

Challenges in TV Subtitling

A Summary of a talk given at the Summer Meeting by David Padmore, Head of Access Services, Ericsson

Ericsson is a Swedish communications company that has recently acquired Red Bee Media which provides subtitles for all BBC programming and also Ch 4, Sky, BT and UKTV. We have five studios in the UK together with a team of home based staff. The first subtitling was just 36 years ago in the UK so it is still quite a young industry. I began working as a subtitler in 1993 so I have first hand experience of the development and expansion of subtitling. In 2008, the BBC finally reached 100% subtitling of its output across the 18 national and regional variations of the BBC which amounts to around 60,000 hours of subtitled content every year.

Today 79 channels are regulated by Ofcom to provide subtitling services. Current regulations do not extend beyond broadcast television, so if you are trying to watch TV programmes in another way, through iPlayer or another On Demand platform, there is currently no obligation on the content owners or the broadcaster to provide subtitling on those platforms. More than 80% of the UK's 90 on demand providers have no subtitles. There is another regulator, the Association for Television on Demand (ATVOD), which is trying to encourage providers of services like All 4, Netflix and Amazon to make sure that their services are as accessible as possible but currently they have no regulatory enforcement powers .

There are four areas of subtitling that need explanation. The differences between pre-recorded programmes and live television and, importantly, the critical topics of accuracy and latency. Accuracy is quality of the displayed text relative to the spoken words of the programme. Latency is the time delay between the original timing of the spoken words of the programme and the displayed text. Both accuracy and latency



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are influenced by the nature of the original programme.

For pre-recorded programmes it is relatively straightforward but still demanding. A subtitling operator views the recorded programme (see Fig 1) and either manually with a keyboard or by voice recognition computer software (VRCS) , creates the subtitles placing them appropriately in the scenes depicted. Colour attributes are added to distinguish individual voices in the programme. Accuracy is ensured through a quality control process and latency is eliminated.

Live transmissions however present a major challenge as both accuracy and latency can get compromised. Live TV news programmes are a combination of both prepared text and direct live transmission. Where the newsreader is reading from the screen we can get access in advance to the autocue scripts and prepare them and send them out in sync with the audio. The parts which are unscripted, where you don't know what is going to come, are done either by stenography, or by using speech recognition technology using a technique we call re-speaking. The original