GSMA comments: BEREC report on infrastructure sharing as a lever for ECN/ECS environmental sustainability

General comments

GSMA welcomes BEREC's 'Draft report on infrastructure sharing as a lever for ECN/ECS environmental sustainability'. BEREC's positive stance on network sharing agreements is key for telecom operators' efforts to reduce carbon emissions.

We welcome BEREC's acknowledgment of the need to improve the assessment of the environmental impact of policy decisions and the way those impacts are weighed against other regulatory objectives.

While it's important to enhance understanding of this issue and incorporate environmental considerations into future policy and regulatory decisions, sustainability efforts should aim to support telecom operators rather than add additional regulatory or bureaucratic challenges.

The GSMA highlights the environmental benefits of voluntary network sharing and emphasizes the potential role of competition policy in unlocking these benefits.

Comments on BEREC Report

The benefits of infrastructure sharing

Infrastructure sharing is essential to the decarbonization strategy of telecom operators, directly aligning with key EU environmental goals.

- Climate mitigation: Infrastructure sharing reduces energy consumption and emissions by minimising the number of active mobile sites, leading to lower overall energy use without compromising service quality or coverage. Many installed network components still consume nearly the same amount of power during off-peak hours as they do at full load. RAN sharing allows multiple providers to utilize the same equipment and resources, significantly reducing overall energy consumption and minimizing redundancy.

- Climate adaptation: Reducing infrastructure duplication enables operators to redirect investments into building stronger, more resilient networks capable of withstanding the impacts of climate change.

- Lower impact on nature: Reducing the need for additional electronic network equipment, decreases the strain on natural resources and lessens the overall environmental footprint of network operations. Infrastructure overbuilding can lead to emissions from manufacturing and construction activities. Avoiding such overbuilding delivers both environmental and economic benefits.

- Reduction of e-waste: Fewer infrastructure sites lead to less electronic waste generated during the equipment lifecycle, contributing to more sustainable resource use.

Voluntary RAN sharing agreements allow parties to meet the high expectations on investment in terms of timing, quality and coverage and improve mobile coverage with minimum environmental impact. RAN sharing agreements contribute to EU environmental goals, as they reduce the number of mobile sites (without any impact on service quality or coverage) and thus their environmental impact. They also contribute to reduced energy consumption.

There are studies supporting BEREC's conclusion – a collaborative approach to RAN sharing not only promotes efficiency and flexibility but also results in significant energy savings - in an active RAN sharing case study, each MNO benefits from approximately 30% energy OPEX savings.[1]

To fully unlock the environmental benefits that infrastructure sharing can deliver, further incentives could motivate commercially agreed infrastructure sharing, such as providing greater legal certainty to market actors on mobile network sharing.

Although commercially agreed network sharing agreements have merit, depending on market context, in some cases, larger benefits of network sharing can be achieve through in-market consolidation. Market consolidation can offer a more streamlined approach to achieving these environmental and operational benefits by consolidating decision-making and optimising network management. A more lenient stance on in-market consolidation could enable operators to fully unlock these benefits, particularly in investment-challenged markets where standalone voluntary agreements may fall short.

Balancing sustainability and competition

Considerations concerning infrastructure sharing must balance sustainability goals with competition aspects and market conditions.

It is important to emphasize the preference for voluntary agreements that amplify synergies, rather than imposing obligations that may distort the market and potentially add regulatory burden.

The current competition framework could be improved to encompass sustainability matters and provide a more secure and predictable regulatory environment for mobile network sharing.

The 2023 revision of the Horizontal Block Exemption Regulations and Horizontal Guidelines by the European Commission marks a significant step forward. These Guidelines include a dedicated chapter on mobile telecommunications infrastructure sharing agreements. The Commission acknowledges the potential benefits of network sharing agreements such as cost reduction, faster roll-out of new networks and technologies, wider coverage or denser network grids, which lead to improvements in the quality of services and to a wider variety of products and services. Infrastructure sharing agreements may also allow the emergence of competition that would not otherwise exist (paragraph 260). The Guidelines also introduce an assessment framework suggesting certain criteria the fulfillment of which would allow to conclude that the network sharing agreement *prima facie* is not likely to have restrictive effects on competition.

[1] Source: Green Future Networks: A Roadmap to Energy Efficient Mobile Networks - NGMN

The Guidelines acknowledge several benefits of network-sharing agreements, but they do not explicitly recognize their environmental advantages, which are not included in their competition assessment. Furthermore, the current Guidelines remain insufficient to provide the necessary legal security that market actors require to make informed investment decisions in network-sharing agreements. This omission represents a missed opportunity to integrate sustainability considerations into the evaluation framework as well as to encourage all efforts of telecom operators in this direction.

The current framework could be improved to encompass sustainability matters and to move one more step forward in providing a more secure and predictable regulatory environment for mobile network sharing:

- Sustainability effects in horizontal cooperation: The Horizontal Guidelines do not consider sustainability effects in the analysis of horizontal cooperation agreements under Article 101 (3) TFEU. Green Deal objectives could be met in many horizontal cooperation agreements, and efforts to contribute to such objectives should be considered as a pro-competitive effect in the general appraisal of horizontal cooperation agreements. The EC should therefore consider sustainability efficiencies in the overall assessment of the pro-competitive effects of horizontal cooperations agreements.

- Acknowledgment of the environmental benefits brought by mobile infrastructure sharing agreement: We welcome the fact that the 2023 Guidelines acknowledge different benefits of mobile infrastructure sharing agreement in terms of improvement of quality and consumer choice, faster roll-out and wider coverage. The Commission should extend the list of these benefits to explicitly acknowledge also positive environmental impact of mobile infrastructure sharing agreements.

- Refinement of assessment criteria: Although the criteria established in the 2023 Guidelines (paragraph 264) provide useful guidance for assessing mobile infrastructure sharing agreements, some aspects require further refinement to include also sustainability dimension:

  a) The environmental benefits brought by the mobile network sharing agreement, such as energy saving and carbon emission reduction resulting from such sharing, should be one of the factors relevant for the individual assessment of mobile network sharing agreements,

  b) Geographic scope and coverage of the network sharing agreement should be assessed taking into account the pro-competitive environmental benefits resulting from mobile network sharing. If such benefits are more important for nationwide network sharing, then this should be factored into the competition assessment of such sharing agreements.

Environmental benefits in merger analysis

BEREC could explicitly mention in the report that merger analysis could better incorporate the evaluation of environmental benefits and highlight their importance.

BEREC should highlight the importance of evaluating these benefits and their role in achieving sustainability goals as merger synergies also allow to materialize significant environmental benefits.

Methodology for environmental impact assessment/ data collection

We agree with BEREC that it would be beneficial better understand the positive environmental impacts and weigh them against any potential competition concerns. Developing a uniform 'methodology' could proof challenging. We urge BEREC to maintain a flexible approach that takes into account diversity across regions, markets, and technologies. Given the complexities introduced by these different factors, any methodology should remain adaptable, ensuring it can accommodate these differences while supporting informed decision-making.

We encourage BEREC to compile existing studies analysing the environmental benefits of infrastructure sharing to inspire innovative approaches. For example, the study "Network Sharing and its Energy Benefits: A Study of European Mobile Network Operators" concludes that infrastructure sharing can reduce the energy required to operate mobile networks by 15% to 60% compared to scenarios where each operator manages a separate network.

We encourage BEREC to conduct or commission new studies to quantify the environmental benefits listed in the report, using different scenarios of traffic growth and network evolution.

Regarding data collection by BEREC and National Regulatory Authorities, BEREC should consider the already intricate framework of sustainability reporting obligations. The report mentions that some countries, like France, impose specific environmental protection obligations. It also suggests that while the absence of a clear mandate for National Regulatory Authorities to enforce environmental objectives at the EU level does not seem problematic, further guidance could be useful. As seen in France, it is essential to streamline and clarify reporting obligations, in particular when data requests to electronic communication providers come from multiple sources (e.g. different agencies or authorities, compliance with different laws).

Evolving tech landscape

BEREC's report objectives are valuable, however the document assumptions are built on outdated framework of network topologies.

BEREC's report quotes an outdated framework, failing to reflect major market developments. It does not fully take into consideration the evolving telecom landscape, particularly the role of TowerCos and aggregation, the impact of fluctuating and increasing EU energy prices, and the supply chain availability challenges. The legacy categories of active and passive sharing are less relevant now that Mobile Network Operators are rolling out 5G SA with QoS provisioning, along with AI control of the RAN compute load that optimizes energy consumption.

The draft fails to address these major market developments. NetCo/TowerCos are mentioned briefly, but without acknowledgment of the major role these companies now play in infrastructure sharing mechanisms. Equally, there is little mention of OpenRAN, virtualized networks, cloud RAN, and MEC, which are technologies Mobile Network Operators may or may not employ according to their market needs.

Regulatory frameworks should remain technology-neutral and flexible, allowing operators to adopt solutions that best align with their market conditions and strategic priorities. For instance, while OpenRAN and virtualised networks can enhance energy efficiency, their adoption must be market-driven rather than mandated.

Sustainability and urban planning

Infrastructure sharing is, and should remain, voluntary to ensure competition and market-specific flexibility. Imposition of sharing on sustainability grounds can reduce competition in the ubiquity of access. Mobile Network Operators need flexibility to decide what is in their balanced interest depending also on market specificities.

The points about the lack of data and measurement tools for Mobile Network Operators to gather sustainability metrics are well made. However, TowerCos also need to provide operators with relevant data on energy consumption and other sustainability indicators to enable comprehensive assessments.

Sensitivity in urban planning for historical and cultural reasons is important, but regulatory measures should not inadvertently hinder sustainability. Regional authorities should incentivize sharing with common civil works and structures rather than limiting EIRP (cell/mobile power levels).