

## 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? –N
	Having experienced 66 hour and 20 hour power outages in Storm Arwen and Storm Corrie in Ballater and losing all communications apart from analogue PSTN the answer is NO.
	During Storm Corrie we were able to maintain contact with external agencies for the whole 20 hours via the PSTN despite the local power outage. This is just not going to be feasible with the current proposals for the digital system. Switching off the PSTN system is going to leave a lot of people at far greater risk of not being able to contact emergency services in the event of an extended power outage due to severe storm or flooding.
	During Storm Arwen our nearest area with power was 25 miles away. There was no mobile signal and the telephone box outside the Victoria and Albert Halls in the centre of the village would no longer operate as the machine was full of coins.
Question 2: Do you consider the measures in the proposed guidance relating to the resilience at the Control Plane to be appropriate and proportionate?	Not qualified to comment
Question 3: Do you consider the measures in the proposed guidance relating to the resilience of the Management Plane to be appropriate and proportionate?	Not qualified to comment
Question 4: Do you consider the measures in the proposed guidance relating to communications providers' own managed services to be appropriate and proportionate?	Not qualified to comment

Question	Your response
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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? Not qualified to comment

## Call for Input

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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? No  It was heartening to read that some cell sites have several hours or days of power back up. In remote areas such as Cairngorms cell sites should have extended power back up. I would like to see 3 days power back up on what will become Critical Infrastructure to remote communities when PSTN is shut down.
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 there should be a minimum for each site. However a risk assessment for each site should be undertaken to identify the required minimum power back up. In Storm Corrie our nearest village with power was 25 miles away in Banchory.
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?	Contact with emergency services and monitored alarm services for both elderly and incapacitated individuals
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?	Allow mast operators to install wind and solar power generation at mast sites. Voice service to be prioritised

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CFI question 5: How many sites would it be feasible to upgrade and maintain and why?	Conduct risk assessments to determine the level of power back up required for each site. These can be generic for many sites in Urban areas but need to be individual for Rural areas and take into account the proximity of other masts and how far one may have to travel weather and flooding permitted to access a signal.
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 - see other answers needs to be risk assessed.
CFI question 7: What cost effective solutions do you consider could meet consumers' needs during a power outage?	Provide Resilience Groups in at risk areas with an emergency communication system which could be operated for critical communications during a major storm or flooding event.
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?	Carry out a range of risk assessments from Urban to Semi Rural to Rural to Remote to Very Remote locations taking into account distances from adjacent infrastructure to arrive at an appropriate power back up solution or as I say in another response provide resilience groups with an alternative communication system that can be operated to contact emergency services and other essential personnel during communication outage incidents.
CFI question 9: Does the mobile market fail to capture the value or importance of power backup, and if so, why?	Probably
CFI question 10: Should improvements in power backup be focused on solutions at sites which are identified as higher risk of outages?	Without question Yes. If this cannot be provided before PSTN is switched off then provide local Resilience teams with an

alternative communication system eg a Starlink system or similar. This would be infinitely cheaper than maintaining a large

power supply to a critical system.

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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?	A series of generic risk assessments for a complete range of sites to be conducted. Then each site to have power back up as determined by the risk assessment.
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?	Sites defined as CRITICAL by Risk Assessment to have a minimum of 1 hour back up before PSTN is switched off.

Please complete this form in full and return to  $\underline{\text{resilience.team@ofcom.org.uk}}.$