the national competent authorities to determine the areas in which a level of concern might be reached, and thus address any citizens' concerns. This is in line with Recital 139 of the Code.

In addition:

- This IR operates in accordance with the principle "first come, first served", both from the point of view of visual cluttering and EMF protection.
- The notification requirement does not go beyond Article 57 of the Code and is to ensure that it falls within the scope of the implementing regulation. This provision is ancillary and inextricably linked to the main purpose of the implementing regulation, which is to set the characteristics of the small cells which may be installed without a permit.

# Article 4 (Monitoring and Reporting)

Why?

- Since EN 62232:2017 does not cover small cells with active antenna systems, which is acknowledged by the industry in the second public consultation, such small cells will not be covered by the draft implementing regulation in order to ensure protection of public health.

- The further development of the European standard EN 62232:2017, also in view of the new ICNIRP guidelines released in March 2020, in order to cover small cells installations employing active antenna systems may require a revision of the implementing regulation at the appropriate point in time. Therefore, this Article is important for the inclusion of the active antenna systems once standardisation has been fully completed.

# Small cells in the real world

# Thank you

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