

Proposed guidance consultation

Question	Your response
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?	Confidential– No The proposals for physical infrastructure are less robust in a rural island setting like Orkney. Not only is the archipelago itself off the north coast of Scotland, but there are number of inhabited islands that rely on a single daily ferry service which would prove a logistical challenge in the event of damage to or failure of physical infrastructure. There is minimal cross over between masts which could result in smaller islands being left with no communication services. The Council does not consider a 4 hour battery back up as sufficient in these circumstances.
Question 2: Do you consider the measures in the proposed guidance relating to the resilience at the Control Plane to be appropriate and proportionate?	The Council does not have sufficient technical knowledge to respond to this question in detail however the guidance does seem appropriate in relation to ensuring that the control plane of a network consistently provides stability and correct running.
Question 3: Do you consider the measures in the proposed guidance relating to the resilience of the Management Plane to be appropriate and proportionate?	The basic premise of the guidance on the resilience of the Management Plane is appropriate, however OFCOM should ensure that the options available to a CP covering rural areas such as Orkney are robust enough taking into account the isolated nature of the Scottish islands, a greater frequency of weather disruption and winter daylight hours and lack of alternative communication options. Rural areas are known to have poorer coverage and are at the end of the queue in terms of coverage and upgrades in technology – Orkney for example has a number of not spots and is unlikely to see a 5G network developed commercially.

Question

Your response

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

In part. A key concern with telecommunications resilience in Orkney relates to power outages and adverse weather. In the event of an outage in Orkney, adverse weather can knock out power supplies for days rather than hours. As mentioned previously, logistics are a challenge at the best of times, when there is inclement weather, this problem can be hugely exacerbated. Storms earlier in 2024 meant that ferries bringing food and fuel supplies were unable to dock for nearly 4 days. Ferries often operate at capacity and there may be delays getting both qualified personnel and equipment on site. We are particularly concerned for our vulnerable citizens, relying on communication networks to deliver services such as care alarms. This will become a greater risk when the copper network is retired.

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, all steps should be taken to ensure that training on network service and provision is as robust and simple as possible to the point where a large number of personnel and third party contractors can understand procedures and processes. We also agree that skills competency training should be at the core of supporting the continued operation of resilient systems. We would encourage the availability of at least one qualified engineer on each inhabited island to be on call in the event of service outages.

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?

Confidential – N

In part – rural areas should expect the same standard of service resilience than that found in cities. MNO's should factor in issues such as rurality, transport logistics and history of power outages and design measures appropriate to these circumstances

Question

Your response

CFI question 2: Do you agree that at a minimum MNO's networks should be able to operationally withstand short term power-related incidents?

Yes, however what may be deemed a short-term outage in an urban or mainland UK context isn't necessarily the same for areas such as Orkney. MNOs should have contingencies in place that allow networks in Orkney to be as robust and resilient as that in an urban setting.

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?

Safety should be paramount, at the very least consumers should be able to access voice services to call the emergency services and be able to contact family members. Maintaining services to vulnerable citizens should also be prioritised.

We also agree with the guidance where it states: "...expectation that communications providers design, host, and operate primary voice services entirely within their own infrastructure, in a manner that does not depend on the functioning of the wider internet."

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?

The Council is not qualified to respond to this question.

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

In rural settings battery back up or generators should be installed at each site.

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

No. A key concern with telecommunications resilience in Orkney relates to power outages and adverse weather. In the event of an outage in Orkney, adverse weather, such as high winds can disrupt services for days rather than hours. The climate is also more damaging to equipment leading to higher levels of fault and equipment failure. As mentioned previously, logistics are a challenge leading to further delays and longer downtimes.

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Your response

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

The Council would ask that consideration be given to establish subset of critical cell sites receive enhanced power backup. This could include battery back up or some form of renewable energy power generation. In the event of a mains connected power outage, electricity generation directly connected to each mast would both provide a power supply during windier periods and re-power batteries.

CFI question 8:

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?

Yes, as a rural island local authority, we would see option a) as the best option.

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?

As a local authority we feel that the mobile network operators do not have robust power back up measures in place. This will become even more critical when the copper network is made redundant.

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

Yes, especially rural, and very hard to reach areas such as Orkney, Shetland, the Western Isles and the Highlands. Not only are they identified as sites that have a higher risk of outages but experience greater impacts of isolation as a result of location.

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?

No. As alluded to in previous answers, it can take engineers days to reach parts of Orkney, especially in inclement weather. A back up system would need to be able to provide cover for sufficient time for repairs to be undertaken or the network to be operational.

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?

The Council would encourage an outside in approach to any upgrades prioritising areas where the risk of network disruption would have the greatest impact – where no other alternatives means of communication is available and where disruption is more likely to last longer.

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