Feedback on the noise and hand arm vibration worker involvement pilot project

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The Worker Involvement Activity forms part of the Noise and HAV programme. The aim of this activity was to reduce occupational ill health related to noise and HAV exposure by introducing worker participation projects. Twenty eight companies were recruited by HSE to set up worker involvement projects in July 2006. Four of these pilot projects were selected for this in depth feedback study which aimed to: gain views of worker involvement in the decision making process; gain feedback on the usefulness of the support materials; identify processes and difficulties involved in setting up the project; identify the noise and HAV exposure reduction outcomes from the project; and identify lessons that could be learnt for setting up worker involvement projects.

This study found that the worker involvement projects were considered to have been effective, beneficial and reasonably successful in identifying and solving noise and HAV problems, raising risk awareness, improving working relationships between workers and managers, and improving risk assessments.

HSE Books

ACKNOWLEDGEMENTS

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EXECUTIVE SUMMARY

Objectives

The aims of the study were to:
- Gain perceptions and views of worker involvement in the decision making process with regard to the control of noise and HAV.
- Gain feedback on how useful the participating companies found the worker involvement project support materials.
- Identify the processes that participating companies went through in setting up and running the worker involvement project within their company, any difficulties or obstacles they came up against and how these were overcome.
- Identify the outcomes from the project in terms of the reduction in exposure to noise and HAV and the development and use of appropriate risk controls.
- Identify good practice and lessons learnt in setting up and running a noise and HAV worker involvement project.

Method

This study involved conducting semi-structured interviews with the project managers of four companies who had volunteered to take part in the noise and HAV worker involvement pilot project. A series of three interviews were conducted with the project manager of each company. Interviews were held at the start, half way through and at the end of the project. Key topics that were addressed were progress, communication methods utilised, obstacles to progress encountered, use of HSE materials and management of the project. Workers taking part in the worker involvement project were asked to complete a postal questionnaire at the end of the project to provide some feedback.

Main Findings

The worker involvement projects were reported to have been effective, beneficial and reasonably successful. Involving workers in identifying and solving noise and HAV problems was seen as beneficial in increasing awareness of the risks from exposure to noise and HAV, improving working relationships between workers and managers and improving risk assessments. The project managers found the material provided by HSE for the worker involvement project useful and informative. Opportunities to network with other companies were thought to be valuable for advice, support and knowledge sharing. A variety of both formal and informal methods of involving workers were utilised by the companies in this study. The project managers found that setting up and running the worker involvement project took longer than was anticipated and felt that the project should be seen as a continuous process and one that was likely to take two or three years to establish fully. The main areas of difficulty the project managers experienced in running the project concerned establishing effective two-way communications with the workforce and the amount of time required to drive the project forward.

The feedback from workers suggests that they felt involvement in the project had increased their awareness and understanding of noise and HAV risks, and had been effective in introducing controls. All of the workers responding felt that involving the workers in health and safety issues was a good idea and one that they wished to see continued within the company.

Lessons Learnt

The following lessons could be learnt from this study:

- **Methods of Worker Involvement**
  The companies studied here utilised a mixture of formal and informal methods of involving workers that were appropriate and suitable for their organisation. Informal, one-to-one communications were felt to be particularly effective.

- **Importance of training**
  At an early stage in the project, the companies provided the workers involved in the project with noise and/or HAV training. Training the workers was thought to help them to understand the issues and need for controls and to raise their awareness of hazards.

- **Importance of commitment**
  The project managers in this study all had full support and commitment from their senior managers for this project, they themselves were positive about the potential benefits of the project, and they were prepared to put time and effort into gaining and maintaining the commitment from the workers to the project.

- **Time resources required**
  Setting up and running a worker involvement project required a significant time commitment from the project manager. The time required, both from the project manager and the time away from production for the workers involved, was considered to be the major disadvantage and the principle cost involved in the project.

- **Long term project**
  Establishing effective worker involvement in occupational health and safety issues such as noise and HAV was felt to be a long term project that was likely to take two to three years of continual effort to achieve.

1   INTRODUCTION

1.1   BACKGROUND TO WORKER INVOLVEMENT

Worker involvement is defined by the Health and Safety Executive (HSE) as "the term we use to describe the ways in which workers are encouraged to take part in making decisions about health and safety at work" (HSE 2007). This concept is considered to be more than consulting the workers or providing information and involves establishing a good working relationship and partnership between managers and workers for managing health and safety risks.

The term "worker" is used in favour of "employee" to encompass individuals who are both directly and indirectly employed to carry out tasks.

Legally employers are required to consult with their workers on health and safety under the Health and Safety at Work Act. The Safety Representatives and Safety Committees Regulations 1977 and the Health and Safety (Consultation with Employees) Regulations 1996 provide a legal framework which requires employers to consult with workers.

HSE believes that the involvement and consultation of workers on health and safety issues has an important role to play in contributing to the reduction of workplace injuries and ill health. Research into the effectiveness of worker involvement or participation in occupational health and safety management suggests that benefits of such involvement may include:

- Improved social learning

Involvement of workers enables fuller debate and facilitates the generation of more appropriate solutions. Workers who actually carry out the task are likely to possess valuable knowledge of the hazards, working conditions, capabilities and potential for improvement and this knowledge can be fed back to management to influence decisions.

- Improved industrial relations

Cooperative working relationships established as part of worker involvement reportedly has the potential to improve industrial relations.

- Improved commitment and job satisfaction

Worker participation may result in workers becoming more committed to occupational health and safety and job satisfaction may be increased.

- Productivity and efficiency gains

Some studies have identified the potential of worker involvement to increased innovative behaviour, economic efficiency and productivity.

- Compliance with legal duties and moral rights

Employers have a legal duty to consult with their employees under the SRSC and HSCE regulations. The introduction of worker involvement initiatives is often motivated by the belief that morally workers ought to have the opportunity to be involved in collective decision making at work.

(Shearn, 2004)

1.2 BACKGROUND TO WORKER INVOLVEMENT PILOT PROJECTS

The Worker Involvement (managing noise and hand-arm vibration risks) Activity forms part of the Noise and Hand-arm Vibration (HAV) programme for 2005-2008. The aim of the activity was to augment employer efforts to reduce occupational ill health related to exposure to noise and HAV in the workplace by introducing worker participation projects. The programme team recruited companies from the construction and manufacturing sectors as these were the industries where a large number of workers were potentially at higher risk from noise and HAV. The objectives of this programme activity were to:

- Test the concept that worker involvement could increase the adoption of attitude and behavioural change to improve the management of health risks from exposure to noise and HAV.

- Test support materials and guidance for worker involvement in the management of noise and HAV.

- Identify novel methods of controlling noise and HAV risks developed through the involvement of workers.

- Take the lessons learnt from the pilot projects to develop a strategy for rolling out the activity more widely.

The worker involvement activity was launched in July 2006 and was initially expected to run until April 2007 although this was later extended by three months due to some difficulties the companies experienced setting the pilot projects up over the summer.

Twenty eight companies were recruited to the set up worker involvement pilot projects. A mentor was assigned to each company as a point of contact to monitor progress, give advice and support. A package of support materials was developed and issued to each company taking part. This information included HSE material on worker involvement guidance, noise and HAV leaflets, pocket guides and audio-visual material, as well as non-HSE material such as Speedy Tool Hire's toolbox talks and HAV posters.

1.3 FEEDBACK ON WORKER INVOLVEMENT PILOT PROJECTS

As part of the review of the worker involvement programme activity, more in depth feedback was sought on how worker involvement was implemented in a small sample of the companies taking part. Feedback was sought from the company project managers on the progress of the pilot projects (aims, achievements, communication methods tried, obstacles encountered, lessons learnt), usefulness of the materials supplied, and the management of the project (commitment, costs, benefits and disadvantages). Feedback from the workers was sought at the end of the feedback study and covered their level of involvement in the pilot project and the project outcomes.

1.4 AIMS AND OBJECTIVES

The aims of the feedback study were to:

- Gain perceptions and views of worker involvement in the decision making process with regard to the control of noise and HAV.

- Gain feedback on how useful the participating companies found the worker involvement programme support materials.

- Identify the processes that participating companies went through in setting up and running the worker involvement pilot project within their company, any difficulties or obstacles they came up against and how these were overcome.

- Identify the outcomes from the pilot project in terms of the reduction in exposure to noise and HAV and the development and use of appropriate risk controls.

- Identify good practice and lessons learnt in setting up and running a noise and HAV worker involvement project.

2   METHOD

This study aimed to conduct up to three interviews with the project manager at each of five companies who had volunteered to take part in the Worker Involvement Project. In addition, the study aimed to interview one or two workers involved with the project at each of the companies. Interviews were to be held at the start of the pilot projects to provide baseline information, half way through the project and at the end of the project. The results were to be presented in a case study format.

Design

A case study methodology was used in order to gain in depth feedback from interviews with management and workers involved in worker involvement pilot projects. It was planned to interview the project managers of each of the worker involvement pilot projects and, if feasible, some of the workers.

Five companies were selected from the twenty eight companies recruited to the worker involvement programme activity. The companies were initially contacted by the HSE appointed mentor to ask if they would be willing to take part. They were selected to cover both construction (two companies) and manufacturing industries (three companies). Four of the companies had a directly employed workforce and one had a mainly sub-contracted workforce. One of the companies selected already had an established worker involvement programme and one of the companies had little experience of involving the workforce. The project managers of each of the five selected companies were contacted, by the HSL researcher, to confirm their agreement to participate in the case study and to arrange an initial interview.

The HSL researcher was to visit the company site on three occasions to carry out the interviews with the project manager, and if possible, some of the workers involved in the project. The format of the interviews was semi-structured with a topic guide prepared covering key topics that it was felt should be addressed including progress, communications, worker feedback, actions planned or implemented, obstacles, costs and benefits of running the project (See Appendices). This format was utilised in order to encourage an open discussion and to enable the researcher to explore issues raised in greater depth to obtain rich, qualitative data. The topic guide was designed to take an hour or less to complete for project managers and fifteen minutes for workers. It was felt that taking workers away from their production tasks for anything other than a short period would be unacceptable to the company.

Case Study Visits

Five initial visits were carried out. It proved not to be feasible to interview workers at any of the sites during the initial visits. Interviews were, therefore, only conducted with the project manager. Written consent for the interview was given by the project managers prior to the initial interview. Topic guides for the interviews are included in the Appendices.

Because the progress of the projects was proving to be slower than anticipated, it was decided to conduct the interim interviews by telephone as the companies involved believed that they would have little to report at the interim stage. Only three interim telephone interviews were conducted as one company dropped out of the study following staff changes and another of the project managers was unable to take part in the interim interviews due to heavy work commitments.

Final interviews were conducted with the remaining four companies. Once again, it proved not to be feasible to interview workers on the day of the site visit.

The initial and final interviews lasted approximately 60 minutes. The interim telephone interviews were shorter in duration taking around twenty minutes. All interviews were tape recorded with the agreement of the project manager and transcribed in full for analysis.

In order to try to get some feedback from workers and other members of the project teams on their views of the worker involvement project, it was decided to survey workers at the four participating companies by postal questionnaire at the end of the project. The project managers of two of the four companies (company C and D) were approached and agreed to distribute a feedback questionnaire to the members of their worker involvement project teams. The questionnaires could be completed anonymously and returned by post directly to the researcher. (Company A were not approached because the workforce was largely sub contracted. Company B were not included because of the difficulties distributing questionnaires to a geographically dispersed and mobile workforce).

Data Analysis

The transcripts from the interviews with project managers for the four companies were analysed. The transcripts were coded and similar themes and differences between companies were identified. The findings were presented as individual case studies to describe the processes, obstacles, outcomes and lessons to be learnt for each company in implementing and running a worker involvement project on noise and HAV.

The worker questionnaire responses for each company were analysed and a summary included as part of the case study. A copy of the questionnaire is included in the Appendices.

3   RESULTS

3.1   COMPANY A – FEEDBACK FROM PROJECT MANAGER

3.1.1   Company Background

Situation in the company prior to the worker involvement project

Company A is a construction company which was set up three years ago. They have very few direct employees and, as is usual in the construction industry, the construction work is carried out using Sub Contractors. The aim for this company was to pilot the worker involvement project at one of their sites and then use the experience and information gained to roll out the noise and HAV worker involvement project to other construction sites run by the company and to incorporate the approach in their subsequent construction projects.

Noise/vibration issues identified

Prior to joining the project, the company was aware that it had both noise and HAV issues depending on the work being carried out on the site at any one time.

Organisational safety culture and personal approach of Project Manager

The philosophy of the Project Manager for this company was to involve the workforce and communicate effectively with them to establish a relationship where they *"feel comfortable to come to you with everything and anything"*. The Project Manager described himself as a *"natural communicator"* and someone who had always *"believed in worker participation"*. His personality and management style have influenced the project, along with the support he has received from the senior management.

The philosophy held by the Project Manager was shared by the Senior Management and Directors of the company. Involving the workforce and listening to their concerns and suggestions was part of the organisational culture prior to taking part in the worker involvement project. The project was therefore seen as a natural continuation of a way of working that had already been established.

"I've always been doing that (worker involvement) without that label….it's fair to say that I would go to the canteen and have a conversation with the lads because that's how I work."

Previous control measures and worker involvement initiatives

The Project Manager of this company already conducted Toolbox Talks every week on various Health and Safety issues, including noise and HAV.

"…we have always done Safety Talks and Tool Box Talks."

Existing communication systems

The company had a well-established system of communications. This consisted of three teams who met separately with the Project Manager. One team involved the Site Managers, another team consisted of the Supervisors of Sub Contractors working on the site, and the third was the Site Operatives.

Formal weekly meetings were held with the Safety Representatives for each Sub Contractor and Monthly Committee Meetings with Representatives for the Operatives.

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"...every Thursday morning we have a formal meeting of the Safety Representative for every Sub Contractor and they have to attend, it's not something that they can say 'I'm too busy'." This over time has turned into wanting to attend. They can see the benefits of the meeting and the exchanging of information.

Concept of worker involvement

The Project Manager's concept of worker involvement was to talk to the workers, establish a good relationship with them so that they would feel comfortable to bring their Health and Safety concerns directly to him and the team, and to encourage them to suggest possible solutions.

This company had moved away from what they saw as the traditional approach of "*confrontational*" management. The key to good management was felt to lie in effective communication, and worker involvement was seen as an approach that encouraged good, two-way communication with the workers.

"...confrontation doesn't work and we've proved that...the best way to get people to work with you is to treat them as professional human beings."

3.1.2 Aims and Objectives

The short-term aim for this company was to increase their understanding of noise and HAV regulations and controls. In the longer term it was hoped to use the information gained from participation in this project on all company sites and future projects.

"...we wanted to know more and we can get more out of a project like this when we're guided and given information...and then to use the information as a basis for the rest of the business."

3.1.3 Project Progress

Achievements and how workers have been involved

The worker involvement project was delivered through the existing communications structure within this company. Operatives coming onto the site received noise and HAVS information and were informed of the worker involvement project as part of the Health and Safety induction. They were encouraged to look out for issues and bring these to the attention of the Site Team either informally or at site meetings.

Sub Contractors were expected to look at the control of noise and HAV in detail in their Risk Assessments and Method Statements.

The company reported that they had a lot of feedback from the workers and a lot of information on Noise and HAV has been exchanged. The actions taken in controlling noise and HAV exposure were often driven by the Sub Contractors.

"...three of our Sub Contractors have changed their supplier and they've changed their Supplier simply on the back of the Noise and HAV information....so people are questioning the information that they are getting."

"...they (Sub Contractors) change the way they select their tools – we influence that...they've changed the way that they're actually doing the job."

The company has purchased noise meters for all the site Health and Safety Managers to use to take informal measurements of the in-use noise. "*Again, one of the things we have done is*

made it (noise meter) available for Sub Contractors. We encourage the Sub Contractors to come in, take the noise meter and go and do their own readings."

The Project Manager reported that the workers were now more prepared to question the design of the building and how they are being asked to carry out the job. The company had also changed how they carried some work as a result of the project's focus on Noise and HAV.

"We also find that they offer us different suggestions, they are prepared now to tell us that the ground isn't right to put the machine on. Whereas before, they'd just do it…now they actually come back to you and we consider that's the best part of it."

"We used to put the concrete slab down and drill holes for the risers. We now put a piece of polystyrene where the risers are going to be and lay the concrete slabs…you no longer have to drill a hole."

Methods of communication tried in setting up and running the project

As part of this project the Sub Contractors were required to complete more detailed and less generic Risk Assessments and Method Statements. The monthly meeting with the Representatives of the Operatives was extended so that after the formal agenda, the Project Manager held a 30 minute session on Noise and HAV. The information from this meeting and the minutes were then made available to all the workers on the Site Notice Board and Operatives were encouraged to read these.

Barriers to effective communications

Not having a direct workforce and dealing with a large number of Sub Contractors, some of whom may only be on site for a few days, was identified as one of the major problems (Company A) faced in setting up effective communication systems with the workers.

"It would be a lot easier…to have a site where there's a maximum workforce of 50 men. It's a lot easier to deal with these issues than here where we have got…yes, there's 400 men on site today but we have inducted over 2000."

This company attempted to overcome this difficulty by combining formal and informal communication systems for the worker involvement project.

"If we have a formality to it, by the time we've dealt with it formally, they have gone and we haven't had an impact on them whereas if we can pick it up and deal with it on an informal basis with just those four men, we can have an impact and they, we would hope, will take it to the next site."

The Project Manager believes that, to encourage workers to get involved in the project, it was important to let them know the outcome from the feedback and suggestions they gave and never to belittle any suggestions being put forward.

"…we never tell people that is a stupid idea. What we do is say 'let's have a look at this' and when we've looked at it we sit down and give them the information…give them the reasons…they may still not agree with us but they do respect that it's not going to happen."

The commitment to regular, planned meetings to talk specifically about Health and Safety issues was seen as key to getting the message across.

"It isn't… telling them off because they haven't achieved the progress…and then 'oh, by the way, are we having any health and safety problems?'….At the regular meetings all we're dealing with are health and safety and that, we believe, has had an impact."

One of the barriers to effective communications and involving the workforce was believed to be the workforce themselves. The Project Manager felt that workers were often not used to being consulted or being involved in the Health and Safety process and so found this approach a bit difficult to take on board.

Project progress

By May this company had already started the process of rolling out the worker involvement initiative on Noise and HAV to the rest of the company sites. This progressed to the point in August where the project was being run at 7 sites.

At the interim stage the Project Manager continued to feel very positive about this project describing it as being a *"worthwhile exercise"*. The only area of disappointment that the Project Manager expressed was that he was still receiving Method Statements from new Sub Contractors that made little or no mention of Noise and HAV. However, this was felt to be the minority and the approved subcontractors were producing Method Statements that considered Noise and HAV in sufficient detail.

By the half way stage of the project, the Project Manager felt that the project was successful in meeting the original aims. He reported that both the direct Employees and the Sub Contractors had increased their knowledge of HAV and Noise issues. This success was reiterated at the final interview.

"I believe it has been successful…if you go out there people will tell you – yes. It's very infrequent now that I have to stop and ask someone 'do you think you should be wearing ear defenders? Do you know what the noise levels are?'"

Project action plan and milestones

The Project Manager found that the action plans and milestones that he set initially had to be changed as the project progressed because what he wished to achieve changed.

"I set action plans and milestones and then found that…they changed because I had not understood what I was trying to achieve; it changed."

Continuation of project

The Project Manager of this company strongly believed that the worker involvement approach was something that will not have an end date. *"I think that by constant pressure we will get exactly where we should be but we have to understand… this never ends because if we stop then we'll just go back to where we were."*

The project was continuing both by the Noise and HAV focus being rolled out to all other company sites *"We're moving it on to a group initiative as opposed to a one site initiative."* and also through utilising the worker involvement approaches to other Health and Safety issues within the project site and other sites. *"…parallel to noise and hand-arm vibration…We are having a drive about harnesses….That's because we have identified a weakness, realised that the training that they(the operatives) are getting isn't sufficient."*

The next challenge is dust.

The Project Manager felt that the continuation of this project was not so much to do with Noise and HAV but with using the worker involvement approach in all Health and Safety topics.

"...when I first started this (worker involvement project) I would have said that the thing we've got to keep going is noise and HAV...now I would say that worker involvement is the thing that's underlying it."

Obstacles to progress

Working with a mainly sub-contracted workforce also posed problems in getting the Sub Contractors to include the required level of information in their Risk Assessments and Method Statements. The Project Manager tried to overcome this by giving the Sub Contractors guidance to do this.

"...We have asked them for it and then we have helped them find it. We have pointed them in the right direction...made suggestions, guided them, persuaded them."

Lessons learnt

One of the lessons that this company felt they learnt from the worker involvement project was to communicate the type and detail of Health and Safety information that they would require from the Sub Contractors at a much earlier stage. By communicating this information requirement early and directly to the Sub Contractor, it was hoped that the Sub Contractor would cascade this down to their workers prior to them coming on site.

3.1.4 HSE Role/HSE Materials/Mentor Role

HSE materials

The Project Manager used, and guided his Sub Contractors to use, three sources of information on Noise and HAV. These were the HSE website, information from the tool manufacturer or supplier, and the independent tool hire database. The pocket cards were considered to be the most useful material for the Operatives.

"We found the little cards that they (HSE) gave us very useful....We find that the men take to those and they want them and that's important."

Mentor role

Whilst it was useful to have somebody to bounce ideas off, having an HSE mentor was not considered to be an essential part of setting up and running this worker involvement project for this company. This may have been because of the experience, knowledge and personality of the Project Manager.

What could HSE do differently and/or the same to help

The Project Manager for company A felt that HSE needed to be more involved and influential in working with designers and architects to educate them to design in such a way as to eliminate the need for high risk processes to be undertaken.

"I believe that HSE need to involve themselves in this and try to put a lot of influence in there because Designers, Architects by their very nature will design some items and not have thought about the consequences...and the difficulties with actually producing what they have designed."

It was felt that more audio-visual material would benefit the worker involvement campaign. Material delivered in a format that the workers could relate to and would have an impact on them was also thought to be needed.

The Project Manager for this company believed that more opportunities for networking with other companies within the industry would be useful when setting up and running a worker involvement project.

"I don't think we did enough of that....I thought it was interesting to share other people's opinions, success and failures, other people's problems."

3.1.5　　　Management of Project

Commitment to the project

The decision to get involved in this project was supported by the Health and Safety Manager for the company and was put to the board of directors who gave their full support. It was launched to the Senior and Site Managers at a Managers meeting, to the Sub Contractors at the Health and Safety meeting and to the Operatives Representatives at the monthly committee meetings. The launches were well received. One factor in obtaining and maintaining commitment to the project at all levels was thought to be how it was presented.

"You haven't just got to be able to communicate, you have also got to be a good salesman and you have got to sell the enthusiasm and persuade people to get involved."

The Project Manager reported to the board of directors every three months on the project progress and they have continued in their interest and support of the project.

"…it (commitment) has never once faltered...there's never been a question of .the company can't afford for you to give the time, not once a question of cost or of are we getting anything out of it… they've accepted and supported the idea."

The Sub Contractors had also remained committed to the project and the Project Manager had seen some instances where the sub-contractors were adopting a worker involvement approach themselves.

"...if you can get to the man that actually owns the firm...he's embraced it, his men have commented on his change of management, he involves them, he talks to them."

Costs of setting up and running the project

There was no specific budget for the worker involvement project for this company.

"We weren't told you can have £10,000 or £20,000 or anything like that – we were told – do it and what it costs is what it costs."

The only significant cost for the project was the Project Manager's time.

Benefits and disadvantages of the project

The project was thought to have achieved an increase in the knowledge of Noise and HAV amongst both the company personnel and the Sub Contractors to the extent that some Sub Contractors had asked for advice on Health and Safety Training Courses.

"It would be fair to say that because of this project there is more knowledge now and it isn't just our knowledge. It's the knowledge that every one of the 23 Sub Contractors have developed because...we are asking them 'where's this information?'"

Another benefit of this project was in utilising the lessons learnt from the worker involvement approach to Noise and HAV in other Health and Safety areas.

"...the lessons we've learnt by focussing on HAVs and Noise, involving the workers there, has now been applied to the mobile elevated platforms as well ...and we can see that that will happen with other things."

However, the Project Manager believed that the biggest benefit was the worker involvement process itself. *"...people are prepared to try and take part – that's the biggest single benefit – people take part."*

The Project Manager for this company did not feel that there were any significant disadvantages to running this project.

3.1.6 Measurement of the Success of the Project

The Project Manager for company A believed that it would be *"very hard to measure"* the success or failure of this project. One way which the company have tried to monitor whether the aims have been achieved was by looking at the Operatives' awareness of Noise and HAV issues. During safety tours, the Safety Manager and the Director have asked Operatives if they have the Noise or HAV information for the machine or tool they are using and they have found that *"The number of times the person hasn't the information has dropped dramatically."*

Another measure used was to look at the quality of the Method Statements received from Sub Contractors and monitor how often they had to be rejected.

"...when I first started looking at it, there would be a vague reference to noise...that is no longer acceptable to me. What I'm looking for is, if you're going to use that machine, I want to see the noise levels indicated. Now, they provide that information and they now see it as something that they do as standard."

The Project Manager reported seeing a reduction in the accident rate although he felt that this was unlikely to be wholly attributable to the project.

"We are not saying it's all down to this project, it's not, but if you look at the frequency rate here we do have a low accident frequency rate...it's one of the spin-offs from this project."

However, the Project Manager firmly believed that the real success with the project was not quantifiable in the short term.

"We can't quantify what we are achieving here because we are achieving it for ten years time...what you're doing here is long term and you've got to hold your nerve with it...there's some things in life that can't be quantified."

3.2 COMPANY B – FEEDBACK FROM PROJECT MANAGER

3.2.1 Company Background

Situation in the company prior to the worker involvement project

Company B is a construction and building maintenance company. They have 800 employees mainly working alone throughout the area, supported by 400 office staff and 700 sub-contractors. These employees are very rarely together in any one place and generally visit the head office in order to pick up supplies. There is significant Trade Union involvement. Three years ago the workforce were TUPE transferred from Local Authority employment when the company took over the contract.

The workforce comprises of *"joiners, plumbers, gas engineers, roofers, painters, asbestos operatives, lift technicians, glaziers and electricians"*.

Many work alone on a *"man and a van"* basis and are sent details of the jobs they are required to do via a Personal Digital Assistant (PDA) so they do not need to come into the office each day unless they need to pick up materials or equipment. Some pick up work orders from the main office. Like most operatives working in building maintenance in the public sector they work on a bonus scheme where they are paid additional money for meeting and exceeding targets.

Noise/vibration issues identified

HAV rather than noise was prioritised as the major issue for this company. The tools used are provided and maintained by a major tool supplier who had a presence at the main office.

"...our main labour force here, ...they will use vibratory tools during their work."

Organisational safety culture and personal approach of project leader

This company is part of a group of companies. The group have been involved in behavioural safety programmes for some time and were *"very keen on behavioural safety as an approach generally"*. The project leader has also been *"personally involved in worker engagement, worker participation or behavioural safety programmes"* for a number of years both within this company and with previous companies.

The company were already bringing in change management and behavioural safety programmes prior to the involvement in this project and the project leader considered this work as *"an advantageous add-on"* to what they were already putting in place.

This project was considered to be advantageous to the business on the basis that it would assist them in focusing on individuals working alone at risk and to enable the business to move forward with compliance with the Noise and HAV regulations.

Previous control measures and worker involvement initiatives

The company have previously carried out HAV measurements and toolbox talks on noise and HAV delivered by managers and supervisors. They have good occupational health resources already in place. All new staff were given a pre-employment questionnaire and the jobs were assessed to establish those which were considered high risk and the level of health surveillance needed. In addition all employees are scheduled to have a Occupational Health medical every

five years, with a requirement to complete an annual questionnaire on HAV. The results of the HAV questionnaires are followed up by the occupational health nurse.

There was already a good tool supply and maintenance programme in place with a major tool supplier on the head office site and a rolling three-month programme for PAT testing and maintenance. However, occasionally, there were some problems with this, for example:-

"…should mean that we've got a fleet of well maintained kit…but unfortunately it's not always like that, as operatives work alone, with some of the operatives having their own tools which we don't know about…because they may prefer to use them."

Efforts had been made prior to the worker involvement project to label all the power tools with a maximum length of time that they should be used. The project leader reported some problems with communicating this information to the employees and getting them to understand the need to comply with the maximum use times.

Existing communication systems

In order to give the operatives training or toolbox talks it was necessary to take them away from their usual work in order to bring them together in one place at the same time. About half of the day-to-day communication is done by job instructions sent to a PDA. Other orders are provided on paper via their line supervisor. The Trade Union representatives were able to meet up with the workers during the course of their work and could pass on safety and other information to them. The Trade Union have been very active in discussing and promoting health and safety issues and regularly meet with managers. In the last two years the Health and Safety Director had re-invigorated the safety committee which met regularly.

Concept of worker involvement

For the project leader, in the context of this organisation, the concept of worker involvement meant the involvement of the employees in such tasks as assisting in reviewing their risk assessments, help in the selection of Personal Protective Equipment (PPE) and encouraging employees to give "*…feed back to management about what's working and what's not working well.*" The project leader felt that for worker involvement to be successful every person needed to be involved but he felt that this was not always possible to achieve in every instance (on the basis of geography and high numbers of employees).

3.2.2 Aims and Objectives

This company joined the worker involvement project at the suggestion of their parent company. It was seen as a way of focussing on noise and vibration and driving these issues forward within the company. The aim of the project team for the project was to raise awareness amongst the employees and to develop thorough risk assessments for both noise and vibration.

"*My personal aim would be just to give operatives a greater awareness of the risks from noise and vibration.*"

In the long term it was hoped that the worker involvement project would lead to an improvement in the company safety culture and that the company would be "*…seen by it's employees as a proactive employer with regard to health and safety.*"

3.2.3   Project Progress

The project launch for this company involved having a number of meetings with the Trade Unions, the health and safety steering meeting and meeting operatives and sub-contractors on a one-to-one basis.

The project team involved the project leader, occupational health nurse, a senior manager and trade union safety representatives. These people were invited to be part of the project team as they were the "*logical people to have involved*". The project team met regularly during the project phase. Initially the project team reviewed the HSE material and improved their understanding of HAV risks, with members of the team attending the pilot scheme launch in London.

Achievements and how workers have been involved.

Initially, the safety representatives undertook a worker survey to try to establish the levels of awareness of employees of the risks from noise and HAV. A questionnaire on HAV awareness was carried out on a one-to-one basis with operatives. This survey found that only about 50% of employees felt that they had a good understanding of HAV & Noise risks. They also found that sub-contractors working for the Company were more aware in general, probably as they had been exposed to regular inductions at a variety of construction sites.

Methods of communication tried in setting up and running the project.

The intention was that feedback from project meetings was cascaded down to employees by supervisors and union representatives via the Trade Union monthly meetings. Employees were also encouraged to feedback to the project leader or other health and safety personnel directly by telephone or face-to-face when they were out on site. The information presented at toolbox talks was updated as part of the project to give it more impact.

Barriers to effective communications

The dispersed nature of the workforce makes establishing effective communication and feedback difficult to achieve. It also made it difficult for the project team to publicise their work.

"*...it's not widely known throughout the business that we're doing this programme – that's one of the problems – trying to communicate it wider and get feedback on that.*"

As is normal in this type of project, there was also felt to be some natural suspicion of change by some of the team to the setting up of the worker involvement project, although they were quick to embrace it as soon as they could see the benefits.

"*Suspicion that 'here's another thing that...(company B) is trying to bring in...they're trying to change good things we already do… and ...we don't do it that way'...that kind of thing – it's a suspicion of change.*"

This was additionally overcome by involving the team in two meetings with the HSE's project manager at the head office.

The operation of a bonus scheme and the need to meet public sector targets also causes some concerns to employees and they naturally want to prioritise work over safety briefings.

Project progress

At the first interview the project leader felt that the team had not been able to make much progress because the HSE timescale suggested for the project was too short.

"The main issue is the timescale….HSE said we'll get you involved from last July – well that's the wrong time – it's the holiday period and then trying to get people on board takes another couple of months…it's really a one year programme."

However, progress had been made as the project had been launched, the project team set up and was meeting regularly, the operative survey had been carried out and the results collated.

As part of the project, scientists from the Health and Safety Laboratory (HSL) had been brought in to carry out some real work noise and vibration measurements on site. The taking of these measurements and the results had been videoed by the company for use in future training and awareness material.

"Obviously getting HSL in to help us, get more information together ...to be able to say 'well look, when you're doing this job you'll be exposed to a level...' and then to be able to say at tool box talk '...this is one of our operatives, this is with the HSL and this is what you're exposed to'…very powerful…message."

The company had completed a review of the power tools that the operatives were using during the course of their work. A comprehensive risk assessment for HAV for responsive work was completed as part of this project and, working with the tool hire/maintenance company, a list of best value low vibratory tools was produced.

Project action plan and milestones

The project leader felt that, while he had put together an action plan and milestones for this project, these had not been reviewed or updated in the course of the project as quickly as they should have been. This was due to lack of time caused by a rapidly expanding business, and to the pressure of other health and safety related work commitments which held greater priority.

"We created an action plan…but it was not used as thoroughly as it could have been… ."

HAV and noise were seen as important, though not as important in site visits where safe working conditions could be addressed prior to and during work.

Continuation of project

The involvement of employees in health and safety issues is seen as a priority and changing behaviour through the use of employees is critical to the business. Employee involvement is a process that had been started prior to this project and would be continued, although not necessarily with the focus on noise and vibration.

"We were down the road (towards worker involvement) already and the change management process ...it's a continuous thing anyway."

The company planned to continue developing toolbox talks using the video footage from the HSL on-site measurements. These toolbox talks would be presented to all employees. The project team also planned to extend the worker involvement project to produce risk assessments for noise issues and to roll out some of the documentation created under the worker involvement project to the company's other contracts.

"We won't necessarily pick on worker participation for noise and vibration but we're doing behavioural toolbox talks with employees beginning in November … starting first with training on delivery of toolbox talks for managers."

Obstacles to progress

One of the major difficulties in introducing worker involvement into this company was the problem of communicating with a workforce that mainly worked alone and was dispersed across a wide area. It was difficult to establish effective communication in these circumstances both in cascading information down to the employees and in getting feedback from them.

"We haven't been able to involve everyone…very difficult to do in an organisation with 1200 people, but we did share some information with them and we plan to share more."

Progress was not as fast as the project leader would have liked.

"Everyone is very busy in the business, this is an additional safety initiative…"

The timing of the project was considered to be a major obstacle.

"I think driving it forward…is one of the issues actually. To run a programme like this you need somebody who can spare the time…someone who could really stay focussed and motivated around it."

Lessons learnt

The main lesson that this company has learnt from the project is that significant time is required to set up and drive the process forward and this is time which is often difficult to find with the demands of other areas of the work. If running this project again, the project leader felt that he would try to get a wider cross selection of employees and contractors involved with the Project Team.

3.2.4   HSE role/HSE materials/Mentor role

HSE materials

The project leader felt that while the information HSE provided for this project was good there was too much of it and the useful parts had to be selected.

"Yes…it's good…there's information overload because there's too much. We'll take the bits out that we want…pull it into a format that suits our plans."

The guidance on how to run the project was not used after an initial read through. The HSE website was thought to be a good source of material and other sources of information that were used included the OPERC database and the Speedy tool hire information.

Mentor role

For the project leader of this company, having a mentor for this project was not considered to be an essential factor in setting up and running this project, but was useful in assisting and focussing on completing the work.

What could HSE do differently and/or the same to help these companies.

This project leader saw the next stage for HSE as marketing *"some form of worker participation programme"* although not necessarily focussing on noise and vibration.

"Other topics………such as working at height…………may be far more useful for our industry"

3.2.5 Management of Project

Commitment to the project

The company already had a strong commitment to health and safety and were committed to the project.

The project leader reported some difficulties maintaining his own commitment to the project. This was due to the lack of time he had available to drive the project forward in an organisation that was rapidly expanding.

"…there were some concerns expressed over commitment, but largely these have been around availability of people…it's been impacted massively by...a business expansion situation."

The project team continued to meet throughout the project. The project leader reported that the when the project was discussed with the employees, they viewed it positively and were supportive.

Costs of setting up and running project

There was no specific budget for the worker involvement project for this company but the project leader felt that this was not required as *"we've got everything we need for the programme (control measures) already here."* The cost of running the project was mainly the time involved.

Benefits and disadvantages of the project

One of the unanticipated benefits of running this project was felt to be that the health and safety team were able to develop better and closer working relationships with the Trade Union representatives. In an organisation where one of the main complaints of employees was that they felt isolated, this project gave a focus to engage with the operatives and it was reported that the response had been very positive. The project also helped to focus on noise and HAV and started the process of communicating these issues to the Trade Union representatives and the operatives.

The outcome of this project was the production of a list of low vibration tools for use when purchasing or hiring equipment. The technical report from HSL was another benefit to the company both in updating previous measurement surveys and as a tool to give more impact to toolbox talks.

3.2.6 Measurement of the Success of the Project

The Company may repeat the survey of employees in the future to see if there has been a rise in the percentage who feel they have a good awareness of noise and HAV.

3.3 COMPANY C – FEEDBACK FROM PROJECT MANAGER

3.3.1 Company Background

Situation in the company prior to the worker involvement project

Company C has 250 technicians based at vehicle depots across the country, usually working alone. The company has contracts with transport companies for the maintenance, repair and regroove of tyres and their technicians are based at the vehicle depots. Usually a technician would be the only employee of the company working in a depot and would be working without direct supervision. In this situation the technicians rarely have the opportunity to meet together.

Many of the technicians employed by this company had been tyre fitters for many years and a few have been diagnosed with Hand Arm Vibration Syndrome (HAVS). Occupational health surveillance has been in place for some time. The company contract an occupational health provider to carry out pre-employment occupational health questionnaires and annual HAV questionnaires, and monitor any potential problems arising from these.

Noise/vibration issues identified

The main problem for this company was the HAV exposure from the use of impact wrenches to loosen or tighten wheel nuts. In addition, some technicians were being requested to use angle grinders or battery operated needle scalers. The level of vibration exposure from these types of tools was being investigated by the company.

Organisational safety culture and personal approach of project manager

The industrial sector of the company had previously utilised a worker participation approach to health and safety issues. The project manager came from this background and had, therefore, experienced this way of working and had seen the benefits.

"I'd worked on a number of worker involvement style projects…working in teams, getting people together to discuss, get suggestions, feedback."

The senior manager, who also had a background with the industrial division of the company, also valued the worker involvement approach and wished to *"instil the industrial sector's safety culture in the commercial division."*

Previous control measures and worker involvement initiatives

The company had already taken a significant step towards controlling the HAV exposure prior to starting the worker involvement project. This involved issuing a personal impact wrench, with the associated attachments and filters, to each technician. This was implemented to overcome the problem of technicians having to use the impact wrench supplied by the contract company which might be high vibration and /or poorly maintained.

All technicians were given training in HAV and noise issues during their induction period and were also given an annual HAV refresher session by their line manager.

Existing communication systems
Communicating with technicians working mainly alone and in geographically widespread locations was difficult. A line manager visited each technician every six weeks and would go through a supervision checklist with the technician.

Concept of worker involvement

The project manager had experience of setting up and working with teams on health and safety issues, promoting discussion, feedback and good, participative relationships with the employees. This worker involvement approach had been successful previously in the industrial setting and the wish of the project manager and the senior management was that it should be part of the safety culture of the commercial sector of the company.

3.3.2 Aims and Objectives

The aims of the project for this company were to try to improve the risk assessments for HAV, to raise the technicians' awareness and understanding of HAV issues and to get the technicians involved to improve the likelihood that they would take personal responsibility for their own health and safety and comply with the risk assessments.

"If they own things then they're more likely to abide by things that are written on a risk assessment…."

3.3.3 Project Progress

Achievements and how workers have been involved.

The geographical spread of the workforce meant that it was not possible to implement the worker involvement project across the country so it was decided to concentrate on a region which was relatively easily accessible for the project manager, where a number of vehicle depots were close enough to be visited in one day and where there were known HAV issues. This meant that six technicians were involved in the project. The project team included the project manager, the area manager, local managers for the region and the six technicians at the depots in the region. They were chosen as the logical people to be involved in the project team.

The workers were visited by the project manager to establish a working relationship and to get their feedback. The feedback received was used by the project manager to fine-tune the HAV risk assessments. Many of the actions implemented as a result of feedback involved aspects of health and safety other than noise and HAV. These actions included giving the technicians a greater choice of gloves and safety glasses, investigating reported problems with the tool trigger and with parts of the tool coming loose. The solutions that technicians came up with locally were passed on to other regions.

One technician with advanced HAVS solved the problem of a non-impact, low vibration impact wrench being too slow to be productive. He used the wrench to loosen the nuts but then used an air drill with a socket attached to remove the loosened wheel nuts.

"…and that has come from him – the guy himself has done that so it's great…and we've now got a ready made solution for other issues like that."

Methods of communication tried in setting up and running the project.

The project manager visited each of the six technicians himself and *"…had an informal chat about the worker involvement stuff and got their feedback on a range of issues."* The feedback was then written up by the project manager and used to inform the fine tuning of the risk assessments and had led to some actions being taken.

The project manager asked the line managers of the technicians in the project to change the form of their six weekly supervision visit to be a more two-way process. Rather than going

through the checklist, the line managers were asked to *"...go round with technician and ask questions and ask for feedback and opinions."* The line managers then passed the feedback on to the project manager.

The project manager felt that it was important that the technicians were given feedback on what had happened as a result of any issues or suggestions that they had put forward.

"The important thing with that is that we take it from them and we then pass it over to the other areas and the important thing then is to feed it back what we've done with that information to the person who told us about it in the first place and that's what's really grown it."

Barriers to effective communications

The geographical spread of the technicians and the difficulties in getting them all together at the same time proved to be the greatest barrier to communication.

"*The big problem is that very very rarely do these people see each other because one tyre technician is operating in one town and another in another town and they're literally all over the country"*

Initially, the technicians involved in the project were *"rather suspicious"* of the project manager and were not so open with their feedback. The project manager overcame this by informal talks with each technician.

"...in a population of people you'll always have your cynics and the rest of it, but generally speaking, once you sit down and start to have a conversation with them they do open up and we get some good stuff...they're buying into it to different degrees."

He felt that it took two or three meetings with the technicians for them to get to know him and to open up to him.

Another way that the company tried to overcome the problems of communicating with a geographically spread workforce, was by appointing a communications manager for off-site employees. This communications manager was developing a newsletter for off-site staff within which the project manager would have a column for health and safety issues. Whilst it is acknowledged that this may have happened anyway the project manager felt that *"...the very fact that I've been involved in this (worker involvement project) has expedited it a little."*

In the future it is hoped to be able to communicate with the technicians via email which the project manager felt would be "*a fantastic step forward*".

Project progress

From the first meetings to introduce the project and to get some feedback, an issue about the type of gloves the technicians preferred arose. As a result, the technicians were given a greater choice of glove types.

The HAV risk assessments were re-written incorporating the feedback from the technicians involved in the project. The technicians, together with their line managers, then worked through the risk assessments. The feedback from this exercise highlighted some problems with the wording of the risk assessments.

"*The way we explain something...we just changed some of the wording to make it a bit more understandable.*"

Project action plan and milestones

The project manager set up a gannt plan with key milestones. Generally the milestones were achieved "*pretty much within two to three weeks*" of the plan.

Continuation of project

This company planned to rollout the worker involvement project to all the other regions shortly.

"*I'm talking to the national manager now in terms of rolling out some of the things that we've come up with nationally …but driven by the area service managers… and what the feedback is from the workers, from the guys at the coal face can then be shared at regional meetings and ultimately at UK meetings to pass on to other areas.*"

Obstacles to progress

In the first three or four months of the project, the project manager found setting up and running the worker involvement project to be particularly challenging because of the geographical spread of the technicians.

"*If I'd known what the project was going to entail I probably wouldn't have taken it on. It's very challenging to do worker involvement with workers who are spread across the country and where they don't come together….*"

However, by the final interview, the project manager felt much more positive about the project and believed his perseverance with it had paid off.

The main obstacle to progress was felt to be the time required to implement the project where the workforce were not on one site and where the project manager was very short of time because of his existing workload.

Lessons learnt

The project manager felt that, should he run the project again, he would have liked to get the regional managers together and try to get technicians released on set days. He felt that this could be possible with early planning and neighbouring regions offering cover.

3.3.4   HSE role/HSE materials/Mentor role

HSE materials

The project manager felt that the HSE materials supplied for the worker involvement project were good. He used the HAV leaflets and the information from the HSE website. The information was issued to the technicians on their initial training course. The materials used by this company were a combination of HSE material applicable to the organisation and the project manager's own information.

Mentor role

The project manager felt that he could have set up and run the project without reference to the HSE worker involvement materials and without a mentor although he felt that it was "*…nice to have somebody who you can bounce off and to put a fresh perspective on things.*"

What could HSE do differently and/or the same to help

The project manager felt that the only possible area of omission for the worker involvement project materials supplied by HSE was some guidance on tools to run a project. Information on project management or an HSE workshop on running projects such as this was thought to be potentially useful.

3.3.5 Management of Project

Commitment to the project

The senior managers were *"very supportive and committed"* to the project but concern was expressed that involvement in the project would take up too much of the project managers time. To try to avoid the time commitment of the project being too onerous for the project manager, the senior management agreed to employ an assistant to take over some of the routine, non-worker involvement tasks and release more time for the project manager to give to the worker involvement project.

The technicians were a little suspicious at first of the worker involvement project but in time, when the project manager had spent time talking with them and had developed a good working relationship with them, then their level of commitment to the project grew.

Costs of setting up and running project

The project was not costed and there was no specific budget. The project manager did not feel that this was a costly exercise and that the main cost for the company was the project manager's time.

"They've been a few bits and bobs like I've had to trial different gloves, buy different connectors, a few pots of locktite….I would guess that we haven't spent anything more than probably about £1500-2000 maximum other than my time and travelling."

Benefits and disadvantages of the project

The project manager reported that he now receives more feedback from the technicians and that they seem more aware of HAV issues and more engaged and involved in pointing out issues, problems and in suggesting solutions.

"I think the other benefit is that we have got a much more positive and interested set of guys."

"I'm really pleased that generally they do understand the HAV issues."

The HAV risk assessments had been amended incorporating the feedback from the technicians involved in the project. The project manager saw this as one of the major benefits of the project.

"For me the results were that I now have got a much better, closer working relationship with the guys…if they have an issue they can come to me. The other big result that is measurable is that we now have updated the master risk assessment reflecting everything that has been fed back and the risk assessments are a lot more meaningful to the guys on the shop floor."

There was felt to be an improvement in the level of communication between the supervisors.

"The supervisors now communicate with each other more frequently on these kinds of issues and sharing experience and good practices/bad practices and lets not solve the same problem several times in different locations."

The major disadvantages for this company in running the worker involvement project concerned the project manager's time and the distance he had to travel to meet with the technicians involved in the project.

"The only things that have been problematic have been the frequency of being able to get out to visit the technicians... and in getting them together."

Another disadvantage has been the conflicting priorities in running this project and sorting out equally important issues in other regions.

"The disadvantage for me is that I am a one man band and there have been times where I have had to abandon this (project) for a short period of time to deal with...other issues and there have been other issues which I haven't been able to deal with when I've been working on this."

3.3.6 Measurement of the Success of the Project

The project manager felt that the difficulty in measuring the results of the project was an issue. However, he did state that the number of hazards reported had increased and the number of accidents has decreased. He believed that this reduction in accident rates was partly due to the worker involvement project.

"I think it's partly this (project)...obviously it's not just that region...but the reduction in accidents is nationwide and it is as a consequence of all sorts of things we have been doing not just this one but this has contributed to it."

3.4 COMPANY C – FEEDBACK FROM WORKERS

Background

Five workers who participated in the worker involvement pilot project within this company were sent questionnaires to complete. Three responses were received. All three of the workers who responded reported that they were fully aware and directly involved in the project and were members of the project team.

Situation prior to the project

All the workers who responded to the questionnaire, described themselves as quite well informed about health and safety issues in general and two felt they were similarly well informed about HAV risks. One respondent felt that he was not well informed with regard to HAV risks.

Involvement in project

All the workers who responded felt that they had been given the opportunity to make suggestions on how to reduce noise/HAV risks and other health and safety or work issues, and to contribute to writing noise/HAV risk assessments. Similarly, two respondents reported being given the opportunity to contribute to the decision on which suggestions to take forward. The response was mixed for the question on whether they had received feedback on suggestions

made. Of the two workers who reported making suggestions, one felt feedback had been received and the other reported not knowing what was happening with the suggestions made.

Project outcome

The three respondents rated the company as very good or good at managing health and safety matters following the worker involvement project. This included keeping everyone up to date with changes (2 very good, 1 good), providing opportunities to comment on proposed changes (2 very good, 1 good), responding to suggestions from workers (1 very good, 1 good, 1 satisfactory), dealing with problems (1 very good, 2 good) and producing useful risk assessments (2 very good, 1 good).

All three respondents rated the worker involvement project as satisfactory or better at improving understanding of noise/HAV risks (1 very effective, 1 reasonably effective, 1 satisfactory) and as very (2) or reasonably effective (1) in introducing methods to reducing noise/HAV exposure. All the respondents reported that involving workers in health and safety issues was a good idea (2 strongly agree, 1 agree).

The technicians reported increased knowledge on HAV following the project. One comment was: *" I know a lot more"*.

Another beneficial outcome of the project reported was that it had improved communications by increasing the network of contacts for technicians to discuss issues. Comments included:

"I know more people I can talk to."

"It was good to be able to talk a lot about these things. I found out a lot of things."

The respondents highlighted positive outcomes from the worker involvement project in aspects of their work other than noise/HAV. These included improvements in the range of Personal Protective Equipment (PPE) (gloves) and improvements in safe working areas.

Continuation of project

Two of the three respondents reported that they would like to see the worker involvement project continued within the company (the third respondent did not feel the question was applicable). All three respondents felt that the involvement process was not solely confined to noise/HAV issues and reported that their managers consulted them on other aspects of their work.

3.5   COMPANY D – FEEDBACK FROM PROJECT MANAGER

3.5.1   Company Background

Situation in the company prior to the worker involvement project

Company D are a maintenance facility and part of a global organisation. Prior to the start of the worker involvement project, the employees were already working in teams and the organisation actively promoted a team concept and the involvement of workers in many aspects of the business. The company had recently successfully completed a global company audit as part of which they had to show that more than 40% of the workforce were involved in health and safety. As part of working towards the global company audit, gate safety teams were launched to involve the employees in looking at a variety of issues including PPE, chemical control, employer involvement, ergonomics and first aid. A tool champion team was set up as part of this process to involve the employees in organising for the tools to be returned for regular maintenance.   The role of this tool champion team was extended to form the worker involvement project team and to be part of a gate safety team.

Noise/vibration issues identified

This company felt that they had tackled the control of noise previously and continued to reassess this. The area where they felt more could be achieved was with the control of exposure to HAV from the numerous power tools and processes carried out.

Organisational safety culture and personal approach of project manager

This company had a participative approach to management and a well-established principle of team working.

"We are a team oriented company. The guys on the shop floor they work as a team. They manage their own leave, they manage their own workload...one will look after tooling, one quality, one health and safety for the teams. They go to weekly meetings, they report back as a team."

This team concept was promoted and maintained by a member of the Human Resources department. *"So we have got somebody who works in the HR department who concentrates on teams, training, setting up teams and so on."*

The rigorous internal health and safety audit that the company had gone through in the past two years was felt to have further strengthened the existing culture of team working and worker involvement. *"It (the company's safety culture) has never been as strong as it is today and it's all because of the ...audit."*

Previous control measures and worker involvement initiatives

Two years ago the company set up a tool maintenance programme which involved the participation of the workers. To achieve this, they set up "HAVS Tool Champions" who acted as the communications link between the workers and the tool maintenance company. This team of tool champions were the logical people to form the project team for the worker involvement project and so provided an already established team.

The tool maintenance system introduced prior to the start of the worker involvement project was considered to have had a significant impact on reducing the vibration exposure.

"...we employ a consultant who undertakes the vibration monitoring for us and he has seen a vast reduction in the vibration ...he seems to think that this is down to the maintenance."

Health surveillance for HAVS had been introduced some time prior to the start of this project. The company carried out health questionnaires and annual surveys.

Existing communication systems

As previously stated, this company had a long established culture of team working and the communication links were already established for these teams, including the HAV tool champion team. The workers were used to the concept of taking on a role within a team, attending meetings associated with that role and reporting back on a weekly basis to the rest of the team or their colleagues.

Concept of worker involvement

The project manager felt that, for him, worker involvement was about building up relationships, encouraging the workers to come up with the solutions and implement them with minimal input from the management.

"I think it's all about building up a partnership and just letting them... not be afraid to come up any ideas they have, how they would like to see the team progress and let them...sort of lead it and with us just guiding it a little."

In joining the worker involvement project the project manager succeeded in building on the established team approach and extending and formalising the role of the existing HAV tool champion team.

"Now it's a bit more proactive, where they actually took matters into their own hands and actually fixed HAV issues as well."

3.5.2   Aims and Objectives

Involvement in this project was seen as an opportunity to focus on vibration issues and risk assessments. The project *"...gives us a little bit more focus and also some background knowledge and support."*

"We had a team in place to look at tool maintenance – we wanted to give them some more targets...formalise them as a team as well and actually get them more involved."

The project manager also wanted to use the worker involvement project to increase the awareness of the employees of the importance of tool maintenance and of following the risk assessments.

"...also to get over to the guys on the shop floor how important it is ...to actually get the tools in on time from a maintenance point of view... how important it is for the rules we set by the risk assessments as well. That was our main objective."

3.5.3   Project Progress

Achievements and how workers have been involved

Measurements of the vibration emission levels of all the processes and tools were carried out as the first stage of the worker involvement project. These assessments were carried out by a

consultant. Until these had been completed, the project manager felt that there was little that the project team could do so the time was used to raise awareness of HAV issues.

By the end of January, 31 vibration assessments of processes had been undertaken. These assessments formed the basis of the risk assessment and the identification of solutions to reduce exposure. In addition, this information, together with the photographs taken of each process, were to be made into posters giving the workers information on the *"tool, consumable, the vibration level measured and the safe operating time and any controls around that"*.

Once the vibration measurements had been received from the consultant, the project team tackled the processes that were identified as being higher risk. The team observed the processes and then discussed possible solutions.

"...we took the team down and we looked at some solutions and one of the members suggested that they had a tool which they could use...to try out...which could make it easier for them."

The alternative tool suggested was tried, vibration measurements taken and it was found to be a suitable low vibration tool for the process.

The project manager felt he had received good feedback and suggestions from the project team. "*The team have been great. They're coming up with ideas and they're engaged every week because they send the tools back for maintenance."*

Methods of communication tried in setting up and running the project.

The plan was for the project team to meet initially fortnightly with the project manager. The minutes of the meetings were taken by the project manager and distributed to the team members who then cascaded the information down to their colleagues.

The project team members sat on the existing health and safety teams (gate safety teams) and met with the gate safety team facilitator once a fortnight.

Barriers to effective communications

It had been recognised from previous campaigns that information in a report format was not easily communicated to the workers. The team suggested producing posters of the salient points and putting the posters up in areas were they where visible to the workers.

"So during the launch of the team we knock some ideas about with them, we said the report will come out in this format...and they said 'well can't you do posters like you did previously?'

Because of the additional call on their time to carry out the tasks associated with the worker involvement project, the team members were given four hours a week to allocate to this. This was a formal agreement that was agreed with the Managing Director and the production managers, to release the team members for this length of time. This overcame the pressure of conflicting priorities between their work and the time needed for the project.

"*They know they don't have to ask their manager for four hours off, it has already been approved. Nobody is putting pressure on them and saying 'why are you doing that?'"*

Project progress

Since the worker involvement project was launched in the company, the focus was on carrying out the vibration emission measurements and producing the risk assessments for all the tools

and processes used in the work. Once the assessments were complete, the project team met to identify the high-risk areas and to come up with ideas and solutions.

Two processes were identified from the assessments that were considered to have a higher HAV exposure risk. The project team came up with a solution to one of these and the second one is still being investigated and lower vibration tools sourced.

The project manager felt that progress slowed again towards the end of the worker involvement project. This was because of his workload as he was undertaking "...*dual roles and had to prioritise things...*". He was not able to dedicate the time he felt was necessary to drive the project forward and the fortnightly project meetings had slipped to meeting once a month. The project manager hoped that employing a new member of staff to take responsibility for running the project would increase the pace of progress.

Project action plan and milestones

Initially progress was felt to be slower than was hoped.

"*We did have a plan to complete all the assessments by the end of January but ... it hasn't been as quick as we would have liked.*"

Problems running the noise and HAV worker involvement project in an organisation where processes were not in operation regularly or routinely were felt to have delayed the completion of some stages of the project.

Continuation of project

The project manager believed that the project is one that would continue.

"*It won't end for us because you are constantly maintaining the tools. The guys still need to be part of the team.*"

Other aspect of health and safety were already dealt with using a "team concept" to engage workers so there was felt to be no need to roll the worker involvement project out to address other issues.

Obstacles to progress

The project manager had some difficulties in completing risk assessments and getting measurements of the vibration levels on the processes involved because some processes and tools were not used regularly.

" ... *we don't mass produce things, so ...production is quite sporadic. It's not every day this person uses this tool, different repairs to ...parts are only called to be undertaken once every month, three months.*"

The timescale for taking these measurements had to be extended.

The slow progress in getting the assessments completed initially caused some difficulties in keeping the project team motivated whilst waiting for the assessment results. "*...frustrations, maybe, of not being able to undertake the risk assessments and trying to keep the guys energised during the period... .*" To get over this, the project manager utilised HSE material to increase knowledge and awareness of HAV issues in the period before the vibration assessments were completed.

Lessons learnt

The project manager felt that he would have liked the opportunity to take more of the project team members to the HSE workshop event as he found this useful.

3.5.4 HSE role/HSE materials/Mentor role

HSE material

The HSE website material was thought to be "…*very useful…all the information we have had so far is good because it's clear and it's not too detailed, it's only 10-15 pages long which is good.*"

The guidance on the worker involvement project was seen as being "*useful at the beginning*" but mostly not relevant as the company had already established teams and effective communication systems.

Mentor role

The project manager described having an HSE mentor as "*quite good*" but had not had cause to call on the mentor for advice. He believed that he might have needed more advice and support from a mentor if the organisation had not already had well-established teams and a worker involvement approach.

It was felt that a positive aspect of having a mentor or contact was to enable a swift response to queries, especially on the interpretation of the regulations. However, the project manager reported that he could have run the worker involvement project without a mentor.

3.5.5 Management of Project

Commitment to the Project

The project manager met with the Managing Director of the company to gain his support for the project. Senior management were also involved in launching the project to the workforce.

"…*we met with the MD on 15th November to get his support and buy in and from there, after we knew we had his support we launched it to the existing team.*"

The commitment from the managing director to the project was clearly demonstrated by his agreement to give team members four hours a week away from their production tasks to dedicate to project tasks.

The project was introduced to the existing team as an extension of what they were already doing and the team were happy to give their commitment.

"…*we launched it to the existing team and we said 'look at the moment you… spend a small amount of time doing this…we want to enhance you all and we want you to lead it…and come up with as many ideas as you can and to really establish the team'…everyone stood up for it – and there was a union rep as well.*"

Commitment to the project was not difficult for this company to maintain. The project manager felt that this might have been because the internal audit process that they went through two years ago had fostered a positive atmosphere to new initiatives.

Costs of setting up and running project

No specific budget was allocated to the worker involvement project within this company.

"... we have a budget set up every year for health and safety – and it ranges right across… ergonomics, industrial hygiene, engineering controls…we allocate the money to the higher risk tasks and prioritise on risk."

Whilst the company had not had the cost of setting up teams and the worker involvement project from scratch, there was an additional, formalised cost to the organisation in allowing the project team members four hours a week to dedicate to project tasks.

Benefits and disadvantages of the project

The project manager believed that this project produced benefits in encouraging team engagement and in the team members raising their colleague's awareness of HAV issues.

"They have raised quite a few people's awareness…their colleagues on the shop floor…they take things from the meetings and say 'well, do you realised you could get this from health and safety…have you been for the training?' or 'don't forget to send your tool in for maintenance'."

One unexpected benefit of the worker involvement programme for this company was a cost saving in the consumables.

"…we used to use x amount of burrs but now we've got a correct rated gun and the correct rating burr we have saved x amount of money on the consumables."

Keeping the momentum going with the project team while waiting for results or the next actions had been difficult for the project manager.

"Disadvantage of this project is that we haven't got a stable production…they only do the job now and then…sometimes they forget to call you…and before you know it another month has gone before the next job comes."

3.5.6 Measurement of the Success of the Project

The project manager felt that the project had been successful although he did not feel that the objectives had been fully met as yet.

3.6 COMPANY D – FEEDBACK FROM WORKERS

Background

Ten workers who were involved in the project team for the worker involvement project within the company were sent questionnaires. Seven replies were received. All seven respondents reported that they were aware of the project and six felt they were fully involved . Five of those respondents described themselves as members of the project team, one was aware of the project but did not receive information and another was involved only in the vibration measurement of the tools in use.

Situation prior to the project

The majority (6) of the seven workers responding to the questionnaire described themselves either as very well (3) or well informed (3) about general health and safety issues prior to the start of the project with just one respondent reporting being not well informed. Whilst the same number of respondents reported being very well informed about noise and HAV risks (3), a greater number (3) felt they were not well informed. One reported being quite well informed.

Involvement in project

All of the respondents felt that they had been given the opportunity to make suggestions about reducing noise/HAV risks, about other health and safety or work issues and to contribute to decisions on which suggestions to implement. Only four of the respondents felt that they had been given the opportunity to contribute to the writing of risk assessments for noise/HAV. Of the three respondents who reported making suggestions as part of the project, all three also reported that they had received feedback on these. The other four respondents had not made suggestions or contributions.

Project outcome

The majority of the respondents rated the company as either very good or good at managing health and safety matters following the worker involvement project. Six respondents felt the company was very good (3) or good (3) at keeping everyone informed of changes and one respondent rated this as satisfactory. Similarly the majority (6) of the respondents rated the company as very good (4) or good (2) at both providing the chance to comment on proposed changes and responding to suggestions. Five respondents rated the company as either very good (4) or good (1) at dealing with health and safety problems with the remaining two respondents rating this as satisfactory. All seven respondents reported that the company was very good (4) or good (3) at producing useful risk assessments in noise/HAV.

All of the respondents felt that the project was very effective or reasonably effective in improving the understanding of noise/HAV risks (very effective 4, reasonably effective 3) and in introducing methods to reduce noise/HAV exposure (very effective 3, reasonably effective 4). Comments included:

"Greatly improved awareness of HAVS…allowed workers from all areas to understand the individual issues and associate with them."

"Involvement helped me to understand levels of exposure."

All of the respondents felt that involving workers in health and safety issues was a good idea with six strongly agreeing with this statement and one agreeing. One respondent commented:

"I think that being involved in the project as someone working on the shop floor is very good."

Continuation of project

The continuation of the worker involvement project on noise/HAV was seen as something that all of the respondents would like to see continued within the company. Four of the seven respondents felt that they and their colleagues were already consulted by the managers on other aspects of their work whilst two felt they were not consulted and one felt this was not applicable. One comment on the existing consultation with workers was:

"Always looking at possible EHS issues within our workplace."

4   DISCUSSION

Background and safety culture

The project managers of all four of the companies studied reported that their company already possessed a strong safety culture and an existing commitment to involving the workforce in health and safety decisions. The project managers also had previous experience of behavioural safety projects, worker participation or team working. One of the recommendations of Shearn is that for worker involvement projects to be effective, there should be a "positive management culture of commitment to health and safety" (Shearn, 2004, p27) and this appeared to be the case for these companies. It may be that organisations without this commitment would not consider embarking on this type of approach and it is unlikely that project managers would take on the role of setting up and implementing something that did not fit with their or their organisation's approach.

The companies all had some knowledge and experience of the risks associated with noise and HAV, and had implemented worker involvement style initiatives previously. Prior to the project all four companies had put in place some form of training and controls for noise and HAV and had safety committees or safety representatives in place. One of the companies was well advanced in worker participation, already involving more than 40% of their workforce in health and safety issues. This prior knowledge and experience is likely to have a bearing on the set up and running of the project.   The worker involvement project was considered to be an "add-on" to existing projects or ways of working rather than a new project by three of the project managers.

The companies were selected to cover different industries from the manufacturing and construction sectors and all had different ways of working. However, the four companies selected had in common their size as all were relatively large companies. The size of the companies may have been an advantage in that they had the resources to be able to tackle a project of this nature and they employed experienced health and safety managers.

The two companies who appeared to have the most difficulties to contend with in setting up and running this project both had a workforce who largely worked alone, were geographically spread and who could rarely be brought together to meet in one place. In these circumstances communicating with the workforce was more difficult than for single site operations.

Aims and objectives of worker involvement

Shearn (2004) categorises the justification for a worker involvement approach to occupational health and safety as psycho-social and organisational development, potential productivity and efficiency gains, and the fulfilment of ethical and legal imperatives. The aims for this project for the four companies evaluated were concerned with psycho-social and organisational development. The stated aims focussed on increasing noise and HAV knowledge throughout the company, raising awareness of risks, improving the company safety culture and encouraging workers to take personal responsibility for their own health and safety. Productivity or efficiency gains were not mentioned, nor was compliance with the legal obligations to consult workers.

It was hoped that a two-way exchange of knowledge between the management and the workforce could be established which would add to the development of the organisation. The aim was for knowledge of noise and HAV risks to be disseminated down to the workers through, for example, training and toolbox talks leading to the raising of awareness of noise and HAV risks. On the other hand, it was hoped that the project would enable knowledge of the

issues and possible solutions to be passed on from workers to management. Three of the project managers mentioned the importance of the worker involvement project in encouraging workers to use and share their first hand knowledge and experience of carrying out the tasks in identifying issues, suggesting controls and improving the risk assessments.

Commitment

Commitment of both management and workers to any worker involvement approach (or any other organisational initiative) has been identified in the research as a key requirement for the success of worker involvement initiatives (Shearn, 2004). The four companies achieved initial and continued commitment from the senior management. It was felt to be important that this management commitment was clearly visible to the workers. For example, the commitment of the senior management to the project was clear to the workers in company D where the managing director sanctioned the project team members to have four hours a week to dedicate to project tasks and where he played a major part in the launch of the project to the workforce.

Similarly, commitment from the workers played a critical part in the ease with which the worker involvement project was implemented within the four companies studied. In company D, where an established team concept had been in place for a number of years and the project team utilised an already existing team, the implementation of the project appeared to be relatively smooth and obstacle free, and the commitment of the workers was readily gained. In contrast, the project manager of company C described the implementation of the project as "tough going" until he had overcome the initial suspicion of the technicians and had established a good relationship of trust with them.

Worker involvement approaches

The companies utilised a mixture of formal and informal methods, tailored to meet the needs of their company. The construction company used more informal approaches as they were dealing with a large number of sub-contracted staff who might only be on site for a few days at a time. These approaches included initial health and safety inductions to individuals or small groups, informal conversations during walks round the site or at lunch breaks. Formal safety meetings were also conducted regularly. Previous research into worker engagement approaches within the construction industry also found that informal systems worked well (Cameron et al, 2006). In contrast, the engine maintenance company, who had a more permanent workforce employed mainly on one site, utilised more formal worker involvement methods including regular project team meetings to look at issues. There appears to be no one method of implementing worker involvement that is appropriate for all companies and perhaps one of the keys to success is the importance of tailoring the approach or mix of methods to fit the organisation.

Progress

Three of the four companies felt that the nine month timetable suggested by the HSE project team to set up, run and review results for the worker involvement project was not achievable as progress was slower than expected. Progress was slow even in company D where the team and communication links where already partly established prior to the start of the worker involvement project. It may be worth noting that two of the four companies felt that a worker involvement project would take two or three years to set up and fully establish. This was supported by the project manager of company D who reported that it had taken two years of working towards a quality audit to achieve involvement of 40% of the workforce on health and safety issues. Not only was progress slower than expected, it was also described as "tough going" at times by the project managers. Difficult points included building working relationships, especially where the workforce were geographically dispersed, and finding ways to keep the project team motivated whilst waiting for actions to be completed.

One of the first steps following the set up of the project team for two of the companies was to provide additional noise and HAV training. For the other companies, increasing workers' awareness of noise and HAV risks through induction training and toolbox talks was an early step. This reflects the conclusions of previous studies that training is a necessary pre-requisite for effective worker involvement as without sufficient knowledge about the risks involved workers cannot be expected to identify hazards and suggest solutions (Abdelhamid & Everett, 2000).

Two of the companies had already implemented major controls for HAV prior to starting the worker involvement project and therefore there were limited issues outstanding to address as part of this project. The controls already implemented involved tool selection and tool maintenance. The actions taken during the worker involvement project included improving the risk assessments for noise and HAV, carrying out training to increase awareness of noise and HAV, and reducing exposure by selection of alternative tools. Two of the companies reported that the worker involvement project produced feedback on issues other than noise and HAV that were then addressed.

All four companies felt strongly that the worker involvement project was a continuous approach rather than a project that had a natural end. It was being rolled out to other sites or regions in three of the four companies, although not necessarily with a focus on noise and HAV. In the fourth company a worker involvement approach had previously been introduced for most other health and safety issues so opportunities to roll out the project further were limited.

Barriers and obstacles

Some of the difficulties that the companies experienced when setting up and running the worker involvement projects were related to their organisation or industry. These included a changing and transient sub-contracted workforce, and geographically dispersed workers. However, a common difficulty of all four project managers was the time commitment required for the project. It took more time than anticipated to set up and drive the project forward and this was time that the project managers struggled to find on top of their existing heavy work demands.

Project team workers could face similar pressures and conflicting priorities. The conflict of responsibilities between project tasks and production deadlines could be an obstacle to introducing worker involvement. When setting up the project, the management of company D recognised production pressures as an area of potential difficulty and overcame this by securing director level agreement to give the members of the project team four hours a week to dedicate to project tasks. A study of a worker involvement programme for the HSE Backs campaign, also identified that pressure of the safety representatives' full time work was an obstacle to promoting safety in the workplace (Hillier, 2007).

Costs

None of the companies involved in this study has set aside a specific budget for the worker involvement project, nor did they feel that this was necessary. The costs involved were not considered to be great and were usually funded out of the existing health and safety budget. The majority of the cost involved in setting up and running the project was the project manager's time and the cost of taking the workers away from production tasks.

Benefits and disadvantages

The four companies were generally positive about the worker involvement project and the benefits that it had already produced in a short space of time. Three of the four project managers felt that their workers' knowledge and awareness of noise and HAV had increased as

a result of the worker involvement project. Similarly three of the four commented on improved working relationships and communications between workers and managers.

The major disadvantage reported by the project managers of all four projects was the time commitment required to run the project in terms of the project manager's time and work load.

HSE materials

The materials supplied to the companies by HSE for the noise and HAV worker involvement project were generally felt to be useful. The HSE website was praised for the comprehensive technical information on noise and vibration. The pocket cards were also felt to be particularly useful to give to workers. The project managers reported taking the sections of the HSE materials that they felt were useful for their purposes and incorporating these with their own materials to produce project team training information or toolbox talks for the general workforce. The guidance pack on running a worker involvement project was generally not referred to as it was felt to be too generic to be useful to the experienced project managers in the four companies evaluated. However, less experienced managers may find this level of information more useful.

None of the four project managers felt that it was necessary to have a mentor to set up and run the worker involvement project, perhaps, once again, because of their level of experience. However, three of the project managers felt that it was useful to have someone to bounce ideas off and that support, advice and learning from the experiences of others was useful and could be accomplished by arranging more networking opportunities with other companies involved in similar worker involvement projects.

When rolling out this project to other companies in other industry sectors, the project managers in this study felt that HSE should focus on encouraging companies to adopt a worker involvement approach to all health and safety issues rather than roll out worker involvement specifically to address noise and HAV issues.

Worker feedback

Feedback was received from workers from two of the companies involved in the pilot projects. For the technicians involved in the project in Company C the concept of worker involvement was not well established whereas the workers in Company D were used to team working and worker participation. The other significant difference between the workers in the two companies was that the Company C's workers worked mainly alone and were geographically dispersed from both the company management and other company technicians whereas Company D operated on a team basis on a single site. It appears from the questionnaire responses that the level of general health and safety awareness and specific noise/HAV awareness prior to the project was similar in both companies with greater awareness at the general level than of specific noise/HAV risks.

Three of the project managers mentioned the importance of the worker involvement project in encouraging workers to identify issues, suggest controls and contribute to risk assessments. This aim seemed to be achieved as the majority of the workers responding to the questionnaire felt they had been given these opportunities during the project and half of them had made suggestions.

Both sets of workers responding rated their company highly in aspects of health and safety following the project, such as informing them of changes, providing opportunities to comment on proposed changes, responding to suggestions and producing useful risk assessments. The project managers felt that one outcome of the project was that knowledge and awareness of

noise/HAV risks had increased. This was supported by the feedback from both sets of workers where nine out of ten workers responding rated the project as effective in improving their understanding of noise/HAV risks. Similarly, the improvement in communications, reported by the project managers, was also identified by the workers. This was particularly clear for the Company C workers where the project appears to have overcome some of the not insignificant difficulties of communicating with a geographically dispersed and isolated workforce. The technicians in Company C identified the network of contacts and the opportunity to discuss issues with others as an important outcome of this worker involvement project.

Worker involvement appears to be an approach to health and safety that is welcomed by employees. The feedback from the workers participating in this project was they all agreed that involving workers was a good idea and the majority wanted to see the project continue. In Company C, where the worker involvement concept was relatively new to the workers, the feedback indicated that the project was felt to have delivered important benefits outside of noise/HAV issues. These benefits included improvements to safe working areas and personal protective equipment (PPE).

Whilst it is acknowledged that feedback was received from only a small number of workers who participated in the worker involvement project, the feedback that was received was generally positive and supports the feedback from the project managers.

5   CONCLUSIONS

5.1   LIMITATIONS

A small number of companies were involved in this study as the aim was to gain a more detailed understanding of the perceptions and views of those taking part in a noise and HAV control worker involvement project. As it did not prove feasible to interview workers or other members of the project team at the time of the site visits, feedback from workers could only be achieved by means of postal questionnaire at two of the four companies. The use of a postal questionnaire limited the opportunities to explore workers' views of the involvement project in as much depth as that of the project managers. The numbers of workers who were asked to complete questionnaires was also small (fifteen with ten responses). However, this represented the majority of the members of the project team within one company and five of the six workers involved in the second company. As the feedback in this study is gathered from a small number of project managers and workers some caution is needed in interpreting the results.

Another limitation of this type of study is that organisations that are willing to take part in the study and to be involved in the pilots for the worker involvement project are likely to have an existing strong focus and commitment to health and safety, and to already perform well in this area. Poor performing companies with weaknesses in the area of health and safety may be unlikely to risk exposing these weaknesses by taking part in the worker involvement pilot project. Similarly, a project concentrating on involving the workforce in health and safety decisions may only attract companies who already believe in the benefits of this approach.

5.2   SUMMARY

Views of worker involvement approach

The project managers from the four companies providing feedback, generally felt that the worker involvement projects were effective. They felt that involving workers in identifying noise and HAV issues and in encouraging them to come up with possible solutions to these issues was beneficial in increasing both management and workers awareness of risks from exposure to noise and HAV, improving risk assessments and in establishing better working relationships between workers and managers.

The feedback from workers was also positive in that they felt the worker involvement project had given them opportunities to contribute to the noise/HAV risk reduction process, was effective in improving their awareness of noise/HAV risks, was effective in introducing methods to reduce these risks and had improved communications. Involving workers in health and safety issues was felt to be a good idea and one that they wished to see continued in their company.

Outcomes

In three of the companies the major actions to control exposure to HAV had been implemented prior to the start of the worker involvement project. Their aims for the project were more concerned with increasing knowledge and awareness of noise and HAV and encouraging workers to take more personal responsibility for their own health and safety.

Worker involvement project support materials

The project managers found the material provided by HSE for the worker involvement project useful and informative. The guidance on the worker involvement project was not considered to

be as useful probably because the managers were already experienced in involving workers in health and safety issues. Opportunities to network with other companies were thought to be valuable for advice, support and knowledge sharing.

Processes, difficulties and obstacles

A variety of both formal and informal methods of involving workers were utilised by the companies in this study. The companies found that setting up and running the worker involvement project took longer than was anticipated and the project managers saw the project as continuous, possibly taking two or three years to establish fully.

The main areas of difficulty the project managers experienced in running the worker involvement projects concerned establishing effective two-way communications with the workforce. The major disadvantage of this project was considered to be the amount of time that the managers had to commit to continually driving the project forward, on top of their existing full workload.

5.3   GOOD PRACTICE AND LESSONS LEARNT

The feedback from the project managers and the workers on their experience and views of setting up and running a worker involvement project supports the findings of the literature on what is considered to be the key points for successful worker involvement:

- **Methods of involving workers**

    The companies evaluated here utilised a mixture of formal and informal methods of involving workers that were appropriate and suitable for their organisation. Informal, one-to-one communications were felt to be particularly effective.

- **Importance of training**

    At an early stage in the project, the companies provided the workers involved in the project with noise and/or HAV training. Training the workers helps them to understand the issues and need for controls and to raise their awareness of hazards.

- **Importance of commitment**

    The project managers in this study all had full support and commitment from their senior managers for this project, they themselves were positive about the potential benefits of the project, and they were prepared to put time and effort into gaining and maintaining the commitment from the workers to the project.

- **Time resources required**

    Setting up and running a worker involvement project requires a significant time commitment for the project manager. The time required, both from the project manager and the time away from production for the workers involved, was considered to be the major disadvantage and cost involved in the project.

- **Long term project**

    Establishing effective worker involvement in occupational health and safety issues such as noise and HAV was felt to be a long term project that was likely to take two to three years of continual effort to achieve.

6   APPENDICES

HSE worker involvement -Topic Guide – Initial Interview

Aims/Objectives
Why did you decide to join the worker involvement project?
What are you company's aims and objectives for this project? What do you want to achieve – in the short term and in the longer term?
What is your understanding of good worker involvement?

Situation prior to the worker involvement project
Do you have noise and/or HAV issues within the company?
      What areas? What levels/exposures? How identified?
What actions have you previously implemented to raise awareness of the issues or to control exposure?
      How have these been decided on?
      How have these been communicated to workers?
      How successful have they been?
Did you have Occupational Health surveillance prior to worker involvement project?
      What level? Provider?
Have you introduced any worker involvement schemes previously?
      If so, in what areas?
      Were they successful?
How would you describe the safety culture of the company prior to the worker involvement project?
Does the idea of involving workers in this way fit well into the way your company works?

Commitment to the project
How difficult was it to get commitment from directors and senior management for the worker involvement project?
Do you have a budget for this project?
    How much for? Including control measures?
How did you present/communicate the project to achieve this?
Were there any obstacles to getting the directors/managers on board?
How did you go about presenting the project to the unions and workforce?
      Did this approach work?
      Were there difficulties getting people on board?

Project Launch
Have you had a launch for the project?
      What did you do?
      Was it successful? Useful? Essential?
Did you launch the project in different ways for different groups of people?
      If so, why? What different approaches did you take?

Project team
How have you decided on the make up of the worker involvement project team?
How have team members become involved?
      Invited? Volunteered?
      Did you have difficulties persuading people to join the project team?
      If so, how have you overcome?

How often has the team met?

    Are there difficulties arranging meetings?

    Problems with time away from production?

    How are problems being overcome?

How well do you think the project team is working together?

    Who facilitates the meetings? Is it difficult?

    Do you get lots of opinions and ideas from the project team?

    Is there general consensus?

    How are you documenting the meetings, decisions, actions etc?

    How do you feedback from the meetings to the rest of the workforce?

    How do you deal with suggestions or ideas that are found not to be feasible?

    How do you decide if suggestions are not feasible?

How difficult has it been to set up this project and the project team?

    If difficult – why? What obstacles? How overcome?

Has the concept of worker involvement been hard to get across?

    How have you overcome this?

Project Progress

How do you feel the project is going so far?

What difficulties, if any, have you experienced keeping the momentum of the project going?

    How have you overcome these?

Do you have your own milestones and timescales for what you want to achieve within this project?

    Have these been set by the project team (including workers reps) or by management?

    Are these being achieved or have they been amended?

    If not achieved – reasons for this?

Actions

If actions have already been planned within the worker involvement scheme – what are they?

    How were they decided on?

    How are they being implemented?

    How are they being resourced?

Were these actions under consideration before the worker involvement project started?

Information

Have you found the information from HSE about this project useful?

    If not why not?

How have you used this information?

Would you have liked more/less information?

    Information in a different format?

Have you used any other sources of information?

    Eg. HSE websites, professional bodies, manufactures/suppliers?

Have you attended any meetings with other companies in the pilot or contacted any other companies?

    If so – was this useful?

Could you have set up and run this project without the information provided by HSE on the worker involvement project?

Have you put together your own information and materials to use in this project?

    What were these and how used?

    Will these be used again or were they one-offs?

Role of the Mentor

How much contact have you had with your mentor?

Has this contact been useful? Eg. Asking advice?
What were your expectations of having a mentor for this project?
Have these expectations been fulfilled?
Could you have set up and run this project without the mentor?

Costs & Benefits
What are the costs to your organisation of setting up and running a worker involvement scheme?
If actions have already been implemented - what are the costs of these?
Have you seen any benefits yet of the worker involvement scheme?
Expected? Unexpected?
If not seen yet – what benefits would you expect to see from this project?
Have you seen any disadvantages of this worker involvement project yet?
Expected? Unexpected?
Do you anticipate any disadvantages in the future?
At this early stage would you recommend other companies to introduce this kind of project?
Why? Why not?

Any other comments you'd like to make?

Worker Involvement – Topic Guide - Interim Interview

(3 months since initial interview)

1. Overall Assessment of Project Progress
How do you think the project is going?
What going well? Why?
What going not so well? Why?

2. Aims & Objectives
When last spoke – identified aims/objectives as:
increasing the company understanding of HAV & noise issues
influencing & educating those sub contractors coming on site
What progress towards achieving these objectives?

3. Commitment to project & Project Team
Senior management – still supportive?
Sub contractors – still participating?
Project teams – 3 interlinked teams – still meeting & communications going well?

4. Actions
Actions implemented in last 3 months
Actions planned before end of project.

5. Costs/Benefits/Disadvantages
Costs of actions/ running project? (Time?)
Benefits to running project noticed?
Disadvantages to running project?

6. Info/resources required
Could HSE (or anyone else) have provided any other info or help that you would have found useful in running this project?

7. Other comments?

Worker Involvement Project – Topic Guide - Final Interview

Aims & objectives
What were your aims/objectives for this project?
How successful has this project been in achieving them?

Worker Involvement Concept
Has your understanding of worker involvement changed since you started this project?
How? Why?
Has it been a difficult concept to get across?

Situation Prior to Worker Involvement Project
How much do you think your approach and the company situation prior to the worker involvement project helped you with setting up and running this project?

Commitment to Project
Was the commitment from the directors and management for this project maintained over the duration of the project? How easy was it to maintain?
Was the commitment from the employees maintained? How easy was this to maintain over a length of time? Difficulties? How overcome?
Was project well received?

Project Team
How well did the team work together? Problems? How overcome?
Did you get lots of feedback, opinions, suggestions from the team?
How did you deal with suggestions that were found to not be feasible?
How difficult was it to keep the project team going over the duration of the project? Difficulties? How overcome?

Project progress
How well do you think project went?
What went well? What went not so well?
Will the project be continuing or being rolled out to other parts of company? Why? Why not?
Did you set action plans/milestones?
Have you achieved the milestones that you set for the project? Difficulties? How overcome?
If you were setting up and running this project again – what, if anything, would you do differently? Why?

Actions/Initiatives
Actions implemented throughout project?
Actions still planned?
How were the actions decided on?
How were they implemented?
How resourced?
Were these under consideration before project?
Obstacles? How overcome?

Material/Information/Resources
What information did you use in this project? How used? At what stage?
Was the project handbook useful? Did you follow the guidance? Why/Why not/
What other information would you have found useful to running this project?
Was the information in the correct format for you? Aimed at right audience?

Would you have liked more contact/networking with other companies involved in the worker involvement schemes?

Mentor Role
How much contact? Helpful in providing technical info? Providing info on running project?
Have your expectations of having a mentor been met?
Could you have run this project without the mentor?

Results
Do you have before & after exposures? Eg. Level of exposure reduction due to changing tools.
Have their been any noticeable health surveillance HAV reports or accident rate reductions/increases since the project began?
Any other measurable effects?
Behavioural changes?

Costs/Benefits/Advantages/Disadvantages
What do you estimate the cost was to your organisation in setting up and running the project?
What are the costs of the actions/solutions that have been implemented (or planned)?
Have you seen any benefits of the project? Expected/unexpected?
Any future benefits anticipated?
Have you experienced any disadvantages of this project? Expected/unexpected?
Any future disadvantages anticipated?

Recommendation for Rollout
Would you recommend other companies to introduce this kind of project?
Why/why not?
What recommendations would you make to HSE when rolling out this project to other companies? Anything that could be improved/done differently?

Any other comments?

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Health and Safety Executive (HSE)
Worker Involvement Project Questionnaire

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Last year your employer took part in a pilot project for the Health and Safety Executive (HSE). This project was aimed at introducing increased participation of the workforce in reducing exposure to noise and/or hand-arm vibration (HAV). As a researcher with the Health and Safety Laboratory (HSL) I have been involved in evaluating these pilot project for HSE to see how this type of project works in practice and whether HSE could do anything more to make the setting up and running of the project easier. As part of this evaluation it would be very helpful to me to get your views on the worker involvement project.

I would be very grateful if you could spare a few minutes to complete this short questionnaire. It should only take 5-10 minutes of your time (honestly!) There is no need for you to give your name. You can return the completed questionnaire directly to me at HSL in the envelope provided. Your employer will not see the completed questionnaires although I will provide a general summary of the results at their request. I will make every effort to ensure that questionnaire responses are not attributable to any individual.

I would be grateful if you could return the completed questionnaire by **15th March 2008**.
If you have any queries with this please feel free to contact me: Liz Yeomans, Health and Safety Laboratory, Harpur Hill, Buxton, SK17 9JN, Tel: 01298 218390, Email: liz.yeomans@hsl.gov.uk.
Many thanks for you help with this
Liz Yeomans. Health and Safety Laboratory

Background Information
1. Are you aware that your employer was part of a HSE worker involvement initiative?
(please tick applicable box)
               Yes   No

2. Were you directly involved in the worker involvement project within this company?
(please tick applicable box)
               Yes   No

3. In what way were you involved in the worker involvement project? *(please tick applicable box)*
        Part of Worker Involvement Project Team
        Not part of project team but received information from project team
        Aware of project but did not receive information
        Other *(please specify below)*
……………………………………………………………………………………………………..
Situation Prior to Project
4. Before this project started, how well informed do you feel you were about:
(for each statement please tick the box that best indicates your opinion)
a) general health and safety matters associated with your work?

Very well informed	Quite well informed	Not well informed	Not informed at all

b) risks associated with exposure to noise and/or hand-arm vibration?

Very well informed	Quite well informed	Not well informed	Not informed at all

Comments
……………………………………………………………………………………………………

5. During the Worker Involvement project do you feel that your managers have given you the opportunity to: *(for each statement please tick applicable box)*

	Yes	No	Don't know

a) make suggestions about how to reduce noise or hand-arm vibration risks associated with your work or the work of colleagues?

b) make suggestions about other health and safety or work issues?

c) contribute to the decisions as to which suggestions to implement?

d) contribute to the writing of risk assessments for noise and/or hand-arm vibration?

Comments

………………………………………………………………………………………………

6. If you have made suggestions or contributions, have you received feedback from your managers as to whether your suggestions have been taken forward or not? *(please tick applicable box)*

Suggestions acted on and feedback received	Suggestions not acted on but feedback as to why received	Suggestions made but don't know what is happening with them	Made no suggestions

Comments

………………………………………………………………………………………………

Project Outcome

7. Since the Worker Involvement Project, how do you rate your employer at managing the following health and safety matters: *(for each statement please tick the box that best indicates your opinion)*

	Very Good	Good	Satis-factory	Poor	Very Poor	Not Appl

a) Keeping everyone up to date on proposed changes to health and safety issues

b) Providing everyone with the chance to comment on proposed changes

c) Responding to suggestions from workers about health and safety issues

d) Dealing with health and safety problems that you or your colleagues experience

e) Producing useful and adequate risk assessments for noise or hand-arm vibration

Comments

………………………………………………………………………………………………

8. How effective do you feel the project was in terms of:
(for each statement please tick the box that best indicates your opinion)

	Very effective	Reasonably effective	Satis-factory	Not very effective	Very in-effective	Not appl
a) improving your understanding of the risks from noise and/or hand-arm vibration?						
b) introducing methods to reduce exposure to noise and/or hand-arm vibration?						

Comments

…………………………………………………………………………………………………

9. Do you think that involving workers in health and safety issues is a good idea?
(please tick the box that best indicates your opinion)

Strongly Agree	Agree	Disagree	Strongly disagree

Comments

…………………………………………………………………………………………………

10. Would you want to see this project continued within the company? *(please tick applicable box)*

Yes	No	Don't know	Not applicable

Comments

…………………………………………………………………………………………………

11. Do you feel that your managers consult with you and your colleagues on other aspects of your work?
(please tick applicable box)

Yes	No	Don't know	Not applicable

If 'Yes', please could you provide more information on which aspects of your work your managers consult with you on?

…………………………………………………………………………………………………

12. Are there any other comments you would like to make about the worker involvement project?

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Thank you for taking the time to complete this questionnaire.

Please seal the completed questionnaire in the envelope provided and return to Liz Yeomans, Health & Safety Laboratory, Harpur Hill, Buxton, SK17 9JN.

REFERENCES

Abdelhamid, T., Everett, J., (2000). Identifying root causes of construction accidents. Journal of Construction Engineering and Management 126(1): 52-60

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Feedback on the noise and hand arm vibration worker involvement pilot project

The Worker Involvement Activity forms part of the Noise and HAV programme. The aim of this activity was to reduce occupational ill health related to noise and HAV exposure by introducing worker participation projects. Twenty eight companies were recruited by HSE to set up worker involvement projects in July 2006. Four of these pilot projects were selected for this in depth feedback study which aimed to: gain views of worker involvement in the decision making process; gain feedback on the usefulness of the support materials; identify processes and difficulties involved in setting up the project; identify the noise and HAV exposure reduction outcomes from the project; and identify lessons that could be learnt for setting up worker involvement projects.

This study found that the worker involvement projects were considered to have been effective, beneficial and reasonably successful in identifying and solving noise and HAV problems, raising risk awareness, improving working relationships between workers and managers, and improving risk assessments.

RR705

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