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| Scope |
| This procedure applies to all Company projects, offices, facilities, asset and concession companies and Joint Venture (JV) projects where the Company Management System has been adopted by the JV Board. Where the Company is required to operate another party’s Management System then the requirements of the Joint Venture/Alliance Business Management System (BMS) Assessment (MSC-PR-0002) must be followed in relation to assessing the validity of third party management systems. |

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| Purpose |
| The purpose of this procedure is to identify and control the health risks associated with exposure to noise at work. Environmental noise is covered in the Environmental Noise and Vibration reference material (ENV-RM-0014).  The requirements in this procedure are considered to be our current standards and must be adopted as part of a safe system of work. However, Projects and Contracts are also encouraged to identify new methods of working as long as these are: developed through rigorous risk assessment, demonstrably improve on current standards, deliver legal compliance and are approved in accordance with the Control of HSES Derogation procedure ([HSES-PR-0004](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-6992)). |

Procedural Requirements

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|  | Competencies |
|  | Supply Chain companies who are contracted to undertake noise surveys and assessments on behalf of the Company must be members of the Institute of Acoustics. See [Occupational Hygiene](https://home360.balfourbeatty.com/UKHealthandSafety/occupational_health/Pages/Occupational-Hygiene.aspx) on 360 for preferred providers. |
|  | Any person who undertakes Noise Risk Assessments for a project must have a current SMSTS, or Company accepted equivalent, qualification. |
|  | Single Activity Noise level monitoring may be undertaken by an individual who has undertaken familiarisation training provided by the supplier of the noise monitoring product with assistance provided where necessary by the Health, Safety, Environment and Sustainability Enabling Function (HSES). |
|  | **NOISE RISK ASSESSMENT** |
|  | A noise risk assessment ([HSES-TF-0011c](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-7851)) is required if any employee is likely to be exposed to noise at or above the lower noise exposure action value. |
|  | A person's daily noise exposure depends on both the noise level and length of time that they are exposed to the noise. |
|  | The HSES Function will provide specialist support to managers to establish the levels of noise in the workplace. This may include generic data of noise levels from typical plant and machinery, or practical noise surveys of work place environments. |
|  | There is no requirement to make a very precise or definitive assessment of an individuals’ exposure by taking detailed measurements. A sensible and practicable estimate of exposure will suffice, provided it is based on data which is representative of the individuals’ exposure and can enable a decision to be made as to whether exposure action values are likely to be exceeded. |
|  | Information (such as manufacturers’ noise emission data) used to estimate exposure needs to match conditions and practices at the workplace to be sure the data is representative of the work. Data from measurements of noise will only be required where other sources cannot give reliable and representative data. |
|  | Where the assessment of a noise exposure level is close to an exposure value, controls must either be implemented as if the exposure action value has been exceeded, or the assessment must be sufficiently precise to demonstrate that the exposure is below the exposure action value, by using expert external assistance in undertaking surveys where they are necessary. |
|  | The Site Lead must ensure the significant findings of the assessment and the measures which need to be taken are recorded in the risk assessment document ([HSES-PR-0011](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8591)). |
|  | For sites with multiple zones of varying noise levels, the details of the assessment must be recorded on the Noise Assessment Register ([HSF-SF-0044a](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8143)). |
|  | The risk assessment must: |
|  | * Identify the source(s) of noise hazards |
|  | * Identify where there may be a risk from noise and who is likely to be affected |
|  | * Contain a reliable estimate of exposures (assessment can be a combination of noise surveys and manufacturers information), and compare the exposure with the exposure action levels and limit values |
|  | * Specify controls to eliminate or reduce the risks so far as reasonably practicable, e.g. whether noise control measures or hearing protection are required, and if so where noise control is needed and of what type |
|  | * Identify any employees who need to be offered health surveillance and whether any are at particular risk. Examples are people with a pre-existing hearing condition, those with a history of deafness and pregnant women |
|  | The Site Lead must ensure the risk assessment is reviewed if circumstances in the workplace change and affect noise exposures and employee’s health.  Examples may include changes in the working method, environment, materials or plant and equipment. The risk assessment must also be reviewed regularly to make sure that all reasonably practicable measures to control the noise risks have been taken. |
|  | **CONTROLLING EXPOSURE TO NOISE** |
|  | The main requirement under the [Control of Noise at Work Regulations 2005](http://www.legislation.gov.uk/uksi/2005/1643/contents/made) is to eliminate exposure at source. This requires primary consideration of whether exposure can be eliminated at the design stage by, for example, using alternative technologies. Where elimination through ‘Designing for Health’ can be achieved this should be implemented. Where this cannot be done, exposure must be reduced to as low a level as reasonably practicable, by applying engineering controls and technical measures, in advance of managerial or organisational controls, before resorting to the use of hearing protection. Exposure Action Values should not be considered to be target values which must be surpassed. |
|  | To comply with the duty to eliminate or control risk, the following should be applied in priority order: |
|  | * Consider alternative processes, equipment and working methods |
|  | * Follow good practice and industry standard control measures |
|  | * Take noise into account in workplace design and when selecting tools and machinery |
|  | * Maintain machinery and noise control or absorption materials |
|  | * Consider human factors in job organisation and task design |
|  | * Where possible, provide employees with periods of relief from exposure |
|  | Reference: p6, Document 8 [L108](http://www.hse.gov.uk/pubns/priced/l108.pdf). 2nd edition, 2005. Controlling Noise at Work. Approved Code of Practice and Guidance. HSE Books. ISBN 978 0 7176 6164 4.  The flow chart provides an overview of the steps that should be taken to comply with the legal obligations in relation to noise exposure at work. |
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|  | **HEARING PROTECTION ZONES** |
|  | Where noise levels are likely to be at or above an Upper Action Value, the work place will be a designated Hearing Protection Zone, which is demarcated by signs indicating that hearing protection must be worn. |
|  | An example of a mandatory hearing protection zone sign is shown below. |
|  | Access to a hearing protection zone must be restricted. No person should enter the zone unless they are wearing appropriate hearing protection. |
|  | **HEARING PROTECTION** |
|  | Hearing protection must not be used as an alternative to controlling noise by engineering, technical and organisational means. |
|  | The effectiveness of hearing protection must be monitored. An easy way to monitor the performance of hearing protection is to use the Single Number Rating (SNR) data which is supplied by the hearing protection manufacturer. |
|  | The hearing protection selected must reduce the risk to as low a level as reasonably practicable. Choice of equipment supplied must be made in conjunction and consultation with employees. |
|  | Protectors that reduce the level at the ear to below 70 dB should be avoided, since this over-protection may cause difficulties with communication and hearing warning signals. Users may become isolated from their environment, leading to safety risks, and generally may have a tendency to remove the hearing protection and therefore risk damage to their hearing. |
|  | The Site Lead must ensure that the workforce wear hearing protection at all times where the noise exposure is likely to be at or above an upper Exposure Action value. |
|  | An estimate of the noise exposure which a person could be exposed to, when wearing their hearing protection, may be achieved by subtracting the published SNR from the measured ambient sound level beside the ear. |
|  | The HSEs’ [Hearing Protection Calculator,](http://www.hse.gov.uk/noise/calculator.htm) can be used to help calculate the effectiveness of the chosen hearing protection. |
|  | **INFORMATION, INSTRUCTION AND TRAINING** |
|  | Instruction and training will be provided to employees where the assessment indicates exposure to noise is likely to be at or above a lower action value.  It is important that employees understand the hazards they may be exposed to, the possible effects and consequences and how the risks are caused. Training will include: |
|  | * The likely noise exposure and the risk to hearing this noise creates |
|  | * What measures are in place to control risks and exposures? |
|  | * Where and how they can obtain hearing protection? |
|  | * How to clean and maintain the hearing protection in an effective condition? |
|  | * How to report defects in hearing protection and noise-control equipment? |
|  | * The requirement not to misuse, interfere with, or damage any hearing protection or noise control equipment |
|  | * What they should do to minimise the risk, such as the proper way to use hearing protection and other noise-control equipment, how to look after, store and use noise control? |
|  | * The health surveillance systems |
|  | The Health & Safety Executives pocket card ‘Don't lose your hearing’ ([INDG363](http://www.hse.gov.uk/pubns/indg363.pdf)) can be used to advise employees what they need to do to protect their hearing and what they can expect from the Company if noise is a problem in their workplace. It also explains the different types of hearing protection available. |
|  | **HEALTH SURVEILLANCE** |
|  | Audiometric tests will be conducted at pre-employment, then annually for 2 years. Following this it will be conducted in accordance with the requirements of Occupational Health Surveillance – Assessment Procedure ([HSF-PR-0035](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-1734)). |

| ACRONYMS and Definitions | |
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| **EXPOSURE LIMIT VALUE (ELV)** | The level of daily or weekly personal noise exposure or of peak sound pressure which must not be exceeded. These values are:  (a) a daily or weekly personal noise exposure of 87 dB (A-weighted); and  (b) a peak sound pressure of 140 dB (C-weighted). |
| **LOWER EXPOSURE ACTION VALUE** | (a) a daily or weekly personal noise exposure of 80 dB (A-weighted); and  (b) a peak sound pressure of 135 dB (C-weighted). |
| **SITE LEAD** | The person directly responsible for the Health and Safety of all employees, subcontractors and third parties, and for the care of the environment, affected by our works. |
| **SINGLE NUMBER RATING (SNR)** | The single number rating value is provided for all CE marked hearing protectors. The SNR provides a simple estimate of the protection when corrected for the frequency content of the noise. |
| **UPPER EXPOSURE ACTION VALUE** | (a) a daily or weekly personal noise exposure of 85 dB (A-weighted); and  (b) a peak sound pressure of 137 dB (C-weighted). |

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| **REASONABLY PRACTICABLE** | Balancing the level of risk against the measures needed to control the real risk in terms of money, time or trouble. However, you do not need to take action if it would be grossly disproportionate to the level of risk. | |
| **RED TEXT** | Not yet available, use current BMS for relevant document |

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| INPUTS | | |
| **Reference** | **Type** | **Title** |
| MSC-PR-0002 | Procedure | Joint Venture/Alliance Business Management System (BMS) Assessment |
| ENV-RM-0014 | Reference Material | Environmental Noise and Vibration |
| [HSES-PR-0004](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-6992) | Procedure | Control of HSES Derogation |
| [HSES-PR-0011](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8591) | Procedure | Setting People to Work Safely |
| SI 2005 No. 1643 | [Legislation](http://www.legislation.gov.uk/uksi/2005/1643/contents/made) | The Control of Noise at Work Regulations 2005 |
| N/A | [Guidance](http://www.hse.gov.uk/noise/calculator.htm) | Exposure Calculators and Ready Reckoners |
| [L108](http://www.hse.gov.uk/pubns/priced/l108.pdf) | Guidance | Controlling Noise at Work (HSE). Guidance on Regulations |
| [INDG362](http://www.hse.gov.uk/pubns/indg362.pdf) | Guidance | Noise at Work: A brief guide to controlling the risks (HSE) |
| [INDG363](http://www.hse.gov.uk/pubns/indg363.pdf) | Guidance | Noise: Don’t lose your hearing! – Employee Pocket Card (HSE) |
| [HSF-TB-0044a](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-11652) | Toolbox Talk | Noise |

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| **Reference No.** | **Document Title** | **Retention Period** | **Responsibility** |
| [HSES-TF-0011c](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-7851) | Risk Assessment | 3 years | Site Lead |
| [HSF-SF-0044a](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8143) | Noise Assessment Register (if applicable) | 3 years | Site Lead |
|  | Health Surveillance Records | 40 years | Occupational Health |