

Risk Assessment for safe use of SFX in studios

Scope:

Any production that wants to undertake special effects in the studios must have read this document. All special effects must be discussed in advance with the Resource manager and BBC STUDIOWORKS Facilities/Security to ensure that any extra provision for fire safety or 1st Aid are in place as necessary.

Competence:

The production must ensure that the special effects contractor is competent for the work in question and provides a detailed risk assessment for the effect.

The knowledge, skill and experience needed to be "competent" will vary for different tasks. Levels of competency are recommended by the Joint Industry Grading Committee, special effects personnel being graded according to their knowledge, skill, experience and training. The grading is for different levels:

- SFX Supervisor
- Senior technicians:
- Technicians
- Trainees

All parties should ensure that adequate information is exchanged. Special effects contractors should also liaise directly with BBC Studioworks where appropriate.

Communication:

Production must ensure that all those involved are thoroughly briefed about the risks and the controls, for example exclusion zones and the agreed systems to stop the effect.

Controls:

Scheduling – the Producer must allow adequate time and resources for all such effects and not allow time pressures to interfere with the safe execution or clear up of the effect. There must be clear communication in advance and thought should be given to schedules to ensure that adequate time is allowed for such effects.

Setting up the effect:

Rehearsal

BBC Studioworks requires that, for the safety of the production team and cast there must be a thorough rehearsal under performance conditions, the artistes involved must be present and they must be made fully aware of the actions required. For example:

- Placement of charges - the charges should be clearly marked and safe paths agreed with the artists.
- Exclusion zones and how they are controlled.
- Cueing

Only essential personnel should be in the area. All those involved in the sequence, including artistes, should be present at rehearsal or re-rehearsal and should be made fully aware of the action intended, the risks, control measures and emergency arrangements.

Exclusion Zones

The Producer, with the SFX Supervisor is responsible for ensuring adequate arrangements for managing and policing the controls, e.g. any exclusion zone.

There must be agreed systems or code words to immediately stop the effect. The Resource Manager has day-to-day responsibility for the safety of the studios. It is essential this person is aware of and kept informed of the nature of all proposed and actual special effects activity, including any hazardous areas from which non-specialist staff must be excluded.

Cueing

The cueing arrangements should be rehearsed in situ before the effect is performed with a thorough rehearsal of the action under performance conditions. The artistes involved must be made fully aware of the action intended. A clear line of sight must be maintained by the operator to the effects at all times. The operator should not set off any effects without being able to clearly see the effects area and confirming it's safe.

Misfires

In the event of a misfire no-one should approach area until adequate time has passed defined by the pyrotechnic and firing circuit in use. The procedures detailed in the risk assessment should include details of:

- SFX specialists who will make the area safe
- The personal protective equipment they will use
- Exclusion zones
- Steps to take to make the effect safe
- Steps for disposing of material.

Coordination:

The Resource Manager must be made fully aware of all intended actions and kept fully aware of any changes that occur.

Materials

The VSFX Supervisor, as the person in charge of the effects, is responsible for:

- Procurement and specification of all explosives, pyrotechnics and other materials
- Ensuring all materials are fit for purpose
- The safe transportation, storage and use of all explosives, pyrotechnic and other materials used in the effects
- Ensuring only competent persons are engaged

Specific legislation applies to the storage, transport and handling of explosives and pyrotechnics.

Storage

It is the responsibility of the SFX Supervisor to liaise with the Production and Resource Manager in advance to ensure the safe storage and security of explosives whilst in BBC Studioworks managed areas.

Execution

Before commencing any effect, checks should be made by the special effects team, to ensure exclusion zones are in place, emergency plans are in place and that all appropriate PPE is worn. The person supervising the effect should have unambiguous confirmation that danger areas are clear, e.g. line of sight, and be in direct communication with all key players.

Firing circuits should not be connected or armed until the last possible moment to minimise the risks of accidental firing.

Emergency Planning

The special effects Supervisor or Production manager should liaise with the resource manager in advance to ensure that their risk assessment identifies the course of action to be followed in the event of an effect going out of control or an accident occurring. All persons should be thoroughly briefed on emergency procedures, including:

- means of raising alarm;
- evacuation procedure;
- first aid/medical provision ;
- firefighting facilities

It may be necessary to have the emergency services in attendance. This must be discussed with Resource Manager in advance. Given the risk involved in this type of work, a qualified first-aider is the minimum requirement and the location of the nearest hospital dealing with emergencies should be noted.

Where it is deemed necessary to isolate the automated fire alarms systems then the production will liaise with the Resource Manager a suitable way to raise the alarm where necessary