

EIP032

How can we reach PSR customers without mobiles?

Problem Statement Details

BT Open Reach is in the process of transferring telephone lines from the traditional public switched telephone network (PTSN) links to digital links – either fibre to the cabinet (SoGEA) or to the premises (FTTP). This will mean that the landline telephone in a customer’s property will no longer be powered from the telephone exchange as is currently done with the PTSN links.

During a power cut customers will no longer be able to make calls if they don’t own or have access to a mobile phone or live in areas with poor mobile coverage; nor will it be possible to contact them *via* a landline during a power outage – a particular concern for highly vulnerable Priority Service Register (PSR) customers. Similarly, the red button care alarm systems will not function, nor will existing emergency phone systems, such as those provided within substations, at train crossings, in lifts...

What is required is an alternative way to know that a PSR is off supply *and/or* a means to communicate with them to provide them updates and check whether they need help.

Key Stakeholders

DNO customer services teams – interested in communicating with PSR customers to provide them the right support during a power cut.

PSR customers (and carers/designated contacts of PSR customers) – interested in receiving communication from the DNO during a power cut to receive appropriate support and advice.

Communication Providers – interested in areas where PSR customers exist and identifying how the proposed solution will interface with their services.

BT Open Reach – interested in areas where PSR customers exist and have good reason to be unable to switch from copper to full-fibre products and require extended copper-based service support.

Energy suppliers – interested in identifying how the proposed solution would interface with their products and services.

Target Market

An estimated 157,000 PSR customers in UK Power Networks licence area who do not have a mobile phone registered on their account; 11,000 of those customers would be registered with a medical dependent code. Typically, those who do not have a mobile phone are thought to be elderly and are more likely to need support in the event of a power outage.

Enablers and Constraints

BT are providing vulnerable customers with a [battery backup unit](#) which lasts for a minimum of one hour.

Virgin is providing an [Emergency Backup Line](#) for customers who have accessibility needs or don't have a mobile phone. It is a small box that connects the fibre phone line from the Hub to the home phone handset and connects to the mobile network to call emergency services only. It is intended to provide eight hours of standby and one hour of talk time if disconnected from the mains supply and will only be offered to customers in areas with mobile coverage. However, the solution will not be provided to customers where there's no mobile coverage, and Virgin will not offer fibre phone lines either. If the power outage also extends to the mobile mast, there will not be any mobile phone coverage either (mobile masts tend to have up fifteen minutes to one hour of emergency backup). A portion of the target market is likely to not have broadband connections, and the emergency backup line is not currently advertised to new customers, nor is it mentioned as part of installation services, limiting knowledge access to those who visit their website.

The elderly are likely to store a rarely used mobile phone in a drawer, where the battery is likely to be discharged.

Scalability and Target Implementation Date

BT are planning to complete the fibre optic transition by December 2025 (c. twelve million landlines) and as such the solution should be rolled out at the latest by end of 2024.

The resulting technology could be rolled out to all PSR customers across Great Britain.

Innovation Strategy Target Areas

Innovation Theme	Target Area	Primary or Secondary
Data and Digitalisation	<p>The shift to data-driven, digitally-enabled networks is critical as we move towards Net Zero.</p> <p>We need your help to drive standardisation, interoperability, security and digital skills whilst accelerating our transformation to data-driven networks by the mid 2030s.</p>	Not applicable
Flexibility and Market Evolution	<p>Energy networks must quickly and efficiently respond to the rapidly evolving needs of the energy system transition. We need your support to eliminate barriers to new market entrants, deploy novel commercial and network management solutions whilst ensuring fair participation and eliminating regulatory barriers within the RIIO-2 price control periods.</p>	Not applicable
Net zero and the energy system transition	<p>In order to meet the UK net zero targets of 2050 we must start converting our networks to deliver low carbon fuels today. We want to work with you to develop the role of our gas networks into the future by investigating, trialling, implementing and delivering safe, low carbon alternatives to natural gas such as Hydrogen.</p> <p>Net Zero requires connection of more low and zero carbon sources of energy generation, storage and demand to both the transmission and distribution networks. We need your innovative methods for effective network management and accessing flexibility to improve visibility, forecasting and modelling of low carbon technologies.</p>	Not applicable
Optimised assets and practices	<p>Innovation has a key role to play in ensuring our networks continue to remain reliable, safe, secure and resilient to our changing climate. We are constantly looking to improve and welcome support to identify methods to prevent interruptions, ensure resilience, reduce climate impact and future-proof our networks.</p>	Not applicable
Supporting Consumers in Vulnerable Situations	<p>Equality and fairness are the foundations of a just transition to Net Zero. We hope you can provide insight into the transient and situational nature of vulnerability and how we can overcome the impact the energy system has on consumers, building strong relationships for the future.</p>	Primary
Whole Energy System Transition	<p>The energy system must consider the full range of opportunities, risks and interdependencies that exist across the energy networks to integrate and optimise them in a way that best serves the consumer. We are looking for ways to improve visibility of the networks and transitional options, co-ordinate approaches and collaborate across the UK.</p>	Not applicable