



14th August 2023

Verisure's Response to the Consultation "900- and 1800-Megahertz network licenses review of the 2G license condition"

1. About Verisure

Verisure is the market leading European provider of professionally monitored security systems and protects more than 5 million customers across 13 countries in Europe and four in Latin America, with more than 25,000 employees worldwide. We operate as *Verisure* in most of our markets, and as *Securitas Direct* in Spain and Portugal, providing services in some of the countries for more than 30 years.

Verisure's mission is to bring peace of mind to families and small business owners by providing them with the best security solutions and services. As a pioneer in innovation and technology, Verisure continually invests to provide effective, intelligent, and reliable security solutions. This includes investments into its R&D centers, with more than 600 experts developing new products and services, as well as into external partnerships with industry leading technology companies.

Verisure also inputs on Industry Standards taking part in European Committee for Electrotechnical Standardization (CENELEC) national committees with a key presence and voting rights in those WG which develop standards both for security products and services. In addition, Verisure is member of the Confederation of European Security Services (CoESS)¹ and Euralarm.²

Verisure is in other words strongly committed to innovation and sector evolution, including devices already on 4G networks which is the technology used for new installations since 2019.

As we understand we are not alone in this position, and that several other product and service providers (including essential service providers), and their customers, are in a similar position, we believe there is a strong case for (i) a postponement of a full 2G/3G shutdown, and (ii) a requirement on the mobile network operators to provide shutdown visibility in advance to be able to design a cost and functionality efficient migration and secure service continuity to customers, and that regulatory have a role to play here.

Verisure therefore finds it essential to participate in this consultation as we have also recently done in the one published by the Finnish Ministry of Transport and Communication, to be able to demonstrate that – on a balancing of interests – it is essential to continue requiring the maintenance of the 2G technology until at least 2028 and ideally until after 2030. We note that 2028 is the date *at least* to which shutdown has been or likely will be pushed to by operators in some countries.

¹ <https://www.coess.org/>

² <https://www.euralarm.org/>

2. M2M users as a key stakeholder: Technical and economic impact on Verisure

As BEREC's draft Report on practices and challenges of the phasing out of 2G and 3G (the Report) recognises/recognizes that the phase out is multi-stakeholder issue, and that one of the most impacted stakeholders are companies relying on M2M for their products / services and its migration to 4G/5G requires more actions than the mere change of a SIM card in a given device. As the Report recognizes, M2M migrations typically require costly and time-consuming visits to the households and businesses with the M2M devices to physically update the installation.

The Report says that companies are reluctant to replace M2M devices in order to reduce their transition costs. To the extent this has been the case with some companies, it may be related to the technical limitations set out further below (relating to VoLTE, etc.) and / or the lack of transparency and clarity on the shutdown timeline.

In any event, from a Verisure standpoint, this is not the case as the company has been installing 4G based devices already as of 2019. Additionally, Verisure is also for some time executing replacements and migrations for users to our latest 4G based technology. However, even with 4G/5G based technology, for certain use cases M2M providers are still dependent in many geographies on 2G/3G technologies. For example, many voice calls still require 2G/3G technologies, as carriers in several geographies still do not support VoLTE for M2M use cases (for example, in Portugal, there continues to be no support for VoLTE). Even where VoLTE support exists, carriers cannot support VoLTE with roaming SIM cards, which is a particular challenge for M2M users, as many M2M devices that are installed across multiple geographies rely on "global" SIM cards that by design are meant to operate almost entirely via roaming. The acuity of the technical limitations for M2M users is brought into sharp relief by the eCall example, as the technical specification for 4G calls was only finalised in 2022 because of the challenges inherent in the VoLTE standard. In short, even if M2M installers put in 4G/5G technologies, they were not in a position to "cut the cord" from 2G/3G.

The longer the transition, the more upgrades can be handled within existing service cycles and at a cost lower to the customers. A short transition would involve significant resources wasted on upgrades that would otherwise not yet be required right now, e.g., for installations installed only in 2018. Not only would this have a material financial impact, but it would also involve disposal and replacement of perfectly functioning devices, and unnecessary customer premise visits for the replacement by car, with the environmental impact this would have.

3. Operators as key stakeholders to mitigate impacts and grant service's continuity

BEREC's report includes in Annex I the result of RSPG benchmarking questionnaire on 2G/3G phaseout activities in countries, and it shows that in 15 out of 25 countries operators have not yet started their transition or announced their plans to switch-off the 2G technologies.

This fact is quite relevant and indicates the current lack of visibility about the actual operator's plans to migrate technologies. This is of outmost importance to ensure service continuity to end users, and with it continuity of the services that companies such as Verisure are providing to their customers.

As said, few operators have to date not provided any visibility on the plans for the 2G network. Had they done so, say back in 2014, Verisure would have known what timeline to work against placing more investment on the development of 4G/5G based technology and, VoLTE support having permitted, initiating the upgrade programs sooner under a well-organised and cost-effective migration process to ensure the continuity of its services to customers. By not offering visibility, the mobile operators have arguably foregone their rights to the 2025 deadline and an extension would seem both sound and just.

We therefore hope that regulators take a stand both in extending the license requirement to provide 2G access to at least 2028 as the earliest permissible date, and then also requiring that the operators provide visibility on how they as of that date plan to switch off the network. It is vital for Verisure, and we believe also for other service providers, to be informed by the network operators and to secure enough time for service.

In conclusion operators are responsible for granting service continuity of its end users, especially in those cases where it can affect provision of ulterior services such as utilities or private security itself. Therefore, visibility of any change impacting the service provided should be informed accurately with at least five years in advance.

The companies relying on M2M technology for their products or services are not part of a mass market, and normally the provision of connection services to companies as Verisure is done through a special account and operations centres due the high number of connections powered and the peculiarities it implies. Therefore, providing enough visibility on the migration plans can be shared as confidential with these companies and protected by NDA to be included in the services agreements. There is no reason why visibility could not be shared under this basis.

4. Postponing 2G shutdown – potential detrimental impact?

While Verisure cannot with certainty comment on the potential detrimental impact on telco operators or others, if any, it notes that postponement is occurring in a number of countries, either because of government intervention or because of telco operators' decision. This implies that the potential detrimental impact of such delays is not material. For example, in Denmark, Telenor removed its notification to GSMA (the international body for mobile carriers) that it was planning to sunset 2G in 2025 and now has no publicly planned date for sunset. We are expecting similar developments in other countries, even beyond 2028.

Additionally, several governments and regional bodies are engaged on the topic. For example, the British communications regulator Ofcom has published a document setting out how MNOs

should approach the shutdown to ensure continuity of services for consumers³. While Ofcom notes that it does not have a formal role in the shutdown process itself, it wants to ensure that consumers are treated fairly and that they will have access to the services they need in the future as well. In particular, Ofcom points out that consumers relying on 2G and 3G devices will need more time to adjust to the shutdown, especially as many of these consumers will typically be more vulnerable individuals, such as the elderly, who are less likely to have migrated to more modern services that support 4G/5G connectivity.

5. Example: Finnish context

As BEREC will be aware, the Finnish Ministry of Transport and Communication earlier this year launched a consultation process regarding a possible postponement of the shutdown. As part of this consultation, Verisure submitted input earlier this month (August 2023). Highlights from its submission is found here below:

- The key mobile network operators active in Finland – Telia, DNA and Elisa – have all initiated the shutdown of their respective 3G networks, while none of these companies has communicated its plans with regard to the 2G network. It hence seems that no firm decision regarding 2G has yet been adopted or at least none has been communicated. The lack of transparency of plans has in itself heightened the issue now under consultation as users of 2G have not been able to make firm plans or hard decisions on upgrade investment without a time horizon as a basis. This in itself provides ground for extending the obligation to provide 2G technology for at least a number of years (as noted above, we propose 2G continuation until at least 2028, similar to what we are expecting for other countries, e.g., Denmark in the Nordics).
- Verisure is not aware of any detailed assessment of the potential implications of a 2G/3G network shutdown having taken place and therefore welcomes the Finnish Ministry of Transport and Communication’s consultation. The current shut down of 3G networks already risks affecting a wide range of systems in Finland, such as smart meters, security alarms, remote controls, M2M, eCall and other IoT (Internet of Things) devices and applications. These devices and applications range from sensors that monitor, e.g., dams and factory operations to ATMs, energy and heating meters, GPS locators, payment terminals and not least the eCall functionality. In practice, many data transmission applications today do not operate fully or at all on the 2G network because 3G is still available. There is also no certainty as to how congested the 2G network will be after the 3G network has been switched off. For that reason alone, it would seem responsible to ensure that as much 2G network capacity as possible is available for a transition towards 4G/5G at a measured pace.

³ https://www.ofcom.org.uk/data/assets/pdf_file/0025/252592/3G-and-2G-switch-off.pdf

- As pointed out by the Ministry of Transport and Communication in its invitation to comment, a significantly impacted area of any 2G shutdown will be the eCall system, which is used in vehicles in Finland and across the EU. eCall has been created to make automatic free 112 emergency calls via an available mobile network in case of a serious accident. The standardization of this system began already in 2004 when 2G networks were prevalent and 3G was being deployed⁴. The legal basis for eCall type-approvals in the EU was adopted in 2015 and 2016 by means of the Regulation (EU) 2015/758 (the “eCall Regulation”) and related regulations. The eCall Regulation requires that, from 31 March 2018, all new cars and vans in the EU are equipped with approved eCall technology⁵. However, in 2018, the only approved eCall technology was 2G/3G based, meaning that – to date – all cars with eCall functionality rely on 2G/3G networks. Indeed, until December 2022, there was not a finally agreed eCall technology standard based on 4G or 5G available⁶. Now that there is, it has been estimated that the automotive sector will need approx. three years to offer vehicles compatible with the next generation eCall technology, i.e., until 2025-2026⁷. This will however not resolve the situation with the eCall vehicles that were / are placed on the market before that time, estimated to be in the millions and millions, which will not be able to perform emergency calls in case of 2G and 3G network shutdowns⁸. To our knowledge, there is no solution to this significant challenge at this point in time.
- To conclude this section, Verisure lends its support for Finance Finland statement to the Ministry in July 2023 stating that the 2G network must be maintained in force nationwide.⁹ As stated in by Finance Finland *"The 2G network currently contains a very large number of meters and control devices (2G M2M/IoT) for electricity, water, gas, district heating and refrigeration networks, which have a long life-cycle. The data transmission of meters over the mobile network is small compared to the data transmission of newer network technologies, but the transmitted metering data is delivered e.g., from 3.7 million electricity meters every hour of every day. 2G meters with a lifetime of 10-25 years are still being installed in service."* Therefore, Finance Finland proposes to maintain the 2G network as long as it necessary for overall security and that 2G network users should be guaranteed a sufficiently long transition period. Verisure entirely supports this position.

⁴ https://europa.eu/youreurope/citizens/travel/security-and-emergencies/emergency-assistance-vehicles-ecall/index_en.htm

⁵ [EUR-Lex - 2403050102_1 - EN - EUR-Lex \(europa.eu\)](#)

⁶ [Recorded version – Webinar about Next Generation eCall - cetecom advanced](#)

⁷ [PTF-ecall-and-2g-3g-network-obsolescence-2022.pdf \(pfa-auto.fr\)](#)

⁸ [Internet of Things Programme Information Group \(etsi.org\)](#)

⁹ https://www.finanssiala.fi/wp-content/uploads/2023/06/fa_lausunto_27062023_lvm_2g_valitarkastelu.pdf

6. Conclusion

From the above, it can be concluded that Verisure and, as per our understanding, many other companies relying on 2G/3G technology to provide functioning infrastructure, services or products to customers or society at large need the 2G license requirements of the mobile network operators to be extended to at least 2028 and, also, the mobile network operators to then be required to give greater visibility on final shutdown plans.

In our view, without an extension of the requirement to provide a 2G network, companies and their customers, and in some aspects society at large, risk facing high insecurities on functioning of essential services and functionalities, high inefficiencies in transitioning to 4G/5G at unnecessarily high cost for companies and their consumers, and high negative environmental impact by early replacements of equipment.

All these risks would be significantly mitigated if the shutdown were delayed until at least 2028 and ideally beyond 2030, as this would allow a more resource efficient transition more in line with usual business cycles and programs.

Our assessment is that together with greater visibility and transparency by the mobile network operators, such extension in time for the transition would bring significant benefits to companies operating with 2G/3G technology and their customers, as well as society at large.

We consider that the regulators have a key role to play in helping to ensure that the sectors that rely on 2G/3G connectivity for their services, including the health, energy and transport sectors, are aware of the change and can prepare accordingly. In our view, it should work with all network operators to ensure a smooth transition that meets the needs of business users and consumers, including vulnerable groups.