

Excerpt from the ECA Technical Delivery Handbook

In this document I'm going to use the following expressions:

'Content provider' to refer to the producers of the original stage performance or event,
The 'performance' is the original stage performance or event,
'Production' to refer to the event as produced for the cinema,
'Production team' to refer to those responsible for covering the event for broadcasting and recording.

This section will partly be a check list of things to consider and suggestions or recommendations regarding various aspects of the process. There will be no discussion of rights issues and performance payments.

The content of the live cinema relay is primarily the performance itself. How this is 'packaged' into a complete presentation will need to be decided. Behind the scenes films, interviews with performers and promotional material are all often used.

Live or recorded coverage of a stage performance or live event will inevitably involve an intrusion on the auditorium and disruption to the usual stage performance and procedures. The amount of intrusion needs to be balanced against the quality and 'look' of the production.

As far as the theatre or event audience is concerned cameras are the most obtrusive part of the production. The content provider and production team will need to decide on camera positions at an early stage. On the one hand it may be decided that for the purposes of the broadcast production the theatre and auditorium will be given over to the production with any audience being admitted at a reduced price on the understanding that the broadcast is taking precedence over the theatre audience. This allows complete freedom in the positioning of cameras and the use of camera cranes or jibs. On the other hand the impact on the audience can be minimized by making use of remote controlled cameras and positioning operated cameras so that seat kills are minimized. This may limit the aspirations of the production team. In addition to the live cinema event at least one full rehearsal of the stage show will be required. Ideally two full rehearsals should be scheduled. This allows for changes to be made (for example to lighting) then checked at the second rehearsal with further adjustments made for the live relay or main recording.

The use of high definition cameras providing close up shots of performers will require the makeup, wigs and costumes to be considered. It is a great advantage to have the entire stage company or organisation fully supporting cinema relays as there can often be resistance from stage designers and department heads to modifications of their stage designs.

The audio requirements of the production may well be very different from those used in the theatre. In particular, expect radio microphones to be used on actors and singers, even though the stage performance may not require them. Specialist radio microphone engineers are adept at hiding or disguising microphones on performers.

Stage lighting will need to be changed to accommodate the limitations of HD cameras, mainly this will involve reducing the contrast between light and dark areas of a stage and possibly adding more light to extremely dark scenes. Experienced TV lighting directors will be able to accomplish these changes with minimum effect on the appearance of the performance in the theatre but they will need time to do this. If at all possible, introduce the stage and TV lighting directors at the start of the stage rehearsals.

For venues that have not had outside broadcasts before consideration has to be given to parking the vehicles, providing power (could be a generator) and running cables from the OB units to inside the venue. For live events a suitable location for the satellite uplink has to be found so that it can 'see' the satellite. The production manager for the production company and the unit manager for the outside broadcast supplier will be responsible for setting up and running the outside broadcast. They will be offer advice on all aspects of the production.

Currently any live to cinema event is a live TV outside broadcast using high definition cameras. The producers and directors will have television experience. Their approach to live cinema though has to be informed by the cinema viewing experience. The live/recorded production may well be destined for different markets (cinema/DVD/TV sales). Versioning for each market should be considered. Concentrating on the cinema version is a good starting point. This applies particularly to audio where the required mixes will vary from full 5.1 for cinema to stereo TV mixes complying with the latest loudness guidelines. Later distribution a DCP will require consideration as problems may be caused by necessary frame rate conversion.

Review both audio and pictures in a cinema environment after a suitable recorded rehearsal, either at a preview theatre or a commercial cinema 'out of hours'. Involve as many people as possible from both the broadcast and stage production teams. Time spent in a film dubbing theatre with the multitrack recording is well worthwhile for the first production. If access to a local participating cinema is available then an extended satellite test on the morning of the event can be used to check the final audio balance by replaying multitrack recording of rehearsals.

For any live transmission:

Consider a backup policy to cover failure at any point in the chain, from the event itself, the OB facilities and the satellite transmission. It may be decided not to have a backup. If a recorded rehearsal is of good enough quality, that might be played out in the event of problems or another production from the same company. This playout may need to be from the satellite provider's teleport.

Prepare a test 'tape'. The test tape needs to contain elements to allow every point in the chain to check lip sync, audio channel identification, aspect ratio and frame edges. Representative material needs to be shown. This should include a range of audio- quiet and loud moments and applause.

Provide facilities to allow immediate communication of problems during the event. In conjunction with the satellite company set-up a conference call with satellite operators and helpdesks and run a live blog to keep cinemas informed of any problems. Set up a twitter account associated with the event. This will allow immediate feedback from audiences in cinemas. They are quicker to notice any problems than the cinema staff that are looking after several screens at once.