

# Tessera

## Broadcast Scheduling System

### Media Library Management, Programme Scheduling and EPG Generation

Tessera is a comprehensive scheduling solution for small and medium-sized broadcasters wishing to transmit on any combination of satellite, cable, DTV or IPTV. It manages programming and EPG scheduling for one channel, or across multiple channels.

Tessera provides complete end-to-end management of the schedule, starting with the handling of the input of programme data - through to the output of files for transmission centres and EPG delivery.

Tessera interfaces with 3rd-party advertisement sales systems and also manages distribution of listings information to the press. The system collects as-run data, which it uses to generate reports required for BARB/ATR (Broadcasters' Audience Research Board).

The EPG capability includes delivering EPG files to three separate platforms - Sky, cable and UK Freeview (DTV), other formats available on request.

## ***System Overview***

Material information is entered into a database from which programme schedules are subsequently created, the schedules can be output in a variety of formats for broadcasters, transmission centres and press/listings services.

Tessera includes user-configurable report generation for convenient review of the schedules that have been created. This is useful in analysing the types of programming, the frequency of particular programmes and relevant licensing information etc.

All Tessera applications access the same database, and multiple users can access an individual window onto different stages of the process. This means that tape information can be entered by one user, whilst another is creating a schedule or analysing the information offered by the report generation.

The Tessera package also includes various maintenance and utility programmes.

For those users who only need to generate and deliver EPG content, a much simpler and lower cost EPG only version of Tessera is available.

## ***Key Features***

- ★ Full scheduling control including tape segments / media files
- ★ Multiple secondary events per clip
- ★ Fixed, manual and variable event types
- ★ Flexible material search panel
- ★ Multi-user, SQL database based architecture
- ★ Automated and manual report generation
- ★ As-run log ingest
- ★ Advertisement sales interface
- ★ Automatic generation of playlist and EPG files from the same schedule
- ★ Intuitive drag & drop user interface

## ***How to use Tessler***

### ***Preparing a schedule***

Firstly, a proposed programme plan is compiled, and information about the location and expected availability of tapes or media files is entered into the media library. Programme segments on each tape or media file are logged with reference to the timecode; integral error-checking warns of any timecode inconsistency. Material can be described in further detail by adding EPG-specific information and licensing details.

From this data, the user compiles a programme schedule – either by selecting items individually from the media library, or by using advanced tools such as a template, or a rolling set of events where a range of selected material is to be repeated back-to-back between specified dates.

As the schedule takes shape, information is extracted as an EPG file and issued to the relevant parties, such as BSkyB. Copies of the schedule can also be issued to press and listings services; these can be extracted and automatically delivered by e-mail or FTP to specified addresses if required.

The schedule may undergo a number of revisions before it is considered complete. These may include the insertion of commercials from an advertisement sales house or the addition of presentation commands such as logos and graphics information.

### ***Ad-Sales Option***

When creating a schedule using Tessler, it may be necessary to insert empty ad breaks (commercial breaks) at desired points in the schedule, arranging them to suit the time segments available. Once the scheduler has inserted the ad breaks, Tessler extracts the ad-break pattern from the schedule and sends it to the ad-sales house. The ad-sales house returns a schedule containing "spots" (adverts/commercials), which fill some or all of the empty breaks in the ad-break pattern. These are received by Tessler and inserted automatically into their appropriate place in the main schedule.

### ***Playlist Delivery***

Finally, to ensure that there are no errors in the schedule, the scheduler instructs Tessler to run a variety of integrity checks for gaps and inconsistencies and, when it has been cleared for publication, the playlist is sent in its entirety to the transmission centre or automation system.

### ***Transmission Reports***

After transmission, Tessler receives as-run logs back from the transmission centre and these are compared to the original schedule. Tessler will create a variety of report formats, including those required by the ad-sales house and BARB/ATR.

## ***System Architecture***

The Tessera package includes maintenance and utility programmes for configuration and administration. All of the Tessera applications outlined above access the same database, allowing multiple users to access an individual window onto different stages of the process. For example, media information can be entered by one user, whilst another compiles a schedule, or analyses data using the report-generation tool.

## ***Interfaces***

Interfaces currently supported by Tessera include the BSkyB ad-sales interface, Digitex and MediaPro ad-sales interface. As-run logs currently accepted include Pharos automation systems and the Arqiva transmission format.

## ***Automation Integration***

Tessera is capable of a high level of integration with automation systems, as illustrated by the following description of the operation with the Pharos automation system.

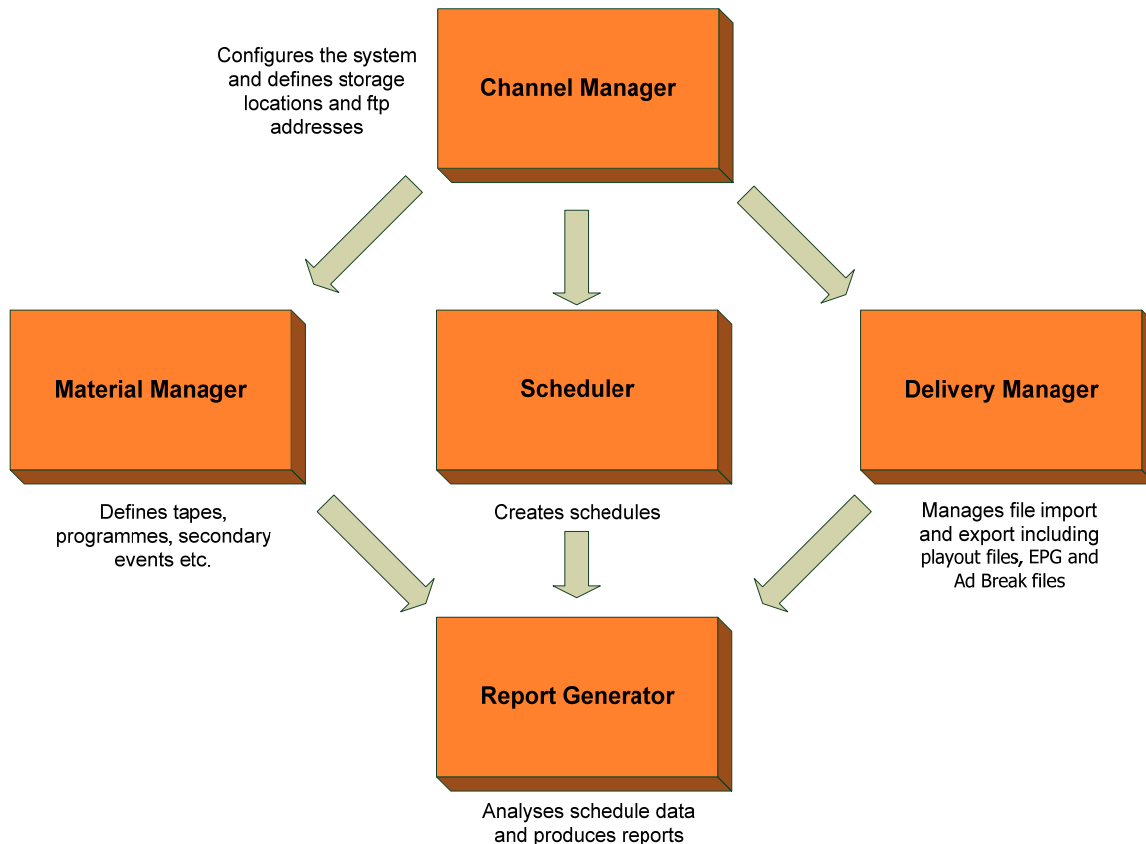
Once a programme plan has been proposed, any available media information is entered into Tessera. Further details can be added at any time when the relevant tapes, or media files, become available. All information entered is automatically relayed to the Pharos system so that it is present when the media files or tapes arrive at the Pharos ingest facility. Once ingested, the media status is updated on Pharos. As soon as this occurs, the Pharos system automatically communicates the updated information back to Tessera.

Two-way communication between Pharos and Tessera ensures both media libraries are kept synchronised. There is no need for duplicate entry of data at each end, and the schedulers can immediately see – by glancing at the schedule screen – which media clips are ready for transmission and which are deleted or not yet ingested.

Once a final manual check has been carried out on Tessera to ensure that the schedule is valid and contains no gaps or inconsistencies, the validated schedule is exported from Tessera as a Pharos-compatible playlist. The format used here also offers schedulers the ability to incorporate a variety of presentation instructions in the playlist, including logo commands, feed switches (for example, from live studio to server and back), graphics information and transition effects.

On transmission, the as-run log created by Pharos is delivered back to Tessera, which compares as-run information to the schedule data, and generates transmission and exception reports.

## Tessera Components



**Material Manager** is used to define tapes, playout servers, advertisement campaigns, secondary events, programmes, and so on. This is especially useful for material likely to be rescheduled regularly – it can be re-entered in the schedule without the need to re-enter all the programme specific values such as title, duration, in and out times etc.

**Tessera Scheduler** is the schedule-generation tool. It allows users to select programme material from the database, or to enter details manually in order to create the schedule. The software can also prepare a rolling set of schedules by selecting a range of material to be repeated back to back between specified dates.

**Delivery Manager** manages importing and exporting a number of file formats. These include EPG files, playout files, Ad Break files etc. Files can be delivered by FTP, email or Windows Copy The delivery manager also automatically retrieves and analyses log files where available to verify that the schedules have been processed correctly. It will flag a warning in the event of any errors.

**Channel Manager** - used to configure the system and define data storage locations, ftp parameters and general broadcaster details.

**Report Generator** - used to extract schedule data between specified date ranges for analysis. The user specifies the date ranges and a copy of the schedule data is transferred into an automatically formatted Excel spreadsheet for convenient review.

## **System Requirements**

**Licensing:** the software is protected by means of a hardware security dongle on the server which limits the number of simultaneous client applications.

**PC requirements:** Microsoft XP or Vista operating system and a PC with a minimum specification of Pentium class processor running at 2.4 GHz, 512MB Ram and CD or DVD ROM drive.



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