Consumer Scotland
Luchd-Cleachdaidh Alba

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Submitted by email to:
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Ofcom's Resilience guidance consultation and Call for Input on mobile RAN power back up

About us

Consumer Scotland is the statutory body for consumers in Scotland. Established by the Consumer Scotland Act 2020, we are accountable to the Scottish Parliament. The Act defines consumers as individuals and small businesses that purchase, use or receive products or services.

Our purpose is to improve outcomes for current and future consumers, and our strategic objectives are:

- to enhance understanding and awareness of consumer issues by strengthening the evidence base
- to serve the needs and aspirations of current and future consumers by inspiring and influencing the public, private and third sectors

- to enable the active participation of consumers in a fairer economy by improving access to information and support

Consumer Scotland uses data, research and analysis to inform our work on the key issues facing consumers in Scotland. In conjunction with that evidence base we seek a consumer perspective through the application of the consumer principles of access, choice, safety, information, fairness, representation, sustainability and redress.

We work across the private, public and third sectors and have a particular focus on three consumer challenges: affordability, climate change mitigation and adaptation, and consumers in vulnerable circumstances.

Our response

1. Our response to Ofcom's Resilience guidance consultation and Call for Input on mobile RAN power back up focuses primarily on the risks to consumers that arise from resilience issues that are associated with adverse weather events, as this links to recent work we have undertaken. However, we acknowledge that resilience issues can occur as a result of a range of other factors, such as hardware failure and poor design.

2. Reliable access to communications is increasingly fundamental to the undertaking of everyday activities. People require access to a wide range of different online services including home working and learning, government services and banking. The growing shift to online services has resulted in a considerable increase in the demand for both fixed and mobile data in recent years, with adults spending an average of three hours and 41 minutes online each day.[1] The essential role of communications services in supporting the everyday lives of consumers is dependent upon the availability of resilient telecommunications networks.

3. Consumer Scotland welcomes the focus on climate change and resilience risks for telecommunications networks. We note the consultation document's description of how more uncertain and severe weather events can affect these networks together with the suggestion that climate change projections indicate that recent climate trends will continue to intensify, including an increased risk of flood, drought, and extreme weather events.[2] More winter storms, including disproportionately more severe storms, and smaller scale convective summer storm activity is also projected to increase over the UK in the future.[3] The increase in these extreme weather events and the impact that they can have on infrastructure means that power cuts and disruption to communications could become more commonplace.

4. The Scottish Climate Change Adaptation Programme 2019-2024: strategic environmental assessment notes that infrastructure in Scotland is exposed to a range of climatic hazards, including these extreme weather events. [4] This is consistent with the findings of the Climate Change Committee which has determined that that the UK telecommunications infrastructure is at risk from flooding, high winds and lightning strikes and has recommended the development of a set of indicators to enable monitoring of the impacts of weather and climate on telecoms and ICT services and the actions being taken to manage them.[5]

5. Although work has begun to improve infrastructure resilience, such as through the Electronic Communications Resilience & Response Group, there remain significant challenges in developing and maintaining our infrastructure given the predicted increase in the volume and impact of severe weather events.

6. We note the that a key ongoing risk to mobile networks is the availability of mains electrical power and the fact that interruptions to this power could result in

consumers being unable to use communications services, including being unable to make emergency calls. The migration to VoIP will amplify this issue as consumers will be unable to make a phone call over a digital landline in the event of a power cut without battery back-up.

7. Consumer Scotland has specific concerns about the impact of the migration to VoIP on consumers in Scotland in relation to power cuts and resilience. We have published a report on the impact of the migration on consumers in Scotland which found that consumers in Scotland, particularly those in remote rural areas, were at potentially greater risk of harm given the combined effects of a poorer than average mobile signal, higher use of and reliance on landlines and a greater number of power cuts that last longer than the UK average.[6]

8. We welcome the acknowledgement in the 2023 Connected Nations report of the potential challenges and risks for consumers as a result of the migration to VoIP. There is a need to manage the migration carefully to avoid harm and we welcome the ongoing work to engage with industry on advances in the availability of in-home battery back-up.[7]

9. Our report recommended that Ofcom should continue its engagement with communications providers and other stakeholders such as energy networks, regional resilience partnerships and infrastructure providers to consider resilience risks. Our communication networks must be as robust as possible to help withstand future weather and climate events and the potential power and communications infrastructure outages that may occur as a result.[8] We recognise that this is not an issue that telecoms providers can resolve on their own. We recommend that efforts be made to continue to improve collaboration between energy and telecoms providers, regulators and local authorities. It is important that the role of bodies such as Regional Resilience Partnerships in Scotland is recognised when, for example, taking decisions about what sites might need to be prioritised to mitigate risk.

10. We note that the one-hour figure for minimum battery back-up is based on initial evidence from Ofgem on the average duration of power outages. However, our report based on data from the Communications Consumer Panel noted that respondents in Scotland were significantly more likely to report power cuts lasting between 1-24 hours (41% of respondents in Scotland vs 31% of all respondents) and power cuts lasting over one day (5% of respondents in Scotland vs 1% of all respondents).[9]

11. The findings of our report suggest that proportionally more consumers in rural areas of Scotland could be vulnerable due to the switchover, with a risk that they would not be able to make an emergency phone call in the event of a power-cut without adequate battery back-up provision. We are concerned that the one-hour back-up – for both digital landlines and mobile cell sites - may not meet the needs of consumers in Scotland, particularly those in remote rural areas, as a result of a greater number

of longer lasting power cuts. We note from the consultation document that Norway and Finland have differential thresholds for battery backup times, with longer times required in sparsely populated areas. Consumer Scotland recommends that this approach should be considered in order to mitigate the disproportionate risks faced by consumers in remote rural parts of Scotland.

12. Given that adverse weather is predicted to be even more frequent in future, we have serious concerns about the impact on consumers in Scotland, particularly those living in remote and rural areas where there is a greater level of compounded or cascading risk. This may be for example, where both power and landline services are affected, or where transport links and mobile phone infrastructure are also disrupted. The concurrent switch-off of 2G and 3G mobile signal across the UK is also a factor that may contribute to risk if consumers have old handsets and are unaware of the need to upgrade their handset or unable to afford to do so.

13. Having resilient mobile sites will be key, as mobile networks will play an important role as a back-up for digital landlines following the migration to VoIP. Consumer Scotland agree that Mobile Network Operators (MNO) should take measures to mitigate against the risks of power outages and support continued communications services during short term power outages and surges. This will help to mitigate the detrimental impact on consumers of such outages. However, it is important to consider where back-ups will be most critically required and where investment should be prioritised, given concerns about proportionality. We recommend that greater attention is given to areas where there are more frequent and longer lasting power cuts, areas where there are a limited number of MNOs with adequate signal or where there are few overlapping sites that can employed in the case of equipment failure.

14. In order to undertake a sufficiently granular risk assessment, we note that it will be important that Ofcom and MNOs are able to access sufficiently detailed data on power cuts to allow for sites, or regions, to be accurately prioritised.

15. Ofcom should continue to work together with communications providers and wider forums such as the Electronic Communications Resilience and Response Group to improve monitoring and reporting regarding the resilience of communications networks. Current incident reporting thresholds which are based on the minimum number of end customers affected may disadvantage remote rural communities who are considerably less likely to meet these reporting thresholds. These communities may be more dependent on these services and at greater risk of isolation. Consumer Scotland recommends that Ofcom consider creating a reporting threshold based on duration of the outage in addition to the number of end consumers affected, in order to capture the impact of outages on these consumers.

16. We note that currently telecoms infrastructure is not prioritised for repair following adverse weather events and suggest consideration is given to changing this to lessen

the impact on consumers and reduce the risk of consumers being unable to contact emergency services or other sources of support. This is of particular significance as a result of the migration to digital landlines and the inability to make a phone call in the event of a power cut without battery back-up.

17. Continuous learning is important, including ensuring that the findings and recommendations from relevant research and reports are considered and implemented as appropriate. For example, the Storm Arwen Review Final Report contained a recommendation for the Energy Emergencies Committee to conduct a review with Ofgem into the 'worst served customers' process to determine whether it can be enhanced, including whether it can be expanded to include a framework to conduct community risk and contingency assessments, prioritising those communities judged to be at high risk of disruption.[10]

[1] Ofcom (2023) Online Nation Report. Available at: https://www.ofcom.org.uk/__data/assets/pdf_file/0029/272288/online-nation-2023-report.pdf accessed 28/02/2024
[2] Appendix B: Environmental Baseline - Scottish climate change adaptation programme 2019-2024: strategic environmental assessment - gov.scot (www.gov.scot)
[3] Mat Office Recent trends and future projections of UK storm activity. Available at: https://www.metoffice.gov.uk/research/news/2021/recent-trends-and-future-projections-of-uk-storm-activity accessed 28/02/2024
[4] Appendix B: Environmental Baseline - Scottish climate change adaptation programme 2019-2024: strategic environmental assessment - gov.scot (www.gov.scot)
[5] Climate Change Committee (2023) Progress in adapting to climate change – 2023 Report to Parliament. Available at: https://www.theccc.org.uk/publication/progress-in-adapting-to-climate-change-2023-report-to-parliament/ accessed 28/02/2024
[6] Consumer Scotland (2023) Consumers in Scotland and the transition to VoIP. Available at: https://consumer.scot/media/dztly3f2/consumers-in-scotland-and-the-transition-to-voip.pdf accessed 28/02/2024
[7] Ofcom (2023) Connected Nations. Available at: https://www.ofcom.org.uk/__data/assets/pdf_file/0022/273721/connected-nations-2023-uk.pdf accessed 28/02/2024
[8] Consumer Scotland (2023) Consumers in Scotland and the transition to VoIP. Available at: https://consumer.scot/media/dztly3f2/consumers-in-scotland-and-the-transition-to-voip.pdf accessed 28/02/2024
[9] Consumer Scotland (2023) Consumers in Scotland and the transition to VoIP. Available at: https://consumer.scot/media/dztly3f2/consumers-in-scotland-and-the-transition-to-voip.pdf accessed 28/02/2024
[10] Storm Arwen review: final report (publishing.service.gov.uk)