Openreach All IP Programme
Frequently Asked Questions

Contents

Q1. What do you mean by All IP?

ALL IP refers to the telephony network in the UK being changed so that all services work over the Internet (IP or Internet Protocol).

Q2. How does this differ from today?

Today the UK network has a copper and fibre mix of lines and will continue to do so for many years to come. The original copper lines network and the associated telephone exchanges, were designed for voice calls. Today the Internet uses broadband technology to pass data over these lines at speeds that are determined by the makeup of these lines and as Fibre is a far better medium for transmitting large amounts of data quickly and the more fibre we can use, instead of copper, the better the service will be.

Q3. What is VOIP?

Voice Over Internet Protocol is a service whereby voice calls are made over the Internet.

Q4. What is Ultrafast Broadband?

Ultrafast broadband is a brand name used by some Communicators Providers to highlight the potential of their product offering for very fast broadband speeds.

Q5. What is a Communications Provider?

Openreach sell lines to Communications Providers (CPs) who then sell their product offering to the end customer (Homes and Businesses). CPs include over 650 companies including SKY, TalkTalk, BT Consumer, Daisy and Gamma.

Q6. What is Fibre First?

This is a programme that Openreach are using to get as much of the UK Network on to a fibre line and so improve the reliability and speed of connections and data transmission.

Q7. What's the difference between FTTC and FTTP?

Traditionally premises have received their services over a copper line that runs from the local telephone exchange into green cabinets in the street and then on to a local distribution point like a telegraph pole. The copper line then enters the premises.

FTTC or Fibre To The Cabinet, is a service that is already available to 95% of the UK. It utilises the traditional copper telephone line from the premises to the green street cabinet. However, at the cabinet, the broadband/Internet part of the customer's service is transferred

onto fibre and allows greater speeds, whist the customer's voice calls continue
to the exchange over the existing copper line.

FTTP or Fibre To The Premises, connects the customer's premises by fibre cable all the way
to the Openreach exchange, without going through the green street cabinets and provides
fast broadband and VOIP. This service is being rolled out by Openreach in a programme
costing billions of pounds and will continue for years to come, until it is available in the whole
of the UK.

Q8. What is SOGEA?

SOGEA stands for Single order Generic Ethernet Access and is the product name that
Openreach use when selling this service to CPs . It is similar to FTTC but, when a customer
moves to this service, they agree use the Internet for their voice calls (VoIP). The service
uses the copper line from the customer's premises to the green street cabinet and then fibre
cable to the telephone exchange. Unlike with FTTC, the copper line from the green street
cabinet to the telephone exchange is no longer used with SOGEA. This means that to make
voice calls you will need to connect to your router in the premises either through WIFI or
through a voice port in the back of the router - if one is supplied by the CP. These calls will
be VoIP.

Q9. How will this affect other devices I use in the premises?

If you have FTTP or SOGEA, you will need to connect any devices that currently are
plugged into the telephony wall socket in the premises, into the router - if a voice port has
been provided by the CP. This could include Telecare devices, Intruder alarms etc. If you
have such devices, you should contact your device service provider, to make sure that they
will continue to work.

Q10. How will I know if my CP moves me to FTTP or SOGEA?

Openreach have advised all CPs that they need to migrate all their customers on to either
FTTP or SOGEA by the end of 2025. This is when Openreach will no longer provide
traditional analogue services. At some point before this end date, your CP will need to
contact you to arrange for your existing service to be migrated on to an All IP service, which
will be either FTTP or SOGEA.

Q11. What services will be withdrawn at the end of 2025?

All services known as part of the WLR analogue (Wholesale Line Rental) family will be terminated. These include standard lines, ISDN 2, ISDN 30, LLU, SMPF, SLU and SMPF. (See appendix A for more information) Your CP will be able to tell you which of these services you currently use.

Q12. Will anything happen before the end of 2025?

Yes. Your CP will need to contact you and arrange for you to migrate your services on to one of the All IP services (FTTP, SOGEA etc). To constrain the use of the older analogue services and the number of lines that will need migrating, Openreach have set "stop sell" dates, which are dates after which CPs will no longer be able to obtain new supply for their customers of these analogue services. There is a national "stop sell" date of September 2023, but some exchanges will hit their "stop sell" dates earlier, as Openreach's roll out of FTTP into exchange areas reaches 75% of premises. There is a list of these exchanges on the Openreach web site (https://www.openreach.com/fibre-broadband/fibre-first).

Q13. Does Stop Sell just mean that a CP won't be able to order new connections of analogue services from Openreach?

Stop Sell refers not only to new provision of analogue services, but also any of the following scenarios: Working Line Take overs; Start of a stopped line; Addition of lines and channels to existing installations; Migrations; CP Transfers; Bandwidth Modify and Addition of Broadband to copper voice lines.

Q14. What should I do now?

We strongly encourage you to carry out an inventory check for your own organisation, to find out what devices you use today that rely on analogue lines, all of which in future will be replaced by an All IP service like FTTP or SOGEA. You are also strongly advised to check with your device service provider to see if your devices will work when your CP migrates you.

Q15. What is SOGFAST?

SoGFAST is similar to SOGEA, but offers faster broadband speeds, as it has additional equipment at the green street cabinet which boosts the speed.

Q16. In the event of a power cut, can I power the router independently and still have connectivity?

If you can provide a suitable Battery Back Up for your Router, then it will continue to allow access to the router and onward services.

Q17. Will Communication Providers be providing routers with battery back-up to provide some resilience?

CPs must provide a Battery Back Up unit for vulnerable customers that will give a minimum of one hour of power for the router, in accordance with OFCOM guidance. If you do not qualify as a vulnerable customer, you may wish to purchase one of these units from your CP or from an independent supplier.

Q18. I don't think 1 hour is long enough for a Battery Back Up Unit, what should I do?

OFCOM have directed CPs to provide a unit that will give at least one hour of power to a router for critical 999 calls. If you wish to add more power units these can be purchased independently from some CPs and other independent suppliers.

Q19. If the Wholesale Line Rental (WLR) withdrawal programme fails – what arrangements are in place to 'pause' the withdrawal of PSTN? How and who will make that decision?

Openreach do not envisage any failure in the programme. However, in the unlikely event of an issue arising that cannot be resolved without something akin to WLR, then the Government may ask for an intervention on a case-by-case basis.

Q20. Is the rollout on schedule?

Openreach do not publish a complete national forward schedule of which exchanges will have Fibre To The Premises, as it is commercially sensitive information. However this link shows where FTTP is being rolled out, but not by date https://www.openreach.com/fibre-broadband/fibre-first. Communication Providers will have their own plans.

Q21. Have Communication Providers expressed concerns about the All IP programme?

CPs have been involved in the programme since 2017. They are invited to regular industry meetings and get regular updates. They can also contact OFCOM and The Office of the Telecommunications Adjudicator (The OTA) http://www.offta.org.uk/home

Q22. What will be our resilience option be post 2025 in the event of a power failure across an area/region?

At the end of 2025, Telephone Exchanges will no longer provide the 50 volt current that has been supplied in the past to the premises. This means that all back up will need to be provided by the customer's own Battery Back Up arrangements.

Q23. What will happen to telephone numbers?

There are no plans to change anyone's phone number as part of the All IP programme. This function is managed not by Openreach, but by the Communications Providers. There may be exceptional circumstances, whereby a CP may have to change a customer's phone number, but this is considered very unlikely. OFCOM manages the UK's national telephone numbering plan and reviews it as necessary.

Q24. Have OFCOM have defined what "vulnerable" means in the context of this programme for free Battery Back Up?

OFCOM have not set rigid rules for this definition, they are leaving this to Communication Providers. More information can be found at
https://www.ofcom.org.uk/__data/assets/pdf_file/0016/123118/guidance-emergency-access-power-cut.pdf

Q25. Who is responsible for supporting vulnerable end users in migrating to fibre products?

Openreach will supply the network, but cannot take responsibility for the devices that are connected by the customer in their premises. Communications Providers may be able to advise. However, the general advice is for the customer to contact the supplier or maintainer of their devices and confirm whether they will work with All IP, and also who will attend the customers premises to make any changes necessary.

Q26. What does the change to All IP mean for rural communities?

Openreach are making sure that as much of the country as possible has access to either Fibre To The Premises or SOGEA. This means that speeds and connectively should be good for the majority of the UK. Where there is neither FTTP or SOGEA, Openreach have offered CPs a transitional product called SoTAP (See Appendix B), which provides a copper line from the customers premises to the Telephone Exchange, but leaves it to the CP to arrange what goes on the end, in terms of voice and data.Q27. What about public payphones?

Q27. What about public payphones?

Payphone services are not provided by Openreach. The CP responsible for the payphone will have access to Openreach lines as today, but calls will be made over the internet (VoIP)

Q28. How will the end user's home phone work?

To enable telephone calls to be made in the home, the end customer's phone will connect to the broadband router instead of the phone socket on the wall. Exactly how they connect will depend on the type of phone being used. This is ultimately a question for the CP, or service provider providing the voice service.

Q29. What about voice-only customers who don't want broadband?

The only way to make a voice call once the CP has migrated its customers on to either FTTP or SoGEA, will be through a router provided by the CP and will be made over the internet (VoIP). This means that even a customer who wants a voice only service will need to have broadband. Openreach are offering CPs a lower cost, low bandwidth product that offers just 500kb of data transmission, which is enough to place and receive voice calls without taking a full data service. It will be up to the CP whether it offers this service to its customers.

Q30. What about Critical National Infrastructure (CNI) organisations?

Openreach encourages CNI organisations to engage with their CPs, and to test their line configurations and equipment against the new product offerings. Openreach will also be opening a Test Lab in late Spring 2021 for service suppliers of telephony equipment to test their products and ascertain what will work in the new All IP environment. The makeup of the Test Lab will depend on which CPs put their equipment there for testing. Openreach hope that as many as possible will take up this chance.

Q31. Why is there no major advertising campaign making the public aware of the analogue switch off like there was with the change to digital TV?

Currently we are not aware of any plan to carry out a national campaign on the All IP changes. The UK Government sponsored the TV change but have not indicated that a similar campaign will be run. Openreach are spending many hours doing events with Industry to make them aware and several CPs are doing the same. Once a CP decides that its customers will be migrated from Analogue to Digital, they will contact their customers to let them know.

Q32. Do Openreach or OFCOM have a 'Non-Branded' video or guidance which can be provided to our clients?

Openreach are working to launch a new All IP web page and this will contain the latest All IP programme slides, communications and stop sell data for Industry contacts to use. We may also add videos at some point. This should be available shortly.

Q33. Where can I get a list of "stop sell" exchanges?

This is available on the Openreach Portal for CPs and will also be available on our new All IP webpage when launched. They can also be sent to you via email if you choose. Contact Openreach at all-ip@openreach.co.uk

Q34. Is the migration going to be by postcode?

CPs will all carry out their migrations at different times and locations depending on their own plans. This may be on an exchange by exchange basis, but it will be down to the CP to manage their own customer migrations.

Q35. How will all customers in the UK migrate to All IP and what happens to those who don't?

The current analogue network will be withdrawn at the end of 2025. This means that all CPs need to migrate all of their customers to a line that is either Full Fibre (FTTP) or part Fibre (SoGEA see question 8). Anyone who doesn't move to one of these line types will no longer be able to continue with a service that is provided to their CP by Openreach.

Q36. How have Openreach chosen which areas will benefit from its Fibre First Build programme?

Openreach has committed to rolling out FTTP to 20M premises by the late 2020s. This shows that we still need to invest in FTTP, as this clearly won't be enough to cover the whole of the UK. In the meantime, FTTC which will become SoGEA on migration (see question 8) is already available to 95% of the UK and gives at least part fibre with its much improved speeds and bandwidth. Openreach could have put all of its FTTP build into cities, but we have tried to spread out the build around the UK, so that all parts have some full fibre exchange areas. This link shows the map for FTTP in the UK. Fibre First: Your future with broadband | Openreach

Q37. How much notice will be given by CP's to their customers regarding migration?

There are around 650 CPs operating in the UK and they will contact their customers concerning the migration to All IP when they are ready to make the move. It is presumed that all will give a responsible notice period, but we recommend that you contact your CP to ask them what their plans are and how much notice they will be giving their customers.

Q38. Why do new build estates not have fibre supplied to the property as standard rather than just to the cabinet?

Openreach are always happy to work with builders and developers to make a new development ready for All IP, when FTTP is available in that area

Appendix A

Services to be withdrawn

Wholesale Line Rental (WLR) enables CPs to offer their own-brand telephony service over the analogue network.

Integrated Services Digital Network (ISDN) is a telephone-based network system that transmits voice and data over copper lines. ISDN enables customers to make phone calls while transmitting files and videoconferencing. There are two types of ISDN: ISDN2 and ISDN30.

Fibre to the Cabinet (FTTC) is a form of fibre optic communication delivery which uses fibre from the exchange to the street cabinet, and copper from the cabinet to the home or office.–Where FTTP cannot be installed by 2025, FTTC will generally be replaced by SOGEA.

Metallic Path facility (MPF) allows CPs to provide phone and broadband services to their customers over the Openreach network. MPF is not affected by the withdrawal of WLR products as traffic is managed through the CPs own core network rather than the PSTN. MPF will no longer be available once FTTP is installed.

Local Loop Unbundling Shared Metallic Path Facility (LLU SMPF) enables CPs to offer broadband services via the Openreach telephone exchange, over an analogue line, while another CP (or the same CP) supplies voice services on the same line – hence it being "shared".

Sub-Loop Unbundling Shared Metallic Path Facility (SLU SMPF) provides access (via an access point - usually the Openreach street cabinet) to the local network. This enables SLU CPs to connect to their fibre network, providing voice services over copper and broadband over fibre.

Appendix B

Remaining Services

Single Order Generic Ethernet Access (SOGEA) will offer similar connectivity to GEA-FTTC without the need for an underlying voice access product, offering speeds up to 80Mbit/s.

Single Order Gfast (SOGFAST) is a cutting edge technology that allows Openreach to deliver ultrafast speeds over existing copper lines of up to 330Mbit/s, through a single order variant which forms part of the Openreach developing product portfolio.

Fibre to the Premises (GEA-FTTP) enables CPs to offer ultrafast broadband speeds of up to 1Gbit/s download and 220Mbit/s upload and can be purchased on its own.

Single Order Transitional Access Product (SOTAP) is a new but temporary product that will deliver a copper path between the end customer's premises and the SOTAP CP's exchange infrastructure, over which the SOTAP CP can provide broadband and IP voice services. This is different from MPF because MPF facilitates the use of existing exchange infrastructure which currently supports LLU SMPF and therefore provides a better experience for end customers migrating away from WLR products. SOTAP will no longer be available once FTTP is installed.

Ethernet is the generic name of a large family of international standards for data communications over fixed lines. It is also the term used by Openreach for a wide choice of high bandwidth, permanently connected, point-to-point services designed to help CPs extend their own networks and deliver a range of high quality services to their customers. The Openreach Ethernet fibre network that underpins them offers unrivalled geographic coverage of the UK.