

# Digital Television for All



## What is DTV4All?

DTV4All is a project funded by the European Commission to facilitate the provision of access services on digital television across the European Union.

## What are access services?

People who are hard of hearing or deaf need subtitles or deaf signing to be provided with television programmes if they are to fully appreciate its dialogue. People who are partially sighted or blind need audio description provided with a television programme if they are to fully appreciate the context of what they hear. Such services enable their users to access the storyline of a television programme so are known as access services.

## The ethos of DTV4All

There are two basic scenarios for the provision of access services. In the first, those with impairments are expected to buy a suitable integrated digital television or a specialised digital television set-top-box that can support the access services they want or have it provided by the public health system. In the second, society takes collective responsibility for inclusivity and ensures that set-top-boxes targeted at the general user can support core access services, especially given that certain improvements made for vulnerable groups can be beneficial to all users.

*DTV4All promotes inclusivity.*

## Why has DTV4All been funded?

The switch-off of analogue television in Europe by 2012 represents both a challenge and an opportunity for access services.

It represents a challenge for two very different reasons. Firstly, many people who have had no problems accessing analogue television will experience some difficulty in accessing digital television. The extent of this issue is such that approximately 15% of Europeans have difficulties in accessing digital television for reasons such as:

- Hearing impairments
- Dyslexia
- Visual impairments
- The complexity of setting up a digital receiver or set-top-box
- Remote controls they find difficult to use
- Electronic Programme Guides (especially when there are over one hundred channels to choose from)



*Figure 1: Screenshot of a signing service provided on a virtual channel*

Secondly, the analogue switch-off will introduce widespread improvements to the quality of existing digital television programmes, collectively known as second generation digital television, such as high definition television (HDTV). As the amount of information that can be sent by a digital television transmitter is limited this poses a challenge to some existing access services.

For example, the amount of information in a high definition television programme is significantly higher than the amount of information in the same programme delivered in standard definition. This means that there will be pressure to reduce the amount of transmitted information devoted to access services due to the demand for programmes to be delivered in high definition.

An example of a service likely to come under such pressure is the provision of a virtual channel which allows a signer to be shown more prominently than in conventional portrayals of a signer on a screen illustrated in Figure 1 above. Such a service is valued by its users because the facial expressions of the signer can be clearly seen and these are an important part of the communication. However, showing the signer in this way requires more information to be sent than conventional portrayals.

The opportunities to improve access to digital television for those with physical, mental or age-related impairments that arise due to the analogue switch-off take two forms, opportunities to extend the provision of existing mature access services to European countries that do not currently provide them, and opportunities to provide new kinds of access services known as emerging access services. To ensure the challenge is addressed and the opportunity exploited, DTV4All takes action on two fronts:

- ▶ *Ensuring the widespread adoption of mature access services for first generation digital television*
- ▶ *Identifying, assessing and promoting emerging access services for second generation digital television*

The most valuable contribution DTV4All can make is to identify the enablers that will allow a core set of access services to be offered in all EU member countries in the near future.

## Objectives of DTV4All

- 1 Offer and evaluate mature subtitling, audio description, audio subtitling and signing services in a minimum of four territories within the European Union for at least 12 months.
- 2 Identify improvements to existing access services and ways of addressing the key technical, organisational and legal obstacles to the sustainable take-up of these services in the timeframe 2008-2010 throughout Europe.
- 3 Identify and prioritise key emerging access services, and the devices and platforms needed to support them for the period 2010-2012 in terms of technological feasibility, perceived value to their intended users and business model viability.
- 4 Make recommendations regarding mature and emerging access services to bodies representing stakeholders in the access service value chain on the basis of which these bodies can take appropriate action in relevant standardisation bodies.

## Consortium

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### Partners:

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Institut für Rundfunktechnik [D]  
RAI-Radiotelevisione Italiana [I]  
Red Bee Media [UK]  
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### Website:

<http://www.psp-DTV4All.org/>