

Proposed guidance consultation

Question	Your response
<p>Question 1: Do you consider the measures in the proposed guidance relating to the resilience of the physical infrastructure domains to be appropriate and proportionate?</p>	<p>Y/ N</p> <p>As recognised in the guidance, telecommunication networks are of increasing importance for individuals and businesses across the country. Inability to access phone networks and the internet can have detrimental economic consequences at an individual level, it can also impair students to access learning materials and, crucially can prevent communities from accessing emergency services when required. Ensuring that the UK’s networks are as resilient as possible in the face of extreme weather events is also essential given the impact of climate change, as recently exemplified by Storm Arwen.</p> <p>These effects are felt particularly strongly in predominantly rural areas such as the Scottish Borders. To provide some context, the Borders have a population of circa 115,020 people, spread over 4,732 square kilometres, making it the 5th least densely populated council within Scotland. Connectivity within the Borders is also lower than the Scottish average, with only 93% of premises able to access download speeds of over 10mbps.</p> <p>Given these challenges, the draft guidance has two main weaknesses. First, it appears to apply indiscriminately across the UK, and fails to sufficiently differentiate areas depending on need and vulnerability. Fundamentally, the principle of equal treatment dictates that whilst like cases should be treated alike, unlike cases should be approached differently. In adopting a ‘one-size fits all approach’ the guidance indirectly disadvantages rural areas, leading to a lower level of resilience in more isolated parts of the country.</p> <p>Second, the guidance seems to focus on measures which can be implemented on an operator-basis. This fails to take into account the structural weaknesses facing the telecom system as a whole, and risks creating additional resilience issues.</p> <p>In particular, the move away from copper landline and the removal of phone kiosks has meant that the system as a whole is dependent on the grid to function, with large number of phone masts lacking power back-up. As such, when extreme weather events damage the power supply, as was the case during Storm Arwen, local residents are unable to contact emergency services, either through their landline, or through their mobile phones. This creates a lack of redundancy across the network which increases its vulnerability. In addition, the move towards internet-based services may have detrimental consequences for older people, who are often less connected. Whilst the draft guidance partly addresses this issue, we would argue that in some areas, as detailed below, the measures proposed will need to be strengthened. We would also advocate for increased collaboration between BT/Open Reach and mobile providers in areas that are losing copper lines and PCBs to ensure sufficient resilience in the mast network when BT lines fail.</p>

Question

Your response

Question 2: Do you consider the measures in the proposed guidance relating to the resilience at the Control Plane to be appropriate and proportionate?

No comment, this question would appear to be better addressed by industry professionals.

Question 3: Do you consider the measures in the proposed guidance relating to the resilience of the Management Plane to be appropriate and proportionate?

No comment, this question would appear to be better addressed by industry professionals.

Question 4: Do you consider the measures in the proposed guidance relating to communications providers' own managed services to be appropriate and proportionate?

No comment, this question would appear to be better addressed by industry professionals.

Question 5: Do you consider the measures in the proposed guidance relating to communications providers' arrangements for preparing for adequate process, skills and training to be appropriate and proportionate?

Yes, while appropriate infrastructure is of paramount importance when it comes to the resilience of the telecommunication network, ensuring that providers benefit from adequate arrangements to face change events and have adequate skills pipelines appears appropriate.

Call for Input

Question	Your response
CFI question 1: Does this framework accurately capture the factors relevant to assessing what is an appropriate and proportionate measure for MNOs to take with regards to power resilience for RAN cell sites?	<p>No, as mentioned above what is appropriate and proportionate for MNOs to undertake should take into account local circumstances, in particular the vulnerability and remoteness of affected communities, as well as the likelihood of adverse events for the network.</p> <p>In particular, we would argue that power resilience for RAN cell sites should be cognisant of the remoteness of the areas affected by potential outages, and of the presence of additional means of contacting emergency services. As mentioned in the consultation paper, international comparisons provide examples of varying levels of obligations depending on the location of the RAN site, with sites in remote and rural areas required retain power for longer periods.</p> <p>A similar level of obligation may be beneficial in a British context, in particular in Scotland, where population density can be particularly low and where the needs of RAN sites in remote areas are likely to differ from those in concentrated population centres. Again, this is key in ensuring that populations within rural areas are provided with an equal degree of resilience compared to those situated in more densely populated parts of the country.</p>
CFI question 2: Do you agree that at a minimum MNO's networks should be able to operationally withstand short term power-related incidents?	<p>Yes, given the increased necessity of access to telecom networks, ensuring that infrastructure can withstand short power cuts is essential.</p> <p>However, as noted above, unless additional redundancy is built into the system, MNO's networks in remote areas should be designed to withstand longer power cuts to allow for local residents to access emergency services in case of outages. It is, however, the view of the Council that, in the current state of the network, the 1hr minimum advocated for by the guidance is insufficient to provide adequate resilience for people living in remote areas of the country.</p>

Question

Your response

CFI question 3: What mobile services should consumers be able to expect during a power outage, what consumer harms should power backup up focus on mitigating and does this vary depending on the type or duration of the outage?

At a minimum, consumers should be able to access emergency services in case of power outages, given the significant security risks an inability to do so entails. This creates a significant safety risks for local residents.

It should be noted that, as recently demonstrated during Storm Arwen, this is not the case across the country, with communities within the Borders unable to access landlines or the mobile network following power cuts.

When outages last for longer periods it should be recognised that access to telecommunications is an increased necessity across the public and private sector. As such provision should be made for the deployment of back-up solutions when appropriate.

CFI question 4: What technical choices are available to MNOs to reduce power consumption, and should be considered as part of assessment of appropriate and proportionate measures?

Whilst this question may be better addressed by industry specialists, in particularly vulnerable areas, the use of generators to maintain power during longer back-ups should be considered.

CFI question 5: How many sites would it be feasible to upgrade and maintain and why?

No comment, this question would appear to be better addressed by industry professionals.

CFI question 6: Do you consider that providing a minimum of 1 hr backup to all RAN cell sites would to be proportionate to meet the security duties under s.105A to D of the Communications Act 2003?

No. Whilst in many cases, a minimum 1 hour back up might be sufficient, it should not be applied as a blanket 'floor' across the country, as it creates a risk of it becoming an industry standard.

Rather, the minimum backup for each cell should be cognisant of local circumstances, with more remote cells fitted with longer backup solutions to enable networks to remain working during outages. As we note above, this difference in treatment for more remote areas would mean that populations in rural areas are not at a disadvantage compared to more densely populated areas.

In addition, the Council would welcome additional clarifications from Ofcom regarding the '1hr backup' rule, in particular the Council would request that Ofcom provides a detailed analysis of how the 1hr figure was reached given variations in the international regulatory framework on the topic.

Question

Your response

CFI question 7: What cost effective solutions do you consider could meet consumers' needs during a power outage?

Again, this question may be better addressed by industry specialists. However, as mentioned above, a focus on sites and communities most at risk would enable the industry to target spending in a way that maximises impact.

In addition, greater co-ordination between providers, including BT/Openreach would enable the deployment of strategic solutions and the creation of additional redundancy which may benefit the market as a whole.

CFI question 8:

No comment, this question would appear to be better addressed by industry professionals.

a) Is it more cost efficient to increase power backup up to any space, weight, or planning limitations, i.e., increasing power backup as much as is feasible provides the lowest £ per hour?

b) do the benefits of any power backup solution have diminishing returns, i.e., the benefit per hour decreases as you increase the amount of power backup?

CFI question 9: Does the mobile market fail to capture the value or importance of power backup, and if so, why?

Yes. Creating adequate resilience within the telecom system is likely to be costly and focusing action on at-risk areas might mean focusing on solutions which benefit a small number of vulnerable customers rather than a large amount of service users. This is likely to be difficult to implement at an individual provider level within existing incentive structures and highlights the need for co-ordinated solutions underpinned by appropriate regulatory guidance.

CFI question 10: Should improvements in power backup be focused on solutions at sites which are identified as higher risk of outages?

Yes, it would be logical to focus solutions on at-risk sites. However, this should not be the only determinant. It would also be appropriate to focus on the *effects* of outages on local communities in determining where power backups should be installed as a priority.

CFI question 11: Why would any requirement lower than a minimum of 1 hour be sufficient in future? What duration do you consider would be sufficient and why?

The minimum level of requirement should respond to the current resilience of the system. As such, with technological advancements it may be possible for it to be altered if other means of accessing essential services are available during power cuts. At the minimum however, the minimum requirement should be set so that local communities are guaranteed access to emergency services in the case of power outages.

Question

Your response

CFI question 12: Over what time period could industry make upgrades to provide a minimum of 1 hour at every cell site or other cost-effective solutions to address potential consumer harm?

No comment, this question would appear to be better addressed by industry professionals.

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