## 10.2. Noise Management Plan

## **Pre-event Planning**

- 10.2.1. Pre-event information to community The Stadium will inform local residents of details of the concert (dates of concert and rehearsals, start and end times and the complaints telephone number) through appropriate community channels.
- 10.2.2. Liaison with Sound Company The appointed acoustic consultant (AAC) will liaise with the concert sound company to obtain details of the sound system and establish the typical sound levels at the mixer position. In addition to this a consultant from the AAC will assess likely sound levels and obtain information to assist with the implementation of the system at the stadium. The sound levels at the mixer tower will be based on the external noise limits outside coupled with the propagation characteristics of the sound system and weather conditions. The AAC will also take the opportunity of confirming the sound limits and sound control protocols to the touring sound company.
- 10.2.3. Rehearsals Rehearsals and sound checks can be carried out between agreed hours. The AAC will monitor the sound levels at the mixer tower to ensure that the levels will comply with the noise conditions.

## Event Day Sound Control

- 10.2.4. Sound Propagation Tests Where possible, during the day before the concert and on the morning of the concert, the production team will carry out sound checks and as part of this process the AAC will undertake a sound propagation test to correlate the music noise levels at the mixing desk with those observed at residential properties. The results of these tests will be used to 'fine tune' the sound system in order to maximise the containment of music within the stadium. The results will also be used to set the sound limit at the mixer to ensure the noise conditions can be met.
- 10.2.5. Sound Control in the Stadium The music sound levels at the mixing desk position will be continuously monitored in terms of 15-minute and 1-minute LAeq values. The noise limit is set in 15-minute intervals, but the 1-minute values provide the AAC with immediate information to ensure the limit is not exceeded. The sound engineers are continually informed of the position of the music noise levels and immediate instructions will be issued to them if it appears that the limit may be exceeded at any point. The AAC at this position will be in radio contact with colleagues and EHOs monitoring music noise levels at nearby residential properties.
- 10.2.6. Audience Noise Exposure Noise monitoring will also be carried out at a representative location in the stadium to assess the typical noise exposure of the audience in order to ensure that the noise conditions are met.
- 10.2.7. Workplace Noise Exposure Noise monitoring will be undertaken at specific areas of the stadium where staff are working. Appropriate warning signs advising staff of the risk to hearing from loud music will be posted at entry points of specific areas.
- 10.2.8. Sound Monitoring in the Community Noise measurements at residential properties will be carried out by a consultant throughout the event. Both LAeq and octave band frequency measurements will be recorded in each location. It is anticipated that the monitoring will be carried out in conjunction with the EHOs. This team will be in radio contact with the AAC inside the stadium at the mixing desk position. Action necessary to ensure the noise limit is not exceeded will be transmitted by radio through to the consultancy team at the mixer and immediate instructions issued to the sound engineer to resolve any potential problems.

- 10.2.9. Complaints Telephone Number Complaints from residents calling the complaints telephone number will be relayed through to the consultants and EHOs monitoring outside the Stadium and the area of the complainant visited. The music noise levels will be assessed and if action is necessary this will be transmitted by radio through to the AAC and EHOs at the mixing desk position. Discussion will take place with the Environmental Health Department on how this will be achieved in practice and a co-ordinated approached will be adopted. The number of operators will be decided on an event-by-event basis. All calls will be logged and the agreed AAC representative will be informed of the location and the nature of the complaints. Full details of all logged complaints received will be sent to the Event Manager after every event.
- 10.2.10. A schematic of the control communication protocol is provided below:

