



# **Ofcom consultation response**

## **The quality of live subtitling**

### **Response by the National Deaf Children's Society (NDCS)**

**26 July 2013**

#### **About us**

The National Deaf Children's Society (NDCS) is the leading charity dedicated to creating a world without barriers for deaf children and young people. We believe that every deaf child and young person should be valued and included by society and have the same opportunities as any other child.

There are over 45,000 deaf children and young people in the UK. The majority of these deaf children are from families with no first-hand experience of deafness.

This response has been produced by NDCS staff, using knowledge collected in recent surveys and discussions with both deaf young people and their families. Our response will focus upon the main issues that relate to deaf children and young people. NDCS uses the word 'deaf' to refer to all levels of hearing loss, from mild to profoundly deaf.

#### **Recent NDCS research**

NDCS recently carried out an extensive online survey with deaf young people aged 12-18. We received almost 500 replies and one of the areas covered was 'enjoying TV and films at home'. 75% of respondents said they used products or technologies to help them enjoy watching the TV and of these 88% said they used subtitles.

Many deaf young people told us that they liked subtitling on TV and that subtitles helped them enjoy TV and films with the rest of their family. However, many also reported problems with subtitling, especially the quality of live subtitling.

The main complaints with subtitling were the delays between speech and the subtitles appearing on the screen (latency), errors or mistakes in the subtitling (inaccuracy) and issues related to the subtitles freezing or ceasing to work.

Quotes from deaf young people who took part in our survey:

*“Overall, subtitles are very good. However, when watching the news, it can be difficult to understand because they are so slow”*

*“Subtitles are slow on live programmes with misspellings and missing words”*

*“Not all programmes have subtitles and if the programme is live they don’t work and sometimes subtitles freeze or don’t say the exact words being said”*

In our 2012 Membership survey we asked families about technology and many stated that their deaf child uses subtitles to enjoy the TV. The main problems reported were delays between the speech and subtitles (24%), poor accuracy (22%) and intermittent subtitles (16%).

These findings agree with the recent research report from Action on Hearing Loss where latency and inaccuracy were identified as the largest causes of problems for people using subtitles. These issues are therefore just as relevant for deaf children as they are for adults with a hearing loss.

## **Comments on the consultation document**

NDCS welcomes the opportunity to comment on this consultation. We support Ofcom’s work to help improve the quality of live subtitling by working with broadcasters, service providers and organisations representing the end-user.

Subtitling on the TV is an important issue for deaf children and young people and as the levels of subtitling increase we feel it is important that the quality of provision should also be improved.

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?

We agree with this proposal. It is important to measure and report on the average speed on live subtitling as research by Romero has shown that the comprehension of subtitles decreases as the speed increases above 180wpm.

All methodologies used should be agreed and used transparently so that all results can easily be compared and suitable conclusions reached. In order for the measurements to be meaningful, the programme segments used must be

predominantly spoken sections and not those containing significant amounts of music or periods with no dialogue.

Although we welcome the reporting of these measurements we would also like to ensure that the findings are used to help increase the quality of subtitling and the comprehension of deaf children and young people. We would expect these findings to be widely available to the public and published on both the broadcasters and Ofcom's websites.

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?

We agree with these proposals. It is important that the measurements should cover a range of programme types and we agree with the suggestions made in paragraph 6.19.

As the average speeds will be compared, it is important that guidelines are devised so that similar programmes and segments are selected for measurement, otherwise these will have a greater influence on the overall result than the actual subtitling performance of that broadcaster.

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.

The current guidance on subtitling speeds should be reviewed when appropriate research has been carried out and new recommendations can be made.

We agree that a maximum target for subtitling speeds would not be appropriate at the moment as we should be aiming for equality in speeds for both hearing and deaf viewers. The key issue here is therefore not the speed of the subtitling but the overall speed of the output. By effectively slowing down the subtitles we are suggesting that words will be removed, but the most appropriate solution would be to control the output so that all potential viewers are able to understand the dialogue. Further research will be required before final guidelines and maximum speech and subtitling speed targets can be agreed.

We are concerned that speech and therefore subtitling speeds may increase and would urge all parties to work to keep speeds at comprehensible levels. Where programmes, or programme types, are consistently exceeding the guideline of 200wpm, for live subtitling, this should be reported on and suitable actions taken swiftly.

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.

Research carried out by NDCS and Action on Hearing Loss has highlighted the importance of latency, so we welcome Ofcom's proposal to measure both the average latency of subtitling and the range of latencies. We also agree that these measurements should be carried out on a range of programme types.

Further research needs to be carried out to investigate how latency can practically be reduced and the relationship between latency levels and comprehension. As a result, we agree that a maximum target for latency is not suitable, at this time – however such a target is required at some stage. Until targets have been agreed, broadcasters should be encouraged to follow current guidelines and appropriate actions should be taken when latency consistently exceeds these guidelines.

Because latency is such a problem for deaf children and young people using live subtitles, we believe it is important that broadcasters should endeavour to keep latencies to no more than 3 seconds. This view may be revised once further research findings are available to us.

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?

We agree with this proposal. Broadcasters should be required to measure and report on error rates for a range of programmes. It is important that errors are measured in terms of both frequency and severity. The categorisation of severity should include minor, standard and serious errors (as suggested by Romero) as this will allow the reader, or evaluator, to quickly determine the true nature of the problems faced by deaf viewers. In addition, we would like to discuss what action will be taken if error rates do not decrease or are even seen to increase.

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?

In the NDCS membership survey 2012, 58 families (4% of the total) reported that 'subtitles shown scrolling rather than a text box' was a problem for their deaf child.

The advantages of scrolling text are that they should allow broadcasters to reduce latency, however recent research suggests that the viewer spends more time reading the subtitles and less time looking at the picture. This could prove to be a particular problem for younger deaf children whose reading abilities may affect their ability to follow and fully understand subtitles.

Block subtitles are easier and quicker to read, so a deaf child will find it easier to read and also view the images. However block subtitles are likely to take longer to produce, giving longer latency periods.

We recognise the value of scrolling subtitles for live subtitling where no preparation has been carried out in advance, but based upon our research we would generally prefer the use of block subtitles.

We would suggest that more research needs to be carried out on this area.

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.

We would also welcome the views of broadcasters on this question and would support further work on this issue.

Latency and inaccuracies were the main reasons for complaints from deaf young people in our recent research, so we would support any initiatives which could help reduce these problems. As such we would support the introduction of delays if they could be shown to have a significant increase in the quality of live subtitles and the comprehension of deaf viewers.

Although we would support the use of delays in programme transmission, we would not support any increase in the latency of subtitles or any reduction in subtitle content. Delays should give the subtitler more time in which to produce subtitles and should therefore result in a significant increase in quality and content.

## **Additional points**

We are concerned about the number of pre-recorded programmes which, for a variety of reasons, are broadcast with live subtitles. We would propose that broadcasters are required to measure and report on the incidences of this every six months. In our opinion all pre-recorded programmes should be supplied with subtitles and should not require live subtitling, unless in exceptional circumstances. This data would therefore allow us to better gauge the severity of this issue and plan further guidelines.

NDCS would seek assurance from all broadcasters that if a programme is broadcast with live subtitles then any errors or omissions will be corrected before future transmission of that programme, including online platforms. We understand the current reasons for this occurring, but see no reason why errors should not be corrected allowing deaf viewers equality with their hearing peers.

## **Contact details**

Chris Bowden  
Head of Technology  
National Deaf Children's Society  
15 Dufferin Street  
London, EC1Y 8UR

Tel: 0207 0141103  
Email: [chris.bowden@ndcs.org.uk](mailto:chris.bowden@ndcs.org.uk)