BoR PC11 (18) 19

Comments to BEREC's draft Common Position on Mobile Infrastructure Sharing

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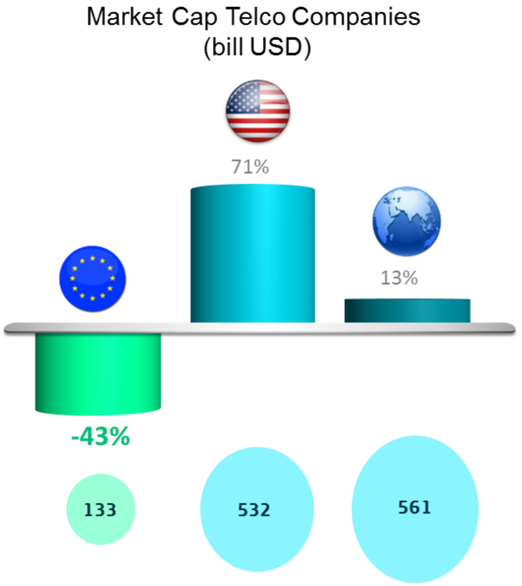
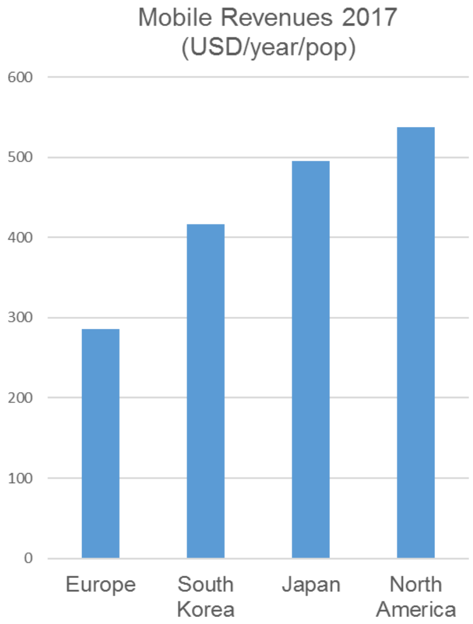
Mobile infrastructure sharing is key to fulfil the EU 5G vision

The topic of BEREC's Common Position is in Telefónica's view timely and relevant. The EU Public Authorities have very ambitious plans for mobile connectivity, and attaining them in a sustainable and efficient way requires a relatively high degree of infrastructure sharing by mobile operators that compete for customers in the retail market.

Upgrading mobile networks in Europe is a challenging endeavour. Revenues per pop are much lower than in Korea, Japan or North America. Demand and willingness to pay for new 5G services is still uncertain, and investors view European stocks with scepticism.

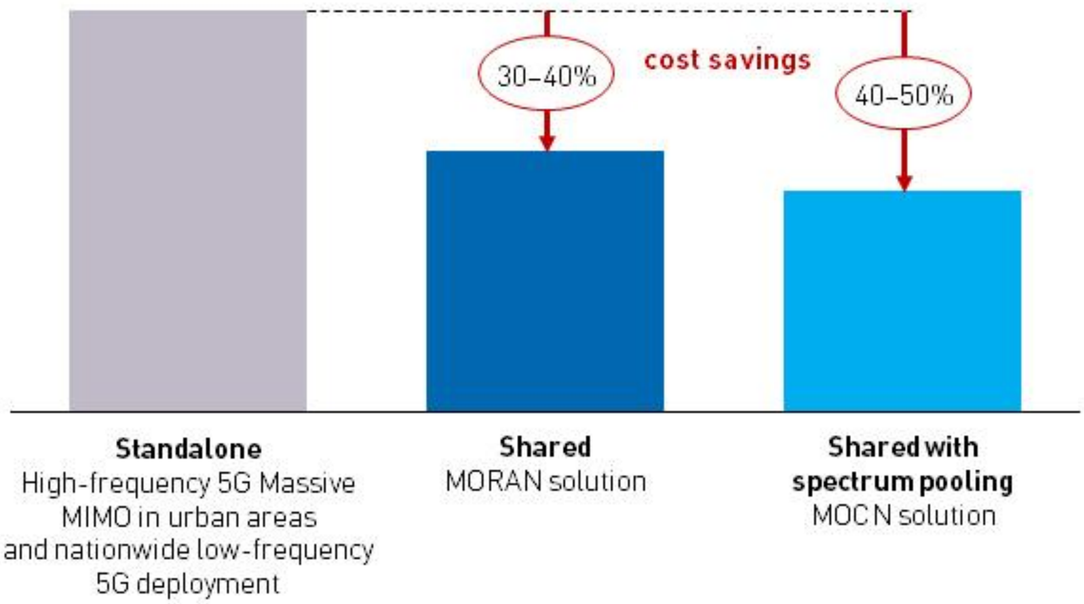


Source: Bloomberg – Market cap as of December, 31st 2012 and October 5th, 2018. Includes T-Mobile USA



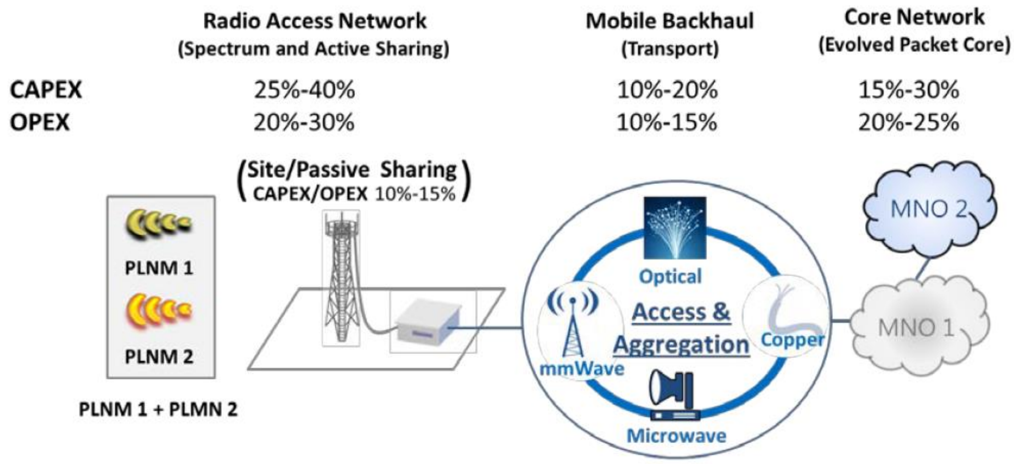
Source: OVUM

Adding to that, the required increase in the capillarity of radio networks in dense areas, and the aim to enhance coverage in remote towns and roads, both point to infrastructure sharing as a facilitator of significant synergies. Analysys Mason, for example, estimates that sharing the access network (including backhaul) through a MORAN agreement reduces the total cost of a nationwide macro deployment by between 30% and 40%. Extending the sharing scope to spectrum frequencies can save up to 50%.



Source: Analysys Mason (2018)[1]

Coleago provides similar conclusions, disaggregating the savings across the different network components.



Source: Coleago, via Samdanis et al. [2]

If the analysis were limited to remote regions or small cell environments, the benefits of infrastructure sharing as a percentage of total standalone costs would obviously be much higher. In these environments in particular, the potential benefits of sharing are extremely large, and in our view clearly outweigh the drawbacks.

On the face of it, the comments of Telefónica will focus on how the BEREC Common Position on Mobile Infrastructure Sharing can be instrumental in fostering private investment.

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[1] http://www.analysysmason.com/About-Us/News/Newsletter/unlocking-5g-Apr2018/

[2] https://www.researchgate.net/publication/301799845_From_Network_Sharing_to_Multi-tenancy_The_5G_Network_Slice_Broker

BEREC's CP should acknowledge that differentiation can be preserved in active sharing deals

Whilst recognizing the efficiencies that infrastructure sharing can bring about, the BEREC draft opinion is in our view unjustifiably pessimistic regarding the possibilities to differentiate and compete under an active sharing agreement.

New technologies like network virtualisation and slicing facilitate sharing of active infrastructure without compromising differentiation. Indeed, the possibility to tailor flexibly the quality provided to different parties sharing an active infrastructure is at the core of ongoing network sharing standardisation efforts in 3GPP[3].

We strongly encourage BEREC to amend:

- section 2.2.2. on the potential drawbacks of infrastructure sharing;
- the description of active sharing in CP1; and
- Section 4.2. doing an assessment of active sharing

to take full account of the most recent standardisation initiatives in 3GPP and the future possibilities to differentiate services under an active sharing deal.

BEREC's CP should help fostering reasonable expectation of approval for voluntary sharing deals

Most importantly, we would see value in a BEREC common position that increases the legal certainty of voluntary agreements and reduces the burden for operators when clearance is required.

We believe the sharing scenarios described by BEREC are in many cases not restrictive of competition within the meaning of article 101 (1) TFEU, and would generally qualify for an exception within the framework of article 101 (3). They should therefore only be banned in exceptional situations. Our reading of the draft Common Position is that BEREC broadly shares this view, with the caveat introduced above regarding active sharing. Unfortunately, even when many BEREC members have competences on the application of competition law, the draft text explicitly says (p.8 and p.26) that the remit is limited to NRAs acting under the electronic communications legislation, which grants NRAs powers to impose sharing, but with little exceptions does not deal with the assessment of voluntary agreements. A message from members of BEREC indicating that they will apply the guidance from the Common Position when doing or informing competition law assessments of agreements would therefore be of value.

In the specific context of spectrum sharing, where the EECC grants competent authorities the power to clear voluntary agreements ex-ante, we find the draft is not detailed enough to provide certainty to investors seeking guidance. The Common Position would in our opinion benefit from a more explicit BEREC statement offering a reasonable expectation of approval for voluntary deals, possibly subject to certain predefined concrete circumstances taking place. For example, a presumption of

[3] Op.cit

approval could apply when the agreement is limited to remote areas or small cell environments.

BEREC's CP should highlight the role of NRAs as facilitators of voluntary agreements

Telefónica has a strong preference for operators voluntarily agreeing the terms of the sharing agreements. When the financial or operational terms of the agreement are set by an external party, the risk of suboptimal outcomes is very high. The technical solutions imposed tend to be more complex than necessary, and they are difficult to evolve. Also, when setting the financial terms of the agreement the external party might not strike the right balance between achieving a fair distribution of the synergies and ensuring that the investments are actually made.

When evaluating the case for intervention, the relevant question is whether and why the benefits of sharing would not be achieved through voluntary deals. In our view, operators negotiating freely should be expected to address sharing deals in which the synergies are high. The set of tools at their disposal is wide and diverse, ranging from a standard wholesale access agreement to sophisticated co-investment risk sharing schemes. The incentives are also generally aligned and in place, given the reduction in the costs of deployment.

At a high level, operators might occasionally not reach a deal due to high transaction costs (negotiating and updating the agreement takes time and resources), or strategic behaviour by one of the parties (the benefits of exclusivity can be higher than the benefits of sharing). Public initiatives related to infrastructure sharing are therefore most valuable, in our view, when directed towards reducing transaction costs and preventing strategic behaviours, rather than imposing ex-post access to an asset.

At a more practical level, we see two specific relevant areas where NRAs can, within their competences, be instrumental in making welfare maximising sharing deals possible. One is fostering deals that reduce the cost of meeting coverage obligations in remote and challenging areas. The other is facilitating small cell deployments through cooperation among operators and managers of public infrastructure (bus stops, lamp posts, etc.). The common position touches briefly on both of them when discussing situations in which infrastructure-based competition is not feasible[4]. Since the topics are common to all BEREC members, we believe more concrete guidance would ensure consistency at EU level and be valuable to operators and Member States.

BEREC's CP should provide guidance on how Sharing Mobile Infrastructure can reduce the burden of coverage obligations

When attaching coverage obligations to spectrum licences, Article 47 of the code calls on Member States to facilitate sharing of passive and active infrastructure, national roaming and joint roll out. Recital 124 justifies this policy:

"Network infrastructure sharing, and in some instances radio spectrum sharing, can allow for a more effective and efficient use of radio spectrum and ensure the rapid deployment of networks,

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[4] CP3 in page 17 of the draft text

especially in less densely populated areas. When establishing the conditions to be attached to rights of use for radio spectrum, competent authorities should also consider authorising forms of sharing or coordination between undertakings with a view to ensuring effective and efficient use of radio spectrum or compliance with coverage obligations, in accordance with competition law principles."

The BEREC Common Position is in our view a useful instrument to shed light on how Member States intend to put in practice the provisions of article 47. In particular, it would in our view be valuable to develop best practice and guidance on how the coverage targets are integrated in the award rules. Drawing on our experience in several EU countries, we wish to note the following:

- Given the ambitious connectivity targets set by the EU[5], imposing individual obligations on several licensees and requiring that the obligations be met with parallel infrastructures would be extremely inefficient.

- Attaching the obligation to a single block, and letting bids in the auction determine the operator that assumes the commitment, creates a large gap in value between blocks. This carries a non-trivial risk of the coverage block going unsold, and distorts the price of all the usage rights, which now depend on the cost of meeting the coverage obligation, rather than on the intrinsic value of the spectrum for the marginal user. We discourage this practice, and if pursued we recommend to establish a discounted reserve price for the coverage lot, to reflect the estimated cost of meeting the coverage obligation.

- We find value in approaches that impose the obligations on two or more licensees and foster cooperation among them after the award to deploy the infrastructure at the lowest possible cost. The shared obligation eliminates the benefits of exclusivity and facilitates a voluntary agreement. We welcome the fact that countries like Germany, Spain, the UK, Italy or France have followed this policy.

- When the obligations are shared, liability for non-compliance should be designed carefully. Shared or unclear liabilities create incentives for free riding, increase the risk of non-compliance and make the agreement more difficult to conclude. We find operators will in general, as part of the sharing agreement, be able to agree on a distribution of responsibilities. By sanctioning those agreements Regulators can reduce uncertainties, promote more efficient deals and ensure timely deployments.

BEREC's CP should reduce uncertainties for infrastructure sharing in small cells

The draft Common Position briefly touches on the possibility of "non-replicable sites or deployments" (p.17 and p.20), in particular associated to "indoor deployments and significant deployments of small cells". It concludes that "in those situations active sharing could be objectively necessary for competition among MNOs, and competent authorities might" … "even mandate active sharing".

[5] See for example article 3 of the UHF Decision (EU) 2017/899

We fully agree with BEREC that indoor deployments and small cell environments provide large scope for active sharing, because the efficiencies can be very large. In fact, sharing of active equipment can be extremely helpful mitigating interferences in mmwave frequencies when there is site-colocation, increasing the incremental benefits of active sharing vs passive sharing.

However, in our opinion voluntary deals, possibly brokered by a neutral host that manages the shared infrastructure[6], are the best approach, for the reasons expressed above. The reference in the BEREC CP to “mandated active sharing” imposed by competent authorities can be interpreted as an access obligation on first movers, that in our view would be counterproductive. We suggest BEREC to soften the text of the CP accordingly, and explore how voluntary deals, as opposed to mandated sharing, can be incentivised.

[6] See https://scf.io/en/documents/191_-_Multi-operator_and_neutral_host_small_cells.php