Ofcom may publish a response summary:

Yes

I confirm that I have read the declaration:

Yes

Additional comments:

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Question 1: Do consultees agree with the proposal to require broadcasters to measure and report every six months on the average speed of live subtitling in a variety of programmes, based on a sample of segments selected by Ofcom? :

No.

I do not believe averaged speeds are particularly helpful measures for live subtitling.

Regulated speed does not exist in natural speech and can fluctuate wildly even within a sentence but listeners can cope with this variation. It may be more difficult for readers to regulate speed (and I am a firm believer in the value of gradual transitions in subtitling speeds to help this).

Lots of educational literacy research shows that readers do not take in every word at the same rate (in fact many words or phrases are recognised by a variety of other methods such as shape). Comprehension of subtitles is also affected by many other factors such as word order, complexity of the ideas (and scripted material within news programmes can be much more challenging here as a lot of journalist thinking time has gone into conveying complex ideas as briefly as possible), and the intention of the programme maker/genre, as well as speed.

I would also argue that for news subtitling, other than for graphics/maps etc, less additional information is gleaned from the pictures than for other genres. So the fact that speed forces the viewer to focus on the text only may be more acceptable, if not relaxing. But does any viewer watch the news to relax?

Average speeds would also suggest an average viewer - and different viewers even with similar degrees of deafness will have differing needs depending on many factors unrelated to their deafness. Particularly within the hard of hearing community, there has always been huge resentment of any editing.

From a technological and cost perspective, it would take a very sophisticated algorithm to relate the measure of wpm to language complexity and readability of the subtitle content.

On a positive note, there is a degree of speed regulation already happening in realtimecreated subtitles (as opposed to subtitles cued out in real time from text available in advance). Both live stenographers and live re-speakers moderate speed in order to keep up. This type of regulation may be accidental but can be very effective as it has not only to do with word rate but also the complexity of the material for the person relaying the information and so perhaps more accurately reflects viewers' needs than deliberate attempts to edit where speed regulation may dominate over sense and certainly over latency (thinking takes time). Discovering which re-speakers/stenographers achieve this best is the holy grail of all live subtitling suppliers; but publishing this information could create all sorts of commercial sensitivity difficulties.

I strongly believe that if a requirement to moderate speed were introduced, it would adversely affect the latency as further 'thinking time' would be required. It could also adversely affect accuracy as thinking about speed would need to be constantly 'switched on' rather than naturally occurring during peaks of particularly complex material.

However, requiring a more even speed (and therefore some editing) in VoD versions of live programming does have merit - if costs can be contained - along with error correction, of course. However, if subtitles could be properly synched in VoD versions, this may actually mean that the requirement for editing/speed smoothing disappears as synched subtitles are so much easier to follow.

Question 2: Do consultees consider that broadcasters should be asked to report separately on different types of live programming? If so, do they agree with the suggestions in paragraph 6.19, or would they suggest different categorisations, and if so, why?:

Yes - different types of live programming must be taken into account. No - only the broad categories suggested.

Account must be taken of the where each programme sits within a broadcaster's portfolio and schedule. For example, it would be unfair to compare a single hour-long news programme, punctuated with ad breaks, with a news programme with no ad breaks that splits into 18+ regional opts all requiring separate but simultaneous coverage. They are not the same beast.

And the broadcaster's total volume of live subtitling in each category needs to be taken into account (in volume terms rather than percentage terms). Live subtitling is still an area where resourcing is an issue - ie producing 300 hours of live news subtitling a week is very different from producing 30. This should not be used as an excuse, but it should inform the figures.

Similarly if a broadcaster is supplying additional live subtitling (eg multi screens), this is serving the audience very well and should be given some additional credit ('added value' if you must), even if outside Ofcom regulation.

However, I do not believe the fact that a single supplier may be providing coverage for several different broadcasters at the same time should be taken into account (this should be allowed for in their work plan to produce the best result for each broadcaster).

Question 3: Do consultees consider that the guidance on subtitling speeds should be reviewed? Do consultees agree that, for the time being, it would not be appropriate to set a maximum target for the speed of live subtitling? If not, please explain why.:

No. Yes.

I do not believe that a review of speeds would be helpful at this point without a clear idea of how any speed regulation could actually be implemented by broadcasters/suppliers without adversely affecting latency and accuracy.

The differing needs and wants of the very diverse live subtitling audience also need to be taken into account (even excluding those without a hearing impairment - whose views should be taken into account as quite a lot of people watch in mixed groups, and hearing groups really cannot help but comment "They missed a bit out there" or "That's not what he said!" These comments are much more likely to occur on live subtitled programmes than pre-recorded).

Question 4: Do consultees agree that it would not be appropriate at this stage to set a maximum target for latency? If not, please explain why.:

Yes, this is not the right time to measure latency in terms of publishing results. In terms of gathering data, it could be useful - but with many caveats.

As stated by Ofcom, there are many points within the transmission chain that can affect latency and it could be extremely difficult to pinpoint the latency in each area. However, measuring gross latency (as a data collection exercise - not for publication) could be useful to get a feel for which transmission chains seem to result in least latency, particularly where the same supplier is subtitling similar material for different broadcasters. But, again, this data would need to be placed into the bigger picture of the broadcaster's wider responsibilities. If neither subtitling supplier nor broadcaster can improve latency easily (cost effectively) then there seems little point.

Latency must also take into account the nature of the programme genre - whether it is a sitforward factual/news programme or an entertainment programme. With the former, conveying the facts accurately is key, latency secondary. To get the most out of live subtitling viewers may have to almost forego having any time for pictures, disconnect from the audio (even if you have some residual hearing) and just focus on the subtitling. Some research carried out in the early 1990s by the BBC (I think it was ONS but only for internal use) actually showed that live subtitling viewers had better recall of information in news items than those listening and watching, even though it was very tiring.

However, there are many factors that make me question whether this is useful other than as an interesting measure. And it is likely to be difficult for the broadcasters to measure in any meaningful detail. Please see Q 7.

Question 5: Do consultees agree with the proposal to require broadcasters to measure and report every six months on error rates, on the basis of excerpts selected by Ofcom from a range of programmes?:

I would argue that time spent measuring error rates could be better spent in trying to produce corrected VoD versions cheaply, efficiently, and quickly.

I believe most suppliers are very conscious of errors and are actively and diligently trying to improve quality. Speech recognition software is improving - although those engines that

improve accuracy often still need to buffer quite a lot before they can release accurate text which, of course, adds to latency and there is still very little choice in speech recognition software (especially at an affordable rate).

Whether published error rates would help or hinder suppliers seeking to improve accuracy, I really don't know. Yes, looking at ensuring that 'a minute's silence for...' comes out accurately next time would be useful (although the chances of it coming out as 'a minute's violence' again are minute). These sorts of errors will always ring alarms with suppliers - high impact and the phrase is likely to occur again in reporting many solemn events. But the chances of 'pigs nibbling wellies' occurring again is tiny. And we all had a laugh.

And the grass roots subtitling audience is already active here. The 'hashtag subtitle fail' site may be every supplier's nightmare but it does highlight problems - with the advantage of appearing as real viewers actually notice them. Admittedly many comments come from people who are not deaf and hard of hearing and their motives might not be what broadcasters, suppliers or Ofcom have in mind, but...

Most broadcasters require suppliers to show how they are monitoring and improving accuracy. Is it possible that formalising and standardising this through Ofcom may actually discourage broadcasters from properly determining the sort of accuracy they require from their suppliers for themselves?

Also error rates needs to viewed in the context of other areas for improvement in live subtitling (not just the type of error but also the impact on latency and potentially speed - eg judging whether an omission is an error or a speed-regulating choice is very difficult). So if accuracy measures are introduced by Ofcom then, in my opinion, speed regulation measures should take a back seat for now.

Question 6: Do consultees have any views on the advantages and disadvantages of scrolling versus block subtitles for live-subtitled programmes? Taking account of both the advantages and disadvantages, which approach would consultees prefer, and why?:

Scrolling subtitles are of course more difficult to read than block subtitles, but they do result in each word reaching the screen faster than block presentations. The latency argument is (rightly) one of the biggest issues for viewers of live subtitling, so surely this advantage of scrolling must be taken into account?

However scrolling subtitles moving about the screen (to avoid action/graphics) are a problem. Mixed presentations have been tried before (used throughout the 1990s at the BBC) but again run into latency problems - scrolling subtitles used for truly live sections will always be behind the audio. If followed by a section of pre-scripted blocks, then either the first few block subtitles will have to be very fast to catch up, or will all be behind. Or the end of the live section will have to be dropped - often difficult to judge and may result in losing important 'summing up' information. The consistent speed and display of scrolling does have merits here.

Exploring methods of smoothing the display of scrolling subtitles also has a place here (this argument does not appear to rage so much in the US where the display has always been smoother and scrolling subtitles became the 'norm' much earlier).

With smart TVs the opportunity to explore new ways of displaying text is always growing. Although going outside the picture (this very subject has been a hot topic in the EBU TT group recently) would present lots of problems for broadcasters, for the viewer it could be very beneficial (with the opportunity to display more of the 'previous' text and possibly even for the viewer to choose presentation style - in picture, out of picture, scrolling, blocks).

Question 7: What are the factors that might facilitate or hinder the insertion of a delay in live transmissions sufficient to improve the quality of subtitling? Ofcom would particularly welcome the views of broadcasters on this question.:

Factors to consider here (in addition to the broadcaster perspective) are the cost and difficulty to suppliers of getting early audio to subtitlers who may not be at a supplier base (eg homeworkers). Being able to work away from base greatly improves the flexibility and availability of scarce live subtitling resources. The fact that live subtitling can now be done using pretty standard resources and connectivity - sound and pictures from the television, software packages installed on standard pcs, and standard networks (secure) - is an advance.

Many suppliers choose to have centralised bases nonetheless (often for management reasons - to ensure proper support of their staff and ease communication) but, for homeworkers particularly, introducing separate audio channels potentially adds cost and certainly complexity (another thing to switch) and must surely present a security risk for the broadcasters.

Plus the solution assumes that there would be both time and resources to correct errors. This may not be possible (researching someone's name in seconds is very difficult). Adding an additional person to correct errors would be very expensive. And if software were the solution, it would be doing a better job now.

Again, corrected, swiftly available VoD versions would seem a better way to go than delaying the broadcast for everyone.