



# Teletext subtitling

## Introduction

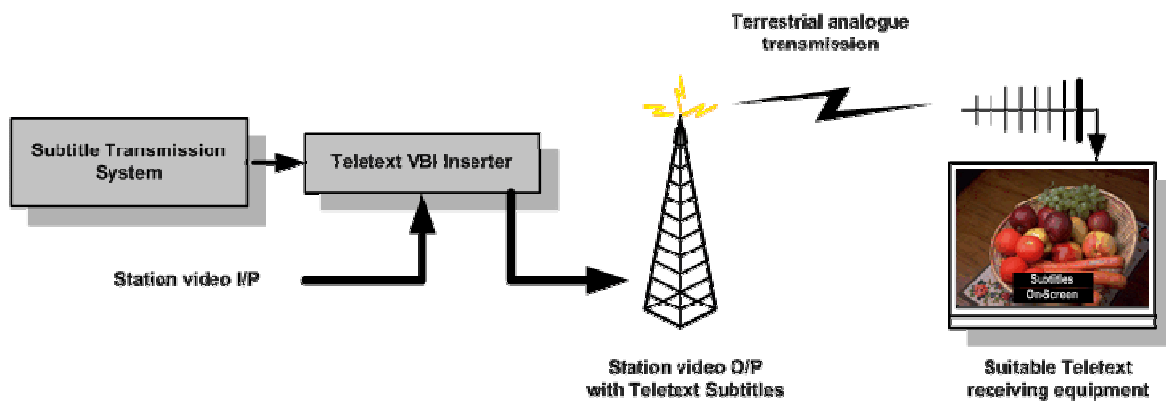
Teletext subtitling is based on the technique of adding a stream of data representing the subtitle characters into the VBI region of the broadcast video signal. Suitably equipped TV sets or receivers can be set to decode the data and display the subtitles on-screen.

## Scope

This White Paper explains the usage of Teletext subtitles, how they fit in to a transmission system and some advantages and disadvantages.

Teletext can be used to transmit data in addition to subtitles including information pages, clocks and private data. This White Paper concentrates on Teletext subtitling only.

## Details



Teletext subtitling is also known as a **closed** subtitling technique. However, do not confuse *Teletext* subtitling with the *closed captioning* system used in several countries including the U.S.A. The individual characters that make up a Teletext subtitle are represented by single codes which are then transmitted to the receiving equipment. The Teletext receiver then looks up the codes in an on-board table and displays the required characters on screen.



### **Advantages of the Teletext system**

- Teletext technology is well proven and reliable.
- The viewer can control whether or not the subtitles are displayed.
- A broadcaster can provide more than one language in a Teletext subtitle service.
- Teletext subtitling has been adopted in most countries that use the PAL television system to provide an important service for TV viewers who are hearing impaired.
- In parts of the world that use Teletext services there is a very large installed base of compatible receivers.

### **Disadvantages of the Teletext system**

- Not all receivers are Teletext compliant. Smaller and portable units often are not.
- The font type and display position is governed by the design of the TV set or receiver and cannot be altered in any way.
- New characters cannot be added, for example the Euro symbol € is not supported.
- Special font attributes such as **Outline**, or **Ghost Stripe** cannot be applied.
- The number of characters per line or row is a set limitation and any subtitle whose text exceeds this limit will lose characters.
- Certain national languages cannot be supported by Teletext technology as their characters may be too complex or too numerous.
- Many domestic VCRs are unable to record the Teletext signal accurately enough to allow decoding on playback.