



ETNO-GSMA response to BEREC Public consultation on the Draft BEREC Report on practices and challenges of the phasing out of 2G and 3G

GSMA and ETNO welcome the BEREC “Draft Report on practices and challenges of the phasing out of 2G and 3G” and find overall that the draft report is balanced in describing the impacts on various stakeholders with the phasing out of 2G and 3G, a process that has already begun and will continue over the next few years.

There are challenges common to the entire sector, as in any technological migration, but as on previous occasions, the commitment of the operators to our customers is beyond any doubt, safeguarding the provision of the service and proposing solutions tailored to the profile of our customers. Our vision of the technological transition from the point of view of the service provided to our customers is that it should take place in a seamless process and that the impact on the service should be as minimal as possible in order to guarantee the satisfaction of our customers.

The goal of operators is to provide telecommunications services in the most efficient way, making optimal use of the resources employed, so the migration from legacy technologies (2G/3G) to packet switched (4G/5G etc.) is a fact that cannot be delayed. In addition, and from a sustainability point of view, we will have to undertake the transition with diligence and effectiveness in order to meet the objectives of the European green and digital transition.

We see this technological transition as part of a process of continuous evolution of the sector, so we do not consider a specific regulatory intervention in this process to be appropriate, since we, the operators, are the main interested party in satisfying our customers’ needs and ensuring that the transition is carried out as transparently as possible for them.

With the previous considerations, we have the following inputs to provide to the draft report:

Dimension of the issue

BEREC report relies on 2021 data provided by GSMA to assess the share of subscribers linked to 2G and 3G technologies, concluding that this share is significant. However, the report does not give enough relevance to the impact of operators’ legacy network shutdowns already underway in several Member States, as well as the natural uptake of new technologies by customers in the last two years. For instance, in Italy by the end of 2023, all 3G networks will be shut down (while BEREC report indicates a 20% of 3G subscribers).

Vulnerable consumers

The draft report states that *“BEREC considers that every effort should be made by operators to minimize stress and worry for vulnerable users (the elderly or disabled und-users who may rely on older feature phones that are based on 2G and 3G mobile technologies)”*.

In the case of Germany, 3G switch-off cited in the BEREC report demonstrates that legacy network switch-off can be achieved without negative consequences for customers. GSMA/ETNO consider that operators providing transparent information to the customers and cooperating with NRAs and other stakeholders are sufficient to ensure the smooth shut down of older technologies. Additional measures specifically addressed to vulnerable customers should be the responsibility of Member States, who should foster the migration to

newer technologies to ensure continuity of service with vouchers or other forms of public funding (e.g. one-time subsidy in Hungary).

Next Generation (NG) eCall

The main challenge that we are still facing, and which needs urgent action is the need to ensure that Car Original Equipment Manufacturers (OEM)s have the regulatory requirement in place for the support of Next Generation eCall (NG eCall) in vehicles. OEM's current requirement to support eCall is not technology neutral, and to progress towards NG eCall, OEMs need regulatory certainty. We understand that the likely intention is for the European Commission to amend the Regulation 2015/758, which references the standards on which the technical requirement for the approval of eCall systems in relevant categories of vehicles are based. The process is, however, already much delayed by the Commission even though lengthy exchanges between stakeholders have been conducted. It is extremely important that the Commission act rapidly on this matter to stop as soon as possible the legacy fleet (relying only on 2G/3G technologies for eCall) from increasing further, by allowing OEMs to support NG eCall in vehicles.

In contrast, the regulatory requirement on mobile network operators (MNOs) to support eCall is technology neutral and we are at liberty to progress towards NG eCall, which was confirmed by the RSPG in the "*RSPG report on Mobile technology evolution – experiences and strategies*"¹, which concluded that "*no need has been identified for regulatory intervention to extend the lifespan of 2G/3G*". The principle of technology neutrality is extremely important for our industry, and we call on BEREC to defend this principle, as deviations have proven counterproductive in the past. The non-technology neutral approach for OEMs only demonstrates too well why it is so important to maintain a technology neutral approach in all legislation.

Emergency communication services

GSMA and ETNO members are dedicated to fulfilling our social responsibility to support emergency communication services. Mobile operators are developing an all-IP based infrastructure to support next generation emergency services, yet the interconnection with emergency services operators is, in many cases, still based on circuit switched communication networks. For example, Public Safety Answering Points (PSAPs) in the EU should have the capability to receive and handle the most modern means of communications including IP-based 4G and 5G technologies. In this regard, we also understand from the European Emergency Numbering Association that for the Next Generation 112 (NG112), coordinated action is urgently needed to ensure *standardised* NG112 in Europe². The risk is otherwise, that fragmented solutions are implemented across the EU27, which will impact all stakeholders and cause delays.

It is acknowledged that the transformation speed towards IP based emergency solutions across EU differs. Therefore, 2G and 3G sunset plans may take place in some Member States as soon as 2025, while MNO's are still fulfilling all their legal requirements. We believe that when both 2G and 3G networks are decommissioned in some member states, BEREC members shall support PSAP in their work of sharing awareness of this to end-users. This is to prevent that such information is only received while end-users enters into a new country with a device that will not support emergency calls.

VoLTE

¹ https://radio-spectrum-policy-group.ec.europa.eu/system/files/2023-03/RSPG23-010final-RSPG_Report_on_Mobile_technology_evolution_%28with%20annexes%29.pdf

² <https://eena.org/our-work/eena-special-focus/next-generation-112/>

We consider that the challenges related to VoLTE and VoLTE roaming are well described in the draft report. To solve these challenges, an industry-wide Task Force was established within GSMA in order to address all relevant issues.

We invite BEREC to give evidence in the report of the reassurances provided by telecom operators to EENA (page 27) with regard to the transparency of information provided to customers roaming in areas where 2G/3G networks are no longer available, as the report indicates that “the organization aims to ensure that end-users are well aware of this issue, so that they may prepare accordingly”.

Coverage

Providing the best possible coverage for your customers is a vital requirement for any mobile network operator and a key competitive differentiator. Great coverage is also a key factor in the transition from 4G to 5G in Europe and significant work is being undertaken by mobile operators to deliver 5G coverage, in line with the EU’s ambitious connectivity targets for the Digital Decade, which envisage full 5G or 5G equivalent coverage by 2030, and in some countries in compliance with spectrum auction obligations.

Spectrum

Many European Mobile Network Operators (MNOs) have already started the transition from circuit switched to packet switched networks, and spectrum is being re-farmed for the roll-out of 5G networks and services to the benefit of consumers, businesses and society as a whole. In this regard, we agree with the report’s statement that the refarming of spectrum will contribute positively to efficiencies in spectrum and electricity usage as well as improved security in new generations of mobile networks.

We also note that in many countries’ spectrum allocations have been fully technology neutral. Therefore altering the rules for how spectrum can be used, to oblige continuation of 2G or 3G technology retroactively, may be illegal.

IoT/M2M

GSMA and ETNO members consider generally that providers of IoT and M2M solution have been duly informed and notified about the closure plans of circuit switched networks in order to allow them sufficient time to consider their use and dependencies on circuit switched networks, and to ensure that their solutions and offerings can be duly upgraded.

Still, in order to minimize negative effect, we believe that BEREC members shall proactively assist in information sharing around 2G and 3G closing down. By carrying out joint efforts to inform users negative effects can be proactively mitigated.

General note on device lifetimes

“Continuity of services” must not mean indefinite support of legacy devices. Even relatively new mobile phones often receive updates for 3-4 years after their purchasing date; M2M devices including, e.g., Smart Meters often can be observed to operate on completely outdated software. Moreover, network and service compatibility with older devices frequently requires the support of outdated protocols and insecure functions. This poses significant additional security risks. Therefore, such disadvantages of legacy support for outdated devices should be taken into consideration when assessing the phasing out of services as well.

Accordingly, the example of “meter replacement before end of life” (p.14 f.) should be supplemented with this aspect. Technical lifetime not only implies the most basic functioning of the device, but also the safety

and security of the device, including not endangering network integrity. Thus, “end of life” should not mean “preferably decades” (p.25), but be based on availability of security updates or economic depreciation, whichever is shorter.

In addition, there is also the option for utility companies to build their own wireless networks which makes them independent of mobile network providers, if control over technology development is paramount.³

In any case, deviation from the principle of technology neutrality is not warranted, as there are strong incentives for the MNOs to conduct the transition to newer technologies as smoothly as possible in order to restrict adverse impact on customer satisfaction to an absolute minimum, as already acknowledged by BEREC.

Passive vs. active sharing

We wish to make the point that, the statement made page 6 of the report, “site sharing between one operator willing to switch-off and another willing to keep this technology operating” should instead read “active network sharing...”, as with passive site sharing, there is no issue.

³ Cf. example of NetCologne and Rheinenergie (both publicly owned local energy and telco operators) deploying their own LoRaWan network (<https://www.netcologne.de/geschaeftskunden/blog/so-setzt-die-rheinenergie-erfolgreich-lorawan-ein/>).