CHANGES TO TELEPHONE NETWORKS – INITIAL ADVICE TO POTENTIALLY-AFFECTED SECTORS

Why is there a change from landlines to voice calls over the internet?

- The UK's telecoms networks will undergo substantial change in the coming years, as the companies that run them upgrade their technology. Some phone companies are already gradually moving their landline customers from the country's traditional telephone network – the 'public switched telephone network' (PSTN) – to newer digital technology known as 'voice over internet protocol' (VoIP), which carries calls over a broadband connection. This means that some businesses and individuals in your sector may already be using VoIP technology, rather than a landline, for their voice calls.

- The change will offer potential benefits to consumers, such as clearer phone calls, and it will help ensure the UK's landline telephone services are fit for the future – including because the PSTN itself is becoming increasingly difficult and costly to fix, and it will cease to be reliable over time. The transition will be straightforward for most customers but some may require additional support to help them update their services.

- This change, from PSTN to VoIP, is being driven by the telephone companies.

How might this have wider impacts on the finance and retail sector?

- **This change is not just about making calls on landline phones**:

  o Over time, **many other services and pieces of equipment have come to use and rely on the technical characteristics of the traditional PSTN phone network** – like its ability to transport data encoded in voice band 'tones' (which, for example, fax machines use), and the fact that it can carry power to facilities and devices that do not have a mains power supply. Equipment or services that rely on these characteristics may need replacing, upgrading or reconfiguring. **It is possible that some facilities that your sector uses may be affected by the transition**. Based on our engagement so far – with telephone companies, wider communications providers and stakeholders – we think these could include: *payment systems such as ATMs and retail card payment terminals; electronic point of sale systems, mobile phone and electricity top-ups; PayPoint services; BACS; and general support services such as communications systems, fire and security alarms, fax machines, modems and other products connected to telephone lines or relying on line power, and communications systems and alarms in lifts*.[1]

  o In addition, the 'PSTN switch off' will also lead to the cessation of 'ISDN' (Integrated Services Digital Network – a pre-broadband approach to providing digital connectivity) services. While ISDN use is limited these days, when it is used it can be for specific purposes or in specific circumstances which may be more difficult to replicate or replace. So, while many organisations in your sector may not be affected, any that are may need tailored solutions.

When is this happening?

- **Initial migrations will start this year (2019), where customers opt to use the new services, with completion by 2025 when the PSTN is expected to be switched off**. However, different telephone companies are at different stages of managing their switch from PSTN to VoIP, leading

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[1] This list is not exhaustive – there may be other applications within your sector.

to differences in both the particular approach each company adopts, and the timescales over which their migrations take place.[2]

What actions do organisations need to take?

- **Telephone companies will generally not be aware of all the services and equipment that their customers are using which rely on the old PSTN technology**. To ensure smooth transition, the communications regulator Ofcom is encouraging organisations to contact their telephone company, and also any suppliers of services they use that rely on the telephone network, as early as possible to discuss the changes and plan for any potential impact on the particular services and equipment they use.

- **Ofcom recommends the following action**:
  o Establish if any services/technology that you use rely on the PSTN or ISDN, and make sure you know what and where these are, whether they use the PSTN's voice/or data capabilities, and if they rely on power through PSTN lines. Investigate widely within your sector – be aware that not all services obviously relate to landline voice calls
  o Contact your communications provider to discuss timescales and the potential impact of the move to IP services on you or your business
  o Contact your service and/or equipment suppliers to see if they have conducted any testing or already offer alternatives that will work with VoIP services. Consider whether your equipment needs to be upgraded, re-configured or replaced and plan appropriate action
  o Consider whether it may be beneficial to schedule or bring forward any necessary modifications/upgrades in advance of the move to VoIP to build in optimum time to make changes
  o Ensure that other stakeholders/arms-length bodies are aware of the change and can begin engaging with their communications provider and suppliers
  o Please let Ofcom (FutureOfVoice@ofcom.org.uk) know if you become aware of any additional services that could be affected by the change which have not been identified in this note

Where can I find out more?

- Ofcom's policy positioning statement on migration to VoIP – *The future of fixed telephone services* – sets out the changes, describes the roles and responsibilities of different organisations, and establishes Ofcom's expectations of telecoms providers
- Openreach, which runs the network infrastructure for many telephone companies, has also produced a short video to explain the changes
- Contact your communications provider(s)

What next?

- Telephone companies are working together to develop a website that will host information about the change. We will let you know when this is launched.

- Ofcom, working with the telephone companies, will continue to work with affected stakeholders and sectors to ensure there is widespread understanding of this change. With good planning, citizens and consumers can be protected from unnecessary disruption.

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[2] Migration to VoIP is likely to occur by 2022 in two areas – Salisbury in Wiltshire and Mildenhall in Suffolk – where Openreach intends to carry out trials beginning in December 2019.