## BEREC: Mobile infrastructure sharing

Stephen Pentland, Vodafone Group, 16th November 2020



What is the context for network sharing?

At 4-5%, returns on capital employed by mobile operators in Europe are lower than our cost of capital. This makes accessing further investment capital from investors or lenders - to extend network reach and roll-out 5G - extremely challenging.

At the same time, operators are spending significant amounts on tactically expanding network capacity and resilience, in order to meet the changing demands of customers during the pandemic. We also face the threat of equipment swap-out costs as we deal with the trade dispute between the US and China, and our procurement teams are having to negotiate with fewer suppliers with strengthened negotiating positions, at least until Open RAN becomes viable.

Neither are we seeing any trend of material improvement in sector revenues - indeed, the pandemic lock-down has eroded some existing revenues. And a small number of regulators in Europe still see the licensing of new entrants as key to pushing down retail prices further, even if those measures risk being in contravention of the EU Framework and State Aid rules.

All of this creates headwinds for the sector in Europe and its ability to invest.

So, any methods that help reduce the cost burden on operators, while helping to extend network reach and accelerate the rollout of 5G, is to be welcomed - as long as, of course, competition between MNOs remains effective.

To that extent, the BEREC's 2019 Guidance has been helpful in setting out the broad principles to achieve this.

In practice, Vodafone's approach to active sharing has been to prioritise sharing outside urban areas – that's where the biggest savings can be made, and means our network budget will stretch further - and some marginal coverage areas have the chance to become economically viable, helping improve digital inclusion.

To build even further into uneconomic rural areas, alongside sharing, there is a valuable role to be played by state aid, which we are already seeing in some markets, and now also benefitting from the European Recovery funding. We see the shared open passive rural networks, beginning to appear in Germany and the UK, for example, as helpful case studies in this regard.

At the same time, keeping our networks in urban areas independent means we remain in full control of our plans to roll-out the latest technologies and services, without being unnecessarily hindered or constrained by partners (or vice versa).

This is an important point, because once sharing creates any constraint on unilateral investment ambitions, that raises the question of competitive impact. And that constraint could be simply because sharing causes parties to roll out at the speed of the slowest party, or

because neither party has much incentive to roll-out, if in practice there's little likelihood that the other party will try to outmanoeuvre them and roll-out faster.

The best safeguard to these risks is to examine if there is still sufficient competitive pressure to roll out, from parties outside the sharing arrangement. And that is where a degree of judgement is necessary.

You can imagine that in a three player market, if the two largest players share extensively, the third player that is excluded might not have sufficient power to exert external competitive pressure on the sharers.

But the external competitive pressure would be increased if the external player had a strong market position in its own right, or had the option to sharing with a 4<sup>th</sup> player, or if the extent of sharing was in some way limited, for example, limited to outside urban areas, or limited to older legacy technologies.

In other words, the more effective the external market competition is, the more extensive the parties' sharing typically could be, as they will retain an incentive to develop their networks to keep up with the competition.

The other key consideration is to examine the investment benefits of sharing, relative to the counterfactual. In other words, if sharing makes it possible to make network investments - that would simply not be viable or possible in the absence of sharing - that has merit, and that needs to be weighed carefully alongside any question of competitive pressure.

We've already seen that sharing makes roll-out in some rural areas viable where otherwise it would not be. It's possible this might apply in other segments of the market too.

We used to hear a lot of talk about 5G leading to densification of urban networks. To be honest, going back to the points I made at the start about the financial health of the sector, I'm not sure mobile operators have the backing of investors to build independent super-dense 5G infrastructure. If it is to be possible, it might be only through some new form of sharing, that enables cost saving and avoids overbuild.

I've no preconceived views on how this might happen, but I do think the club licensing approach that the Italian authorities specified for 26GHz is one interesting approach – why? Licensees are able to also use their competitors' frequencies where that competitor is not using them in that location. Why is that relevant? It provides a strong competitive stimulus for players to be first to build, while commercial reciprocal roaming agreements would give customers of all networks the full benefit of the combined microcell portfolios, while avoiding unnecessary capex on overbuild. (Its maybe easiest to think of this in the way competing retail banks share their ATM cash machine networks). It has similar characteristics to the fibre coinvestment arrangements that have been successful in markets like Spain and Portugal.

For 2G networks, which will be more difficult to switch off than 3G, we see a potential opportunity, not just to share, but to collapse competing 2G networks together, creating a single shared legacy network and, as a result, freeing up valuable spectrum for all involved parties to refarm for 4G or 5G. Here, the impact on competition is minimal compared with the benefits.

So there is scope to imagine various new forms of sharing, and it's not restricted to mobile. Similar principles apply to fixed as well, as we consider how to stimulate fibre investment. Again, ensuring we get the right balance between investment, cost savings and competition will be an important principle – not least as the question of monopolisation of fixed infrastructure is now being raised in Europe for the first time in 20 years.

So, thinking about policy, where is there scope to make this work better in Europe? Our observation, as a mobile player operating across 12 national markets in Europe, is that we still have a very fragmented approach to policy and regulation, particularly in mobile.

We already have highly divergent - and in some cases, harmful - approaches to the licensing of mobile spectrum across Member States, creating a fragmented Europe and causing a flight of investment capital to other sectors and regions. After Europe leading the world in mobile in the days of GSM, three technology generations later, we risk falling further behind in 5G by failing to build a scalable and profitable yet competitive mobile sector in Europe, in contrast to other regions of the world.

For network sharing specifically, the risk is that national competition authorities take inconsistent approaches between member states – where some allow sharing where there is a risk that competition is impacted; whereas other intervene and seek to extract concessions from sharers where actually the harm to competition is unclear, or try to engineer perfect market outcomes which are unproven.

We should therefore focus on how to achieve a more consistent and joined-up approach across member states. This involves greater dialogue between national competition authorities and regulators, and the Commission – DG Competition in particular.

If we get this right, we have a chance of turning around the fortunes of the European mobile sector and once again attracting the investment capital that is needed to build out 5G and make mobile in Europe great again.

Thank you