Directors of music and Bandmasters

Amendment record

This Annex has been reviewed by the Directorate of Defence Safety (DDS) together with relevant subject matter experts and key safety stakeholders. Any suggestions for amendments **should** in the first instance be directed to the Defence organisation's Safety Centre/Team Group Mailbox and with their approval, sent to COO-DDS-GroupMailbox@mod.gov.uk.

Version No	Date published	Text Affected	Authority
1.2	Oct 20	Interim update post-handover of policy from DSA to D HS&EP.	D HS&EP
1.3	Sep 22	Release of two-part chapter structure.	D HS&EP
1.4	02 Apr 25	Revised to provide closer alignment with the legislation that Defence must comply with.	DDS

Noise exposure to musicians

- 1. For Directors of music (DOMs) and Bandmaster (BMs), the management of the risk of damage to musicians' hearing from noise poses a dilemma because the noise (music sound) produced is required for the performance. Guidance can be found in the Health and Safety Executive, <u>HSG260</u> 'Sound advice: Control of noise at work in music and entertainment'.
- 2. Most of the noise that musicians are exposed to is generated by their own and other band members' instruments and is therefore unavoidable. Musicians' hearing is susceptible to damage due to their proximity to the instruments and the sound levels produced and from the duration of the performances or practice sessions.
- 3. Brass instruments may pose a particular risk due to their ability to generate relatively higher sound levels when compared to other instruments in a typical orchestra.
- 4. Instruments where the sound emanates from a part of the instrument particularly close to the ear, for example violins, can also produce higher noise exposure levels.
- 5. Percussion instruments may pose a risk of exposure to peak sounds at or above the lower EAV or upper EAV set out in the legislation due to the striking action required to play them.
- 6. A noise risk assessment **should** be carried out on the acoustic properties of each venue because no two venues are acoustically the same.

- 7. DOMs and BMs **must** reduce musicians' exposure to noise which is at or above the lower EAV or upper EAV SFAIRP. The most feasible measure is the reduction in the general volume at which music is performed: during technical rehearsals, loud dynamics and high levels may not be necessary and **should** be avoided. Other reductions in musicians' exposure **should** be considered and implemented if practicable to do so, these include:
 - a. the use of practice mutes for brass instruments;
 - b. the use of portable acoustic screens and head shields for exposed vulnerable players;
 - c. the consideration of stage layout;
 - d. the identification and marking or control of loud passages in the piece being performed and the score marked accordingly, especially percussion or brass;
 - e. cycling through players;
 - f. make sure multiple adequate rest periods for musicians before, in-between and after performances and rehearsals;
 - g. limiting exposure of musicians during performance and rehearsal by influencing programme selection;
 - h. reducing the number of brass players to the minimum required for the performance;
 - i. the use of live sound monitoring systems throughout the performance so that levels can be adjusted in real-time; and
 - j. where possible, replacing an acoustic instrument with an electronic equivalent so its output level can be electronically adjusted.
- 8. DOMs and BMs **must** make sure that PPE, for example personally moulded in-ear protection, is always worn by all band members whilst rehearsing or performing if the peak or average Exposure Action Values in the legislation are reached or exceeded.
- 9. Risers (raised platforms) **should** be considered in order to raise the second and subsequent ranks of players in concert band situations whenever it is practical for both rehearsal and performances. The use of risers will reduce the muffling effect of playing into the body of musicians sited in front and enable the player to reduce their volume and consequent noise exposure. The risers can also enable greater distance between an instrument and the ear of the person directly in front. To be effective, risers **must** be of sufficient height for the musician's instrument to be directed above the head of the musician positioned in front of them. Acoustic screens **should** also be considered and as appropriate positioned and used in line with the manufacturer's instructions. The impact of reflections from acoustic screens need to be taken into account, as this has the potential to cause local noise levels to increase above the levels without the screens.
- 10. Band leaders or ensemble leaders **should** notify all personnel not required for rehearsal of the risks and instruct them to vacate the performance area.

- 11. DOMs and BMs **should** make sure that the musicians performing in a marching band are directed to produce the same controlled dynamic range. If excessive volume is required from a particular instrument for the benefit of marching troops, for example the bass drum, they **should** be positioned outside the formation of the band to reduce the muffling effect provided by the surrounding musicians on parade and to reduce exposure of other musicians. Where this is not possible effort **should** be made to create space around them.
- 12. Musicians **should** be advised of the noise levels to which they are likely to be exposed whilst rehearsing and performing and that they are more vulnerable to hearing damage from participation in leisure activities which add to their overall sound exposure (for example use of personal audio / media players at high volume, attending music concerts and so on).
- 13. When assessing the noise exposure of a band member, DOMs and BMs **should** also consider any reasonably foreseeable noise exposure experienced by band members conducting other duties, additional practice sessions or activities outside of work that can all contribute to hearing damage.
- 14. If musicians are exposed to noise above the lower EAV, an audiometric health surveillance **must** be provided and all musicians **should** attend regular hearing tests.