Liberty Global response to BEREC's Consultation on the draft guidelines on VHCN

Liberty Global appreciates the continued commitment of BEREC to engage with stakeholders on topics that are relevant to them and welcomes the opportunity to respond to BEREC's consultation on the draft guidelines on very high-capacity networks (VHCN), which reviews the performance thresholds values of Criterion 3 originally defined in 2020.

It is one of the key goals of the European Electronic Communications Code (the Code) to promote the widespread availability, and take up, of VHCN or Gigabit networks. The roll-out of Gigabit networks is one of the critical challenges of our times. It is investment in Gigabit networks which underpins applications, business models and innovation that, in turn, drives growth in every other part of the European economy and directly benefits European consumers. Liberty Global strongly supports regulatory policies that facilitate private deployment of Gigabit networks and sees itself as having a key role in the investment and deployment of Gigabit networks in Europe — now and into the future. Such policies should be technology-agnostic — one of the cornerstones of the Code. A mixed technology approach will not only maximize scope for innovation, and infrastructure competition, but can also serve as the most cost-effective means to achieve the EU gigabit connectivity targets.

Criteria for very high-capacity networks

The BEREC guidelines on VHCN, approved by BEREC in 2020, define four criteria and any network that meets at least one of these criteria is considered to be a Gigabit network.

Criterion 3, Performance thresholds 1

Criterion 3 is defined as any network providing a fixed-line connection which is capable of delivering, under usual peak-time conditions, services to end-users with a specific quality of service in terms of available downlink and uplink bandwidth, resilience, error-related parameters, and latency and its variation (the performance thresholds 1). Thresholds listed may be met in an DOCSIS environment although not all of them are measured.

Process - Draft guidelines

As above, the BEREC VHCN guidelines define four criteria and any network that meets at least one of these criteria is considered to be a Gigabit network. According to the Code, BEREC shall update the guidelines by 31 December 2025, and regularly thereafter.[1] BEREC's 2025 Work Programme includes within section 'Strategic priority: Promoting full connectivity' the update of criterion 3 of the BEREC Guidelines based on data be collected from fixed network operators.[2]

We understand that the public consultation on the draft guidelines is the first step toward final adoption of the updated guidelines by 31 December 2025. Liberty Global recognises that the data collected from fixed network operators through questionnaires sent to operators in 2024 has been used to update the guidelines, and that the Criterion 3 performance thresholds based on the 2020 data collection are confirmed by the data received in 2024 which BEREC deems appropriate.

[1] European Electronic Communications Code (EECC), art. 82.
[2] BEREC Work Programme 2025, section 1.1.

Defining the benchmark case

The Code requires BEREC to determine the criteria for when an electronic communications network (ECN) will constitute a Gigabit network; such networks should consist wholly of optical fibre elements at least *up to the distribution point* at the serving location or demonstrate 'similar network performance' (the former being the 'benchmark' case).[3] In particular, BEREC must determine what is the minimum (or base) level of 'available downlink and uplink bandwidth, resilience, error-related parameters, and latency' that is required in order for networks to be considered a Gigabit network. Whilst in the provisions of the Code this is not further defined, the recitals specify that, in the case of multi-dwelling units (MDU), the benchmark case is a fibre-to-the-building (FTTB) network.[4]

The Code requires BEREC to look at the network performance of a 'network that consists wholly of optical fibre elements at least up to the distribution point at the serving location'. Where this concerns an FTTB network, it does not further specify what types of cabling or in-building access technology should exist between the distribution point and the end-user. Instead, the benchmark case should be determined taking the existing in-building infrastructure (whatever it is) as a given. Currently, this may consist of a wide range of technologies with different capabilities (e.g. (V)DSL, G.fast, DOCSIS, Ethernet, fibre, Wi-Fi). Liberty Global notes that, by limiting the in-building access technology to specific types of access technology, BEREC is creating a higher threshold for Gigabit network than was envisaged with the Code, and may inadvertently preclude other high capacity, next generation networks and thus create tests that are not future-proof.

The role of HFC networks in Europe – today and tomorrow

It is important for BEREC to keep in mind the objective of the Code for ensuring widespread availability, and take-up, of Gigabit network services, and the role that HFC networks (and the resulting infrastructure competition) have played and will continue to play in achieving the European Union's Digital Single Market agenda and its Digital Decade targets.

HFC network operators have long been the leaders in investment in high-speed networks, and at scale, across Europe. Liberty Global operates far-reaching, scalable, gigabit-fast networks that rely on optical fibre at their core.

Moreover, innovations in HFC technology — particularly due to DOCSIS standard upgrades — have resulted in more capacity, lower latency and greater security. With DOCSIS 3.1, and even DOCSIS 3.0 in some situations, the capability of HFC networks can meet or exceed FTTH / FTTB capability on the performance metrics mentioned throughout the questionnaire. In this regard, we note that the capabilities of HFC networks have already been acknowledged by the Commission in several cases, where it found that DOCSIS 3.1 networks constituted very high capacity infrastructure.[5] Similarly,

[3] EECC, art. 2(2).
[4] Recital 13 states that *'In the case of fixed-line connection, this corresponds to network performance equivalent to what is achievable by an optical fibre installation up to a multi-dwelling building. In the case of wireless connection, this corresponds to network performance similar to that achievable based on an optical fibre installation up to the base station, considered to be the serving location.'*
[5] For example European Commission, Broadband Coverage in Europe 2023 Final Report.

Ofcom categorised Virgin Media's DOCSIS network as 'Ultrafast' and gigabit-capable, alongside FTTH, for the purpose of market assessments[6] and public data reporting[7].

Innovation in the telecommunications sector will not cease, and future networks will not be limited to the network infrastructure and technologies that we know today. This makes technology-agnostic regulation even more essential. Any regulatory policy should therefore be designed to reward permanent innovation investment. Liberty Global therefore requests that BEREC recognise the significance of HFC networks for fast, high-capacity broadband deployment in Europe; and the need for companies such as Liberty Global to be able to continue to invest in HFC network improvements and new build project.

[6] Ofcom Telecoms Access Review Consultation (2025), Volume 2, p.13 footnote 41.; Ofcom WLA (2018), Final Statement, paragraph 2.12,.
[7] Ofcom Connected Nations Report (2018) methodology.