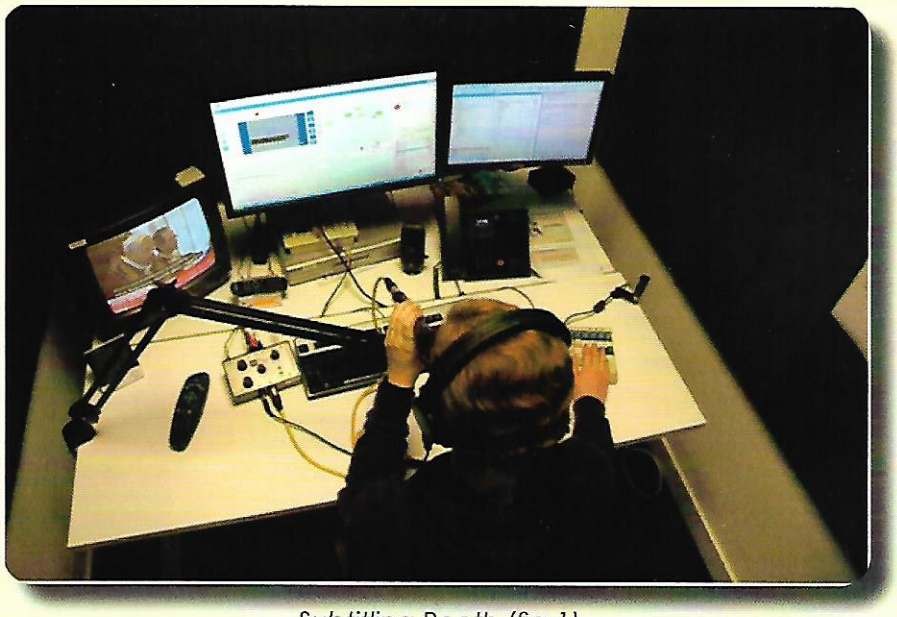
VRCS produces poor quality results. So we use re-speaking in which the subtitler listens to the audio and dictates directly into VRCS which has been 'trained' to that operator's unique voice. This is now a very dominant method of producing live subtitling, partly because of the massive volume increases that we have seen in demand for live programmes to be covered, and a relative shortage of skilled realtime transcription professionals to cover all of that output. Subtitlers often have access to newsroom systems and other resources to help them prepare and anticipate what is going to come up, but sometimes you just don't know what will be talked about so the operator needs to be both very resilient and good under pressure.



Subtitling Booth (fig.1)

A big problem is late delivery of programme material. The biggest challenge in many ways is not knowing what is going to be in the programme and the earlier we receive programme material obviously the easier it is for the subtitler to do their job effectively. Provided a pre-recorded programme is delivered to us by 4 hours prior to its intended transmission then pre-recorded subtitling can be provided

Coupled with this is the issue of vocal speed. Some presenters and members of the public when interviewed speak very quickly and it's a challenge to identify what is being said or to edit words out to keep the reading speed within recommended limits. We try to present subtitles as blocks of text that don't move, because it is easier for people to read a static block than a moving line of words. On a TV screen you are confined really to two lines, as scrolling subtitles are a little bit more difficult to read.

Subtitles then have to follow quite a long path to actually get to the TV screen – through the TV transmission and presentation areas, onto transmitters or up to satellites, through the satellite dish and set top box, and finally onto the TV screen. There are many technical risks along the broadcast chain which need to be managed. This is also why you see quite a lot of latency between the audio and text appearing on screen.

Turning to improvements and developments, Ofcom has been running a process of reviewing of live subtitling on television for the last 18 months. It is working with the broadcasters and with the service providers to try to make sure that everything that could be done to make the subtitling experience as good as possible is being done. An essential part of that obviously is getting as much prepared material as possible. Speech recognition software is getting better. There is a lot of investment into the technology which takes audio and turns it into text, and we are getting the benefit from that as those advances are made.

Many people would argue that everything should be subtitled. Clearly, accessibility is a good enough reason to subtitle everything in the first place. Whilst there are over 10 million people in the UK with some form of hearing impairment it is known that some 18 million people access subtitles. It is a very useful tool in language learning and literacy and features in ethnic communities where English is not the first language. Subtitles are also increasingly being used in public spaces and in noisy environments like gyms and pubs.

There is cause for optimism in the future of subtitling. People who make television and video are increasingly aware of the benefits of good quality subtitles, and also what best practice in this area looks like.