

THE SUBTITLE TIME MACHINE PROJECT

SECTOR
Public service broadcasting

COUNTRY
United Kingdom

LEAD ORGANISATION
The British Broadcasting Corporation (BBC), in contact with the European Disability Forum, an independent NGO that represents the interests of 80 million Europeans with disabilities

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DESCRIPTION

As a national public service broadcaster within the United Kingdom, the BBC's audience has a wide range of users with different expectations. The Subtitle Time Machine project is specifically targeted towards people in need of live subtitling, in particular deaf and hard of hearing people.

Subtitles were introduced in a small amount of programming on the BBC in 1979, while live subtitling started in 1986. By 1998, 50% of the BBC's total output was subtitled, and by 2008 all BBC programmes were subtitled.

Live subtitling can be delivered in two ways: stenography and re-speaking. Stenography is a method of quick transcript of discourse using a special type of typing, while re-speaking refers to a technique where a person listens to what is being said on air and repeats it in a way that will be easily understood by voice recognition software. The problem with these two methods is that there are frequent errors in spelling and accuracy, even though over the years this has improved with voice recognition developments.

Until now, there have been delays in live subtitling for television, with subtitles being displayed on screen later than the audio that they represent. This is caused by the necessary workflow to create live captions, yet it can be frustrating for audiences and has been subject to regulatory attention.

The Subtitle Time Machine project, launched in 2016, has the aim of reducing this delay and achieving greater alignment between the audio feed and the captions in live subtitling.

In order to do so, the BBC has been cooperating with Ericsson. Together, they have the ambition to create a cue signal which would reduce the delay by approximately five seconds.

Making substantial changes broadcasting services requires time, resources, and tailored solutions for the overall infrastructure.

For these reasons other stakeholders are also involved in the project, both elements of the broadcasting chain (audiences and the Office of Communications) and third parties (external companies and manufacturers supplying products).

FOSTERING ACCESSIBILITY FOR ALL

The innovative Subtitle Time Machine project aims to improve the quality of the subtitling service in live programming to ensure that all viewers can fully enjoy their favourite programmes.

Considering the BBC's public remit and its duty to always meet the needs and expectations of its audience, the project aims to ensure that all viewers are treated equally and that the way programmes are presented does not cause discrimination.

Participation of users has been an integral part of the development of this new service. The idea of the project was based on feedback from viewers who regularly use subtitles.

The initiative was launched after an Office of Communications' study showed that delayed and inaccurate subtitles and images can have a big impact on viewers and negatively influence their enjoyment of live programmes.
Further implementation of the project will depend on audience feedback following, and changes will be made if deemed necessary.

The service will be available to all viewers free of charge.

MAIN ACHIEVEMENTS

The service was launched in Autumn 2016. The project makes it possible to broadcast subtitles five seconds earlier than is possible with other encoding methods; this make a significant difference to people with hearing impairments, as delays between audio and subtitles appearing on screen was often mentioned as a serious drawback for them.

LOOKING FORWARD

When it is in service, the Subtitle Time Machine project will be available for high definition live programmes broadcast on digital television.

It will then be rolled out to BBC standard definition channels. The extent of its success will be defined by the audience's response.

However, it is difficult to know whether other broadcasters will be interested in the project as it will depend largely on their set-up; for example, they might have a low percentage of live programming and thus might not see the potential of the project.