

ITSPA response to Openreach's industry consultation on the Single-Order GEA-FTTC Product Proposal

About ITSPA

The Internet Telephony Services Providers' Association (ITSPA) is the UK VoIP industry's trade body, representing over 80 UK businesses involved with the supply of VoIP and Unified Communication services to industry and residential customers within the UK. ITSPA pays close attention to the development of VoIP regulatory frameworks on a worldwide basis in order to ensure that the UK internet telephony industry is as competitive as it can be within international markets.

A full list of ITSPA members can be found at http://www.itspa.org.uk/

Summary

The Internet Telephony Service Providers' Association ("ITSPA") welcomes the new General Ethernet Access – Fibre to the Cabinet ("GEA-FTTC") product so that End Users will be able to obtain their voice service entirely by VoIP from a separate service provider.

Ofcom research says that around 25% of socio-economic group DE are mobile only households and around 16% of group ABC are the same. The cost of the often redundant voice only metallic path in the regulated cost base for current products will contribute to these groups' decision to proceed in this manner and denies, purely by virtue of a regulated product to support a legacy service, ITSPA members the ability to offer innovative services to the population.

ITSPA members are seeing a genuine and increasing demand from their customers for a new product similar to that proposed by Openreach. End Users are, in our members' opinions, and despite the views of Ofcom to the contrary in the residential market, increasingly looking to choose their broadband and voice service providers separately. End Users – business and consumers alike - are seeking flexibility in choice of their broadband and voice suppliers and do not want to be locked into taking their services (broadband, voice and even line rental) from one provider without the ability to seek alternative services from different independent VoIP service providers. Furthermore, given the niche specialties of numerous



ITSPA members, it is also likely that two or more may be combined by an End User to complete the desired or required service.

A new product such as the proposed GEA-FTTC offering should offer the benefit of real choice between a customer's broadband access provider and their voice provider. The new GEA-FTTC product should go a long way to allowing new VoIP services to be built by CPs to meet needs of End Users who seek to acquire voice services from multiple separate service providers.

In addition to simplifying the switching process and increasing consumer choice, the new GEA-FTTC product should also serve as an important consumer protection mechanism. Loss of connection on porting of a number from an incumbent broadband provider to another provider is a consequence that consumers are unlikely to be aware of at the time they put in a request for number portability. This is because traditional broadband providers use the telephone number to provision both the voice line and the data connection. Upon porting the number the data service ceases leaving the customer without any connectivity whatsoever. The transition of voice and broadband service to/from SOGEA from a CP and end-customer experience should ensure an uninterrupted service or at least minimal discontinuity – a seamless experience. This is to be welcomed by CPs and end-users alike.

ITSPA therefore supports the new GEA-FTTC product in principle and looks forward to an ongoing dialogue with Openreach on this product to ensure that the interests of end-user customers who wish to obtain their voice services by VoIP from a separate service provider are able to do so easily and without interruption in service.

Specific Consultation Points

ITSPA has the following comments on the specific points raised by Openreach.

Response Prompt 1 This consultation invites CPs to consider the specifications that the proposed product may require and where this may differ from the existing FTTC specification.

Other than as set out in the remainder of this response we have not identified any specific requirements that would not be met by current FTTC GEA products however we believe there is room to improve SLAs and operational processes.



Response Prompt 2 *CPs are asked to consider carefully and discuss their short term needs and long term aspirations for supporting voice re-injection. Responses should recognise the inherent complexities that it introduces for the industry whether by non-isolated premises wiring or fully isolated wiring (in the voice narrow-band).*

Whilst ITSPA recognises that some customers may have requirements to continue to use analogue telephony via extension wires we do not believe this should impede or add cost for the majority who have increasingly little need for this technology. We note in particular:

- The very high adoption of cordless phones amongst households with multiple fixed line devices.
- The very high level of use mobile phone use.
- The fact that WiFi is routinely offered to broadband customers (including new fast WiFi standards such as 802.11ac), making the positioning of their routers less important than in the past.

ITSPA believe that industry players offering VoIP services will largely do so using native IP technologies like DECT CAT-iq and voice over WiFi as these allow service innovation. We note that Openreach is not proposing a compulsory migration to SOGEA so those customers with ongoing need for analogue telephony can remain on WLR or MPF for the foreseeable future.

ITSPA's view is that Openreach should offer CPs a service to enable support of ATAs and voice reinjection reactively when required, probably through an engineering visit funded by the CP or a self-installed modification to an existing NTE5. Openreach should not increase costs to consumers by rolling out a widespread upgrade programme, nor should any support for voice re-injection make the SOGEA product more expensive or complex for CPs than it would otherwise be.

Response Prompt 3 *CPs are asked to comment on the need to support other migrations including conversions and non-standard line types.*

ITSPA believes that products like SOGEA offer the potential for cheaper fixed telephony in the medium term as facilities like e-side copper and even exchanges become redundant. Furthermore as Openreach point out it will become increasingly expensive and difficult to support TDM technology as equipment ages.



ITSPA believes that analogue technology is in slow terminal decline and that the long-term health of the industry and Openreach is best ensured by a gradual migration away from it. Accordingly we believe that once a line is converted to SOGEA there should be no need to migrate back to WLR or MPF. Instead Openreach should offer a variant of SOGEA that is equivalent in performance to that which might be obtained from exchanged-based broadband at a comparable price.

This approach helps prepare the UK for a future in which analogue telephony has been retired and reduces the overall cost to industry by removing the need for physical re-jumpering at cabinets and exchanges.

ITSPA wishes to see Openreach minimise and ultimately eliminate non-standard line types that may not support SOGEA such that the footprint is maximised and CPs can offer SOGEA products with confidence. In this regard Openreach should seek to eliminate Exchange-Only Lines – possibly by providing VDSL capability within or outside all exchanges with such lines.

Response Prompt 4 This consultation invites CPs to discuss their requirements for the provision and cease process including number porting and the timing of KCIs so that the continuity of broadband and voice service from an end-customer's perspective is uninterrupted or has minimal discontinuity.

The vast majority of provisions will be on existing lines. ITSPA is keen to see an efficient, automated and fail-safe provisioning process. In particular we believe a 'make before break' approach should be followed. We envisage this working along the following lines:

- Order is confirmed by Openreach and RFS service date is agreed.
- SOGEA product created and provided (essentially provision of FTTC GEA broadband on a line) without removing existing voiceband services (whether provided via LLU or WLR.)
 Note that this requires the creation of new products that offer the voice component of WLR or the exchange voice connectivity associated with MPF without the line.
- Once the SOGEA product is provided and tested and the CP confirms that it is ready the number port is triggered.
- Existing outbound voiceband services should not be barred until the number port is triggered (or,
 if there is no number port, the SOGEA service is verified.)



Existing inbound voiceband services are not removed until the customer has had an opportunity
to verify that the SOGEA service is working, trigger the number port and for it to complete (or, if
there is no number port, the SOGEA service is verified.)

The advantage of this approach is that the customer does not lose their existing voice service until the SOGEA IP path is proved and the number port has time to complete. Any costs associated with the dual-running of SOGEA and existing voiceband services should be built into the activation charge and the dual-running should last at least long enough for the customer to establish that the service works (at least 1 working day) plus the time for the longest porting journey to complete. Openreach should also provide a facility to suspend the removal of voiceband services should the gaining CP become aware of a failure of the porting process.

To facilitate this approach ITSPA would like to see SOGEA heralding significant improvements in the Openreach porting process. In particular:

- Any validation of number port should be carried out at the start of the ordering process. Where there is no change of CP number ports should be allowed at any time.
- Removal of the need to establish a port window.
- An automated number port triggered by the gaining CP.
- A positive confirmation from Openreach that the rangeholder has been instructed to redirect traffic, and where the rangeholder is Openreach further confirmation that the number has been redirected.

Response Prompt 5 *CPs as asked to consider how voice reinjection may affect the provision, take-over, and cease process for SOGEA especially when changes of CP occur as this could be affected by voice reinjection and any changes to home wiring.*

ITSPA strongly believes that whatever steps Openreach takes to deal with voice re-injection (which we believe to be a niche problem) the SOGEA product must be standardised and predictable. In particular the process from moving from WLR and MPF to SOGEA and the process for migrating SOGEA lines between CPs should not be complicated by any historic voice re-injection activity. This means any voice-injection modifications cannot have any impact on the core function of the SOGEA line or the NTE5 master socket – they should be restricted to isolating extension wiring from the D-side link.



The only exception to this is if Openreach proposes an optional enhancement to the NTE5 (such as an interstitial plate) to support voice re-injection. In such cases if Openreach has previously modified an NTE5 to make it suitable for voice re-injection then this information should be available via line status dialogue services to allow CPs to provide a high quality service to their customers and avoid placing unnecessary orders where a customer requests voice re-injection.

Response Prompt 6 *CPs are invited to consider whether the current, full range of bandwidths is required for potential uses of SOGEA and whether other combinations are more suitable for prospective use of the proposed product.*

ITSPA believes SOGEA is likely to become a high volume product and so must support all the bandwidths offered over FTTC (but there is no need to implement historic bandwidths no longer offered for sale.)

ITSPA also believes that it would be sensible to offer:

- 1. A restricted bandwidth product comparable to exchange-served ADSL so that re-grades can be implemented via provisioning commands to the cabinet rather than re-jumpering and exchange re-provision, which is a complicated and expensive activity prone to failure.
- 2. A restricted bandwidth product suitable for supporting voice-only / USO products and telemetry. A speed of approximately 2 x 100kbps should be sufficient to deliver voice and 'functional internet access' as required by the General Conditions.

In a world where superfast broadband has a high adoption rate these products would enable exchange consolidation and removal of e-side copper by removing any need for exchange-based WLR / MPF services. Furthermore if technology such as vectoring solves issues with FTTC cabinet capacity then removing the need to disconnect the FTTC service may reduce the overall cost to industry.

Variant (2) need not be launched immediately because it is unlikely to cost competitive with WLR / MPF but if Openreach decides to proceed with an FTTC-based fibre-only exchange trial then it will be required.

Response Prompt 7 *CPs are invited to comment on the fault management approach to SOGEA and changes in relation to the existing GEA-FTTC products.*

SOGEA means that the customer's voice connection is only as reliable as their IP connection. Openreach will need to ensure its network monitoring, service levels and service restoration times are suitable for



primary line voice. In practice this means delivering similar service levels via SOGEA as are delivered via WLR or ISDN. In particular it is essential that Openreach agree with Ofcom that the specification for SOGEA (including the SLAs and support) will be regarded by Ofcom as a suitable input product upon which to build a PATS service as set out in General Condition 3.

Response Prompt 8 This consultation invites discussion on the transmission features of GEA-FTTC that would be required to support end-to-end voice performance targets for solutions our customers may consider delivering over SOGEA.

VoIP services require low latency, jitter and packet loss. SOGEA is only one component that can contribute to the end to end quality but it is therefore important that the SOGEA service does not introduce significant additional latency, jitter and packet loss. [Any comments on these measures? Obviously the SOGEA part only covers the link from the fibre head end to the WAN.]

• Latency: < 5 ms (WAN to head end - including Openreach modem if supplied)

• Packet Loss : < 0.1%

• Jitter : average <1ms

Response Prompt 9 *CPs are asked to consider how delivering voice over SOGEA lines may be impacted by variability in performance across the GEA-FTTC line base and how the order process and fault management process should meet any new demands from voice carriage over GEA-FTTC.*

ITSPA believes that the SOGEA product should ensure high quality voice deliver. There will invariably be plenty of bandwidth available over a SOGEA line to support voice and so the main risks to high quality voice delivery occur only when the network is congested. This could occur over the D-side link or within the trunked domain.

We believe voice assurance can be achieved by:

- Ensuring voice packets are prioritised within the Openreach trunked network.
- Ensuring voice packet marking is respected and prioritised in the VDSL downlink.
- Ensuring voice packet marking is respected and prioritised in the VDSL uplink where an Openreach modem is supplied and to specify such a requirement where CPs provide their own modems.



ITSPA notes that SOGEA might be used by organisations seeking to carry significant amounts of voice traffic over a link (e.g. to support a PABX) and that in time video calling may increase significantly and need to be treated in a similar way to voice traffic.

The ability for End Users to choose form a range of voice services is a major benefit of SOGEA. It is therefore important that any prioritisation applies to *all* voice services over a SOGEA line and is not just available to the CP renting the line.

Response Prompt 10 This consultation invites discussion on coverage and geographic locations suited to trials and pilot launch and the relationship to potential volumes consumed.

ITSPA has no comments on trial sites however we would like to see facilities for testing established at BT premises (such as Adastral Park) so that ITSPA members can prove their services without the need to run extensive field trials. An Openreach test facility should support all order and information dialogue services as well as the telecommunications service itself, thus allowing OSS systems to be tested.

Response Prompt 11 *CPs are asked to discuss their interest, demand, and potential take-up volumes over time of the proposed product and any dependencies that may affect consumption.*

ITSPA expects SOGEA to deliver additional benefits for FTTC and therefore increase adoption of this technology. It is not practicable for ITSPA to provide an aggregated volume forecast on behalf of its members however we would expect SOGEA to be attractive to a wide range of CPs. In particular:

- SOGEA should be easier to consumer than MPF because it does not require local exchange
 equipment. We would expect new wholesale products to emerge to support SOGEA and this in
 turn would enable new players to enter the market with differentiated offerings.
- Even where traditional CPs provide service SOGEA provides an opportunity for ITSPA members to
 provider differentiated voice services over SOGEA lines. In this regard we believe that voice
 prioritisation be implemented in a way that is accessible by all voice providers and not just the CP
 who is renting the SOGEA service.

Industry support for SOGEA depends on widespread availability. ITSPA would like to see Openreach commit to a widespread rollout plan once initial pilots are complete.



Response Prompt 12 *CPs are asked to consider their needs for a progressive testing plan and product trials.*

See our response to question 10.

Response Prompt 13 This consultation invites bi-lateral discussion on the opportunities for Openreach to include supplementary services for SOGEA provision, for example new voice solutions.

ITSPA strongly objects to Openreach offering voice services itself. We believe that there are many players in the market who can provide voice services on a wholesale basis and that Openreach's position as a regulated supplier is compromised if it competes with its customers.