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OFCOM CONSULTATION ON REVIEW OF RELAY SERVICES

HEARING LINK TELECOMMUNICATIONS WORKING GROUP RESPONSE

Introduction

Hearing Link is a membership organisation with the aim of enabling people with acquired hearing loss to participate fully in society. It is estimated that there are, of the order of, 9 million hearing impaired people in the UK with, in addition, an extensive network of families, friends and work/education colleagues. People with acquired hearing loss include those in the early stages of losing their hearing, hearing aid users through to those with a profound hearing loss. It covers all age groups although many will be older. In this note, we use the term “deaf” to cover this wide range of people.

In the context of telecommunications, most of these people communicate using speech and residual hearing, although, for the more severely affected people, other forms of support will be required.

“At the moment, most people would agree that a telephone is needed in order to be included in society” and “Access to communications services will become a pre-requisite for participating fully in society” (Ofcom Annual Plan 2007/8). Functionally equivalent access to telecommunications at equivalent cost is, therefore, vital for hearing impaired people.

The Telecommunications Working Group of Hearing Link deals with access to telecommunications for people with acquired hearing loss and we welcome the opportunity to respond to the consultation.

Initial comments

We are glad to see this consultation although sad that the progress towards equivalence is so slow. Our answers reflect the needs of our

members. However, they take into account the UKCoD “Key Principles” set out in Appendix A.

We shall attempt to answer according to the consultation questions. However, we should like to make the following comments that apply to both text-based (including captioned telephony) and video-based relay services.

Choice, competition and progress.

Ofcom's statement of purpose says:

> "We make sure that people in the UK get the best from their communications services, ... while ensuring that competition can thrive."

Surely, this should apply to deaf users so that they can make use of whichever relay service is appropriate for their personal needs?

It is sometimes argued that deaf user choice is satisfied by the ability to choose which telephone service provider they use – just like any other telephone user. However, deaf people need choice of type of relay service in order to find one as close as possible to functional equivalence bearing in mind their personal needs and abilities. Were a hearing user told that they had choice of telephone service providers as long as the conversation is in British Sign Language, this would hardly be regarded as choice. However, this is exactly the expectation offered to deaf users.

To deliver choice and facilitate progress, Ofcom need to develop its requirements so that there are incentives for providers to update and improve relay services. We believe that competing, same type, relay providers is the best means of doing so.

Proportionality.

We believe that proportionality cannot be discussed adequately without reliable information and there may be a temptation to use proportionality as a stick to force deaf organisations to accept sub-optimal services.

The estimates for text-based relay below give a feel of the unreliability of available data on the user base. Hearing Link have estimated (admittedly being forced to use imperfect data) that in the UK some 400,000 people *might benefit* from text relay but *take-up* is unlikely to exceed something between 10,000 and 30,000. The Consultation uses take-up estimates for text relay from 11,000 to 22,000 with a possibility of 70,000 “light users”. For VRS, the Consultation estimates range from 11,000 to 30,000 users.

One cannot use such data to make decisions on cost and proportionality so important for this large section of society. There are some 9 million people in the UK (@15%) with measurable hearing loss. This represents the largest disability group and the number is equivalent to the populations of Wales, Scotland and Northern Ireland combined.

Many organisations representing deaf people have argued for some time that some form of trial period would help provide better estimates of cost, usage and benefit. We support this.

We believe that there should be a pilot introduction of IP-based text, captioned telephony and VRS services *well before* the existing mandate for the BT TextRelay service is withdrawn (say within one year of the consultation). Then, everyone involved will have a better understanding of costs, take-up and practical problems before proportionality matters are considered.

How will any system be used in practice?

We see very little consideration of how relay systems will be used in practice. There seems to be an assumption that planned outgoing calls are the main consideration. In contrast, unplanned incoming calls pose many problems in regard to charging and practical use. A particular issue is incoming calls to multi-user households.

We believe that Ofcom has a duty to investigate the users experience in practice.

Such practical considerations should influence system design. *The ergonomic principle of considering all potential users at the start of the design process should be at the core of discussion at a very early stage.*

A great advantage of an IP-based system is the potential for choice of terminal to suit the user. This is particularly so for deaf-blind people who benefit from larger fonts, differing contrasts and colours. It also opens up communication for people whilst on the move.

We would anticipate a growing market for “apps” for smart phones, tablet computers and yet to be launched equipment. Government would surely be pleased to see such developments in the UK.

Question 1: Do you agree that NGTR would provide greater equivalence than the existing approved TR service? Do you agree that we have considered an appropriate range of improvements?

Ofcom is to be congratulated on proposing a more up-to-date system capable of using IP-based services. We believe that the revised criteria set out in 4.115 and 4.118 are a good starting point though, in our view, there are some omissions and corrections that need to be dealt with in conjunction with stakeholders.

However, we do not agree that the NGTR described will provide significantly greater equivalence for two major reasons. It will lead to a monopoly provider and it rejects existing captioned telephony services.

A monopoly provider:

As we understand it, NGTR is intended to be an “IP based overlay network used in conjunction with the PSTN connection” (4.24). It will allow continued use of legacy equipment as well as IP equipment. The introduction of IP-based systems is attractive as it offers new methods of access to suit user needs (for example large fonts for visually impaired people) as well as facilitating increased speeds, two-way conversation and the ability to interrupt.

We also understand that it will be up to the telecommunications providers to decide how this is done. The overriding design being controlled by the design criteria set out in 4.115 and the KPIs in 4.118.

However, 4.115 (bullet 3) says that the NGTR has to cope with legacy equipment and PSTN as well as IP-based systems. This indicates a very significant investment unless use is made of the current BT service. We now understand that Ofcom accept that there will be only one service that all telecommunications providers will use. At this stage, one cannot be sure if any organisation would be prepared to take on providing an NGTR service.

Either way, in effect there will be a monopoly service provider.

History supports our concern that such a monolith will constrain development and provide minimal service. Indeed, much of the suggested NGTR is simply what BT/RNID should have developed already had there been sufficient incentive. Certainly, a single provider will constrain choice of service and technical development. It will not future-proof the relay services.

This we cannot accept. Furthermore we believe it may breach regulations on functional equivalence and choice - see Universal Service Directive, Article 23a ('Ensuring equivalence in access and choice for disabled end-users').

There is a general axiom about combining, or mandating, systems involving 'legacy' with 'new technology' - that it can result in holding back the new technology. Already a separate VRS mandate is proposed so we see no reason why a service akin to the current TextRelay service cannot be mandated separately from a mandated IP-based service with competition between IP sub-services. It would allow appropriate separate targets and KPIs to be mandated on the two systems, rather than 'tie' the legacy (TextRelay) with the newer and evolving technologies. Captioned telephony should be one of the sub-services as it could be offered by SME's in a matter of months.

The current service will need to continue for some time anyhow and, without this constraint on development, modern technology should be such that IP-based services can be set up relatively quickly and cheaply with competition between potential providers for quality services with competitive charges. It seems to us that this would enable small service providers to enter the market and provide advanced services quickly as well as provide employment.

The two mandates would cater for essentially the same customer base of hearing impaired people as now so there should be no significant increase in usage apart from that arising from the availability of improved services. Indeed, because proper captioned telephony, like VRS, can offer conversation times of about a third of TextRelay, reduced costs are possible. We would expect the IP-based services to grow as the TextRelay services wane.

NGTR is complex and there are many uncertainties. We are particularly concerned at the prospect that NGTR is such that no potential provider will take it on. Therefore we should like to see the mandating of three separate relay services - Text Relay, IP text Relay and Captioned Telephone Relay as a precursor so that deaf people do not suffer further delays in implementation of voice equivalent relay services.

Existing captioned telephony providers:

CapTel (and more recently WebCaptel) is a commercial system that provides captioned telephony using re-voicing. It has been available for some time and user experience shows that the system offers near functional equivalence to voice telephony. Indeed, it has been shown that access to the service enables users at work to progress better in their careers.

The Consultation has a section on the “benefits of NGTR over captioned telephony” (4.37) in which it is argued that speech recognition technology is not sufficiently advanced for a fast, low error rate captioned telephony and Ofcom declines to mandate this technology. This completely ignores the experience of many hard of hearing people in the UK and worldwide who have experienced CapTel and WebCaptel. We wonder if any of the Ofcom advisers have experience of using the service in practice.

Ofcom has been aware of this technology for, at least, the last five years since Hearing Concern brought it to their attention. The issue at the time was that it came with expensive terminals. Since then the UK based Teletec addressed this problem by developing WebCaptel which provided the same service with normal computer terminals instead of expensive, proprietary terminals. More importantly, it does not require software to be downloaded to these terminals. We understand that, although the CapTel platform may be proprietary (just as the BT TextDirect service), because WebCaptel uses non-proprietary terminals (any computer connected to the internet) it should be acceptable to Ofcom.

It is therefore wrong to continue to say that speech recognition technology is not sufficiently advanced.

As well as facilitating two-way conversation and the ability to interrupt, WebCapTel offers transcription speeds of 125 wpm with accuracy of 98% for straight talk with no jargon and users find that relayed conversations are closely akin to a normal voice conversation especially for those deaf people who's speech is acceptable and including those who have some

residual hearing. This group of people represents the quiet majority of deaf people who have severe difficulties with the normal telephone.

We believe that such advanced technology should not be discarded through prejudice.

Question 2: Do you agree with the proposal to implement NGTR through the amendment to GC15? Do you agree that the criteria we propose satisfactorily embody improvements we suggest for NGTR?

We do not agree fully with the proposal but it offers scope for the provision of improved relay services. The ideal solution would be a specific fund that telecommunication providers pay into and relay service providers draw from.

We welcome the proposal that places responsibility on all telecommunication providers.

However, there must be sensible minimum standards and Key Performance Indicators should be drawn up in cooperation with user representatives.

We do not agree that the current criteria are satisfactory.

The speed of transcription is an important element of the “ability to have natural conversations” (3.10) and should be included in the criteria (4.115) and the KPI (4.118). However, the document does not discuss how it should be defined or measured.

The averaging process used in 4.23 is flawed. In the example a transcription speed of 60 wpm is combined with a voice speed of 170 wpm to give a conversation speed of approx. 110 wpm. A simple average.

What is relevant is a measure of “words being exchanged during a call”, which is surely the whole object of the call. Therefore, a more relevant measurable target “Total number of words transmitted divided by total call time” is required.

Therefore, (assuming an equal number of words is transmitted each way) any averaging process should be of minutes per word rather than wpm – ie the reciprocal of each speed. For the above, this results in an “average” of 88 wpm. If the transcription word count is much greater than the voice word count (most likely if the deaf person is dealing with a bank for instance) then the “average” speed falls dramatically.

However, from the users point of view, the factors that influence the flow of conversation are the transcription speed and delay. These are the factors that can make a conversation stilted and an embarrassment. We believe, therefore, that *transcription* speed and delay are the factors to be defined and measured.

The “average” in 4.23 presents a false, over-optimistic measure of “conversation voice to text transcription speed” in the proposed KPI.

We cannot accept that an NGTR service with transcription speeds of the order of 60 wpm can be regarded as equivalent to voice telephony – especially whilst IP-based relay services are already available that can be regarded as equivalent. We should be no better off than we are at present with 60 wpm.

We recognise that the development of criteria for transcription speed and accuracy will be no mean task. The needs and abilities of deaf people are extremely varied so there can be no satisfactory “one size fits all” or “minimum” solution.

If the resulting conversation is fluid many users would prefer speed over accuracy because, as in a normal telephone conversation, one can ask for confirmation of important details. Slow readers may need slow transcription speeds – although, again, in a fluid situation they can ask the transcriber to slow down.

We believe that Ofcom and user representatives should work together to develop optimal Key Performance Indicators (KPIs) rather than set simple minima as the KPIs will play a vital role in ensuring acceptable services. They will need to be future-proof.

We believe that Ofcom, together with stakeholders should work on this aspect as a matter of urgency.

Question 3: Do you agree that a period of up to 18 months for implementation of NGTR, following an Ofcom statement, is appropriate?

This depends on the availability of relevant and cost effective technology for the combination of IP technology and PSTN systems and we suspect that this will be complex in practice.

Were Ofcom to introduce separate PSTN and IP mandates as we suggest, captioned telephony in the form of WebCaptel should satisfy the bulk of the IP requirements and is available off the shelf so a UK provider should be able to make it available within months.

Additional comment on IP-based services

Many people with acquired hearing loss learn to lip-read and some rely on lip-reading in face to face conversation.

Were a provider able to facilitate a video element with sufficient definition and speed for lip-reading (perhaps similar to what is available on Skype and similar VoIP systems) then such users would benefit greatly.

Question 4: Do you consider that the requirement to ensure equivalent services for disabled end-users would require a mandated VR service in some form for BSL users? Please indicate the basis of your response.

We are not in a position to comment in detail on VRS. However, recognition of BSL as a UK language surely requires VRS for equivalence.

Question 5: Do you agree that a restricted service would be more proportionate in providing equivalence for BSL users than an unrestricted service?

Until we have a much better understanding of potential uptake and total costs it is impossible to comment on proportionality. Proportionality arguments based on unknowns are not acceptable as reasons for discrimination.

Question 6: Please provide your views on Methods 1 – 5 for a restricted VR service discussed above. Are there any other methods that are not mentioned that we should consider? In making your response, please provide any information on implementation costs for these solutions which you believe is relevant.

We are not sure if Ofcom is using the current cap on text relay services as a cap on NGTR services also. We understand that some restrictions may be necessary initially – if nothing else because of the availability of qualified sign language interpreters and re-voicers.

However, we stand by the UKCoD principle that services should be available 24/7/365. Otherwise there may be confusion and delay when a deaf person faces an emergency. We might accept a skeleton service overnight.

Question 7: Do you agree that a monthly allocation of minutes combined with a weekday/business hours service would be the most appropriate means to restricting the service?

We are not in a position to comment although the suggested 30 mins. seems very restricting taking into account work use and incoming calls from hearing people.

Appendix A

UKCoD Key Principles for relay services.

If deaf people are to be enabled to make the same use of telephones as the rest of the population then developments in relay services must comply with the following principles

- Be available 24/7/365
- Be real time equivalent
- Meet appropriate quality standards
- Be available to users at no cost other than the cost of a standard call.
- Meet the varying communication needs of deaf people, whether deaf with speech, BSL users, hard of hearing, deaf-blind or deafened.
- Be capable of taking advantage of new developments in technology.
- Treat Captioned Telephony, Video Relay Services (VRS) and Text Relay with equal importance to ensure that all sections of the deaf and hard of hearing community benefits from functional equivalent access to telecommunications
- Enable the full participation of all deaf users through the provision of appropriate software and terminal equipment to access different types of relay services
- Provide number portability
- Provide real choice for consumers through open competition between “same type” relay providers
- Use standard protocols to ensure interoperability across platforms and networks
- Provide equivalence to all standard telephony platforms including the provision of mobile phone solutions software communication packages