European Open Internet Regulation: Regulatory uncertainty in the development of 5G services

Telenor calls for freedom to develop new and innovative services to ensure everyone will enjoy the full benefits of the Internet and 5G technology.

With 5G come both great opportunities and great challenges. Opportunities from the ability to offer new services with, for example, more bandwidth, better quality and lower latency; and challenges in the form of the significant investments required. In Europe alone a radio access network is estimated to cost €200bn with an additional €100bn for proximity data centres to enable low latencies.

The stakes are high and it is paramount that European policy- and lawmakers provide the best possible conditions for 5G success. Unfortunately, the Open Internet Regulation and accompanying BEREC guidelines do the opposite by setting out road blocks for any 5G business plan.

Strong European involvement in 5G

European policy makers see 5G as a key asset for Europe to compete in the Global market and it is identified as one of the five priority areas under the recently launched Digitising European Industry initiative. The EU has spent considerable resources to influence the technological definition of 5G systems and standards and the European Commission has recently launched a 5G Action Plan aiming at launching early 5G networks by the end of 2018 and fully commercial 5G services in Europe by the end of 2020.

Telenor supports these initiatives and believes, as European policy makers, that there is significant social economic benefit from 5G investment.

The internet and 5G go hand in hand

While uncertainty remains as to the specific technical abilities of 5G networks, it is widely expected that they will support both existing and countless new use cases with a high variety of applications with a variability of performance attributes: From delay-sensitive video applications to ultra-low latency, from high speed entertainment applications in a vehicle to mobility on demand for connected objects, and from best effort applications to reliable and ultra-reliable ones such as health and safety. Further, use cases will be delivered across a wide range of devices and across a fully heterogeneous environment.

Broadly speaking, it is our belief that the vast majority of new and existing 5G services will be available on the general internet, but at the same time will benefit from the quality assurance and network slicing 5G will provide. Only very few 5G services will be decoupled from the internet.

Regulatory uncertainty the enemy of innovation

The European Open Internet Regulation (OIR) and accompanying BEREC guidelines do not in any meaningful way address 5G services. One could argue that this is as expected since the nature of these services are still being developed, however, there are some principle definitional problems that arise when trying to decipher the implications of the OIR and in particular the BEREC guidelines.

Services Other than Internet Access Service (IAS) as they are referred to in the IOR or specialised services as they are referred to by BEREC are defined as "*services which are optimised for specific content, applications or services, or a combination thereof, where the optimisation is necessary in order to meet requirements of the content, applications or services for a specific level of quality*".

This could cover many 5G services, but the definition is vague. What BEREC call a specialised service today was not obvious from the outset and is typically provided using both best effort internet and quality assurance, e.g. Voice over Wifi. 5G services will in most use cases be a combination of (best effort) internet and some quality assurance. In other words, the distinction between a specialised service and a best effort IAS for 5G services is not clear.

The OIR makes clear (in Recital 16) that no Member State should put in place legislation that forbids or complicates the provision of specialised services. This should in our view be interpreted as a basic freedom for providers of services, content and applications in the EU to offer specialised services. That said, if there is reason to believe that such services are offered in a way that circumvent the OIR, then the National Regulatory Authority (NRA) should act accordingly. While the BEREC guidelines acknowledge that specialised services should be assessed on a case-by-case basis, their suggested approach gives little comfort that a 5G service can be launched without circumventing the OIR by not adequately demonstrating the need for quality optimisation since it is also provided over best effort internet.

In practice this means that operators will need to have a close dialogue with the NRA before launching any new 5G service as the perceived risk of circumventing the OIR will be high. This is problematic from an innovation perspective and contrary to the EU Commission's ambitions for 5G. For innovation to flourish 5G services cannot be subject to the detailed ex ante scrutiny as prescribed for specialised services in the BEREC guideline. This will leave little room for testing, experimentation and competition in IoT and new 5G services. As it is today the OIR will put European operators at a significant disadvantage relative to operators in other jurisdictions and can result in European operators foregoing optimal and welfare-enhancing uses of the 5G network which ultimately will leave Europe behind.

While we acknowledge the strong properties of the current Internet and its basic IAS, the visions and expectations for future networks and services go far beyond what the Internet can support today. To support an evolved future Internet and 5G service portfolio, a balanced and much more flexible interpretation of the OIR than the current BEREC guideline is needed.

Indeed law makers need to discuss what objectives any regulation in this area wants to achieve and how those objectives could be reached in the least intrusive way to deliver value to society and ensure European leadership in the race to fully embrace the benefits of 5G.