PROMOTING SAFETY PERFORMANCE IN A HIGH HAZARD INDUSTRY

1. Organisations involved

Babcock International Group Networks Division

2. Description of the case

2.1. Introduction

Babcock International group PLC is a leading engineering Support Service Company and Babcock's Networks division operates in the high voltage power transmission and distribution, digital television infrastructure, mobile, fixed telecommunications and next generation networks markets in the UK.

Services provided include; power transmission and distribution, end-to-end life cycle services for high voltage power lines, mobile and fixed telecommunications end-to-end life cycle service from site acquisition and design to implementation and mast support, and design and installation of antenna for broadcast digital switchover programmes. Babcock employs 17,000 staff world-wide with approximately 800 employees within the Networks Division. The Networks Division's head office is in Nottingham with sites across the UK.

The high voltage power transmission, distribution and telecommunications industry that Babcock's Networks Division operates in can be categorized as high hazard. Those employees working on site, approximately half the workforce, have a number of hazards to deal with on a daily basis, the main two are working at height and working with high voltage electricity. Despite their already impressive safety record, Babcock chose to take an innovative approach to improving safety performance. This

involves the development of a number of safety initiatives focusing on both behavioural and cultural change. This is seen within the organisation as continual ongoing process with an emphasis on improving the overall safety culture of the organisation.

2.2. Aims

The aim is to improve the safety performance of the organisation by improving two way communication on safety, safety leadership, employee engagement and safety related behaviour across the Networks Division.

2.3. What was done, and how?

Babcock's Networks Division decided to take an innovative approach to promoting safety performance. This involves the development of a number of safety initiatives that focus on a 'top down' cultural change and a 'bottom up' behavioural change.

The safety initiatives and programmes are detailed below:-

Health & Safety Policy

Babcock's Networks Division has recently revised the company's health and safety policy. The new policy was developed under the guidance of the managing director and has been endorsed by him on behalf of the organisation. This policy is supplemented by a combined health, safety & environmental management procedure and a health and safety manual. These documents detail the roles and responsibilities of everyone in the company with regards to health and safety from managing director and senior management downwards.

The Networks Division has a strong ethos of compliance and run dual accreditation for OHSAS18001, ISO14001 and ISO9001 with both the BSI (British Standards Institute) and the LRQA (Lloyds register quality assurance). The company polices and procedures are clearly defined and communicated throughout the business.

Safety Leadership Team Meeting

Present initiatives within the company include the formation of Safety Leadership Teams (SLTs) from each of the business units. The SLTs involve differing levels of personnel from directors to foremen who meet monthly to discuss health and safety issues and solutions going forward. They are responsible for creating the strategy, standards and the infrastructure to enable the step change and promote the ethos of an organisation free from harm. They share values and a vision aligned to the operations of the business, enabling people to understand the key issues in regard to health and safety and to take positive action and lead by example.

Access to Advice and Services

Whilst overall responsibility for all SHEQS matters lies with the Managing Director, a dedicated SHEQS Director and SHEQS Manager are employed to oversee the management of the health and safety practices, policy implementations and systems. Continual personal and professional development is encouraged ensure that all SHEQES advisors are up to date with the latest legislation and current best practices.

A drugs and alcohol screening programme has been implemented and is administered through an independent third party and all riggers, line workers and those working at height are tested before employment. Competent professional advice is also sourced from organisations outside of the business, where necessary.

Training

All key personnel across the business have recently completed their IOSH (Institute of Occupational Safety and Health) training; this includes senior managers and directors. Additionally, all site based employees receive annual in-house health and safety training related to their role, this includes working at height, working with overhead lines, first aid and safety passports.

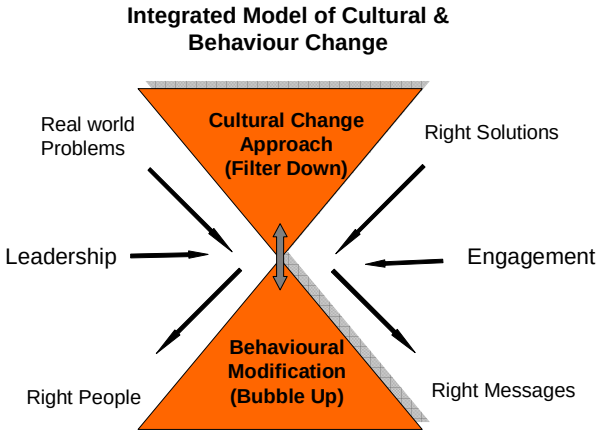
Employee Involvement

Babcock's Networks Division has asked the University of Nottingham's Institute of Work Health and Organisations to devise a three year programme to promote safety performance.

The intervention strategy being developed is summarised below and is characterised by two things:

1. The integration of top down of organisational culture change and ground up behaviour change at the individual and group levels;

2. The tailoring of a truly integrated approach to the context and needs of the organisations and industries involved.



Adapted from DeJoy (2005)

The approach is dependent on a number of key moderating processes including:

- Leadership: The leadership shown by the senior and middle management regarding safety
- Employee engagement: The extent to which operational employees are engaged with and can own the challenge of strengthening safe behaviour at work

This project is positioned at the interface of applied research and practice in occupational psychology and is based on the following strategies:

- The use of an evidence-based problem solving paradigm;
- The recognition and use of employees' expertise in relation to their work;
- The education and involvement of those who 'own' the problem of concern;
- Reflection on the processes involved both in establishing and evaluating the safety intervention, and in conducting and learning from the project.

There are two common approaches to improving safety performance in organisations: the behaviour-based (behavioural safety), and culture-based (safety culture change). The success of both behaviour and culture change approaches is dependent on a variety of factors and, among other things, employee engagement and the commitment of senior management and its leadership (Cox *et al*., 2004). These have been incorporated into the University of Nottingham's approach. Employee engagement and effective safety leadership at all levels of an organisation are a prerequisite for the success of both cultural change and behavioural safety programmes.

Behaviour Change: Ground Up

Behaviour-based approaches are grounded in theories of reinforcement and of social influence (Bandura 1977, 1986, Skinner 1974). This approach facilitates employee learning through observation, peer review, the modelling of safe behaviours, feedback and positive reinforcement. The aim is to produce and reinforce systematic changes in objectively defined behaviours (Kazdin, 1973, Nemeroff and Karoly 1991). The behaviour-based approach can be seen as a 'ground up' or operational-level up approach: the behaviours in focus are usually performed by employees at the operational level.

Culture Change

Safety culture is used to characterise the safety beliefs, values, and attitudes that are held by an organisation and its members (Cox and Cox, 1991). Safety culture can be defined simply as 'the way we do things around here' with regards safety. Safety culture is both framed and reflected in organisational policies, business processes, and allocation of resources usually originating at board or senior management level. Culture change approaches to safety tend to be more 'top down' than behaviour-based approaches. The focus is on understanding and changing fundamental values and beliefs of the organisation and its employees. In order to create any significant improvements in safety, the culture of the organisation needs to be understood and changed. In contrast to behaviour change approaches, culture change focuses on understanding and changing the fundamental values, beliefs and attitudes of the organisation in regard to safety. Research has shown an organisation's safety culture mediates safety programme effectiveness (Cheyne *et al,* 1998), and sets the framework for behaviour change.

Methodology

In order to identify the safety culture and areas for improvement in the organisation, a selection of representative employees across the Networks Division are currently being interviewed using a semi structured format.

Additionally a safety culture survey is currently under construction utilising the already validated HSE (Health and Safety Executive Safety Climate) Survey. All employees across the organisation will be surveyed. The results of the interviews and surveys will be analysed to identify common themes. From this, safety solutions will be developed in collaboration with employees in the organisation.

The final step of the programme is the evaluation of the programme's effectiveness using the initial survey data as a benchmark. According to the results any safety solutions and initiatives can be adapted and improved where necessary.

Communication

In order to improve two way communications in the organisation a number of initiatives have been developed. Babcock's Network Division has its own intranet site called 'FRED', which is accessible to all office-based employees and which is the main source for company information. The SHEQS department has its own dedicated section within this site, which is the main library for all Networks Division health, safety, quality & environmental policies, procedures and their associated forms and guidance notes.

Relevant safety alerts and accident / incident statistics and other health and safety updates and information are regularly e-mailed to key member's of the business to cascade out during bi-weekly face-to-face TOFFS (Time out for Safety) sessions with their team. These updates are also displayed on notice boards on site and around the business.

Updates on safety procedures, work instructions, methods statements are delivered by team leaders, supervisors and foremen to their teams face-to-face in regular tool box talks.

The marketing department has created a quarterly internal newsletter which is e-mailed or posted (to those that don't have access to e-mail) to all employees. As well as business and health and safety updates it also includes congratulations and thanks to employees who have made significant achievements and contributions to the business or health and safety.

Babcock International Group also produces a quarterly magazine 'BIG Picture' which is distributed to all divisions within which also contains articles and statistics regarding health and safety.

Monthly posters are created featuring members of employees with different safety messages; these are published in Grapevine (an internal company magazine) displayed on notice boards around the company and on site.

Active Monitoring of Health and Safety

In order to identify where Babcock's Networks Division is doing well and where areas for improvement are it is important for the company to measure its health and safety performance. Sites are regularly visited by a member of the SHEQS Team, directors, or managing directors. These site visits include schedules for inspections and standardised forms to ensure consistency.

An incident reporting and investigation management procedure has been developed which details the process for dealing with all accidents.

A new system has been implemented in the company for reporting and tracking accidents, near misses, incidents and hazards. Anyone in the company has access to the system and can input a report via their computer. Once a report has been raised, it is assigned to a manager for investigation

of the immediate and root causes of the accident, so that remedial action can be put in place to ensure a similar accident does not happen again.

Those who are site based and don't have access to a computer can contact a 24 hour telephone helpdesk number, where an operator will log the event on their behalf. This 24 hour helpline is also available to all employees who need advice regarding health and safety matters if for any reason a member of the SHEQS Team or their line manager is unavailable.

The statistics derived from the help desk and reporting system are complied and reviewed regularly at the monthly executive board meetings to review any issues, progress and develop strategies to deal with.

2.4. What was achieved?

- Accident rates over the programme have been significantly reduced from 5.63 (per 100,000hrs) in 2005/06 to 2.91 (per 100,000hrs) in 2009/10. The reduction however didn't take place uniformly. The higher number of accidents in 2008/09 is also believed to be a result of consistent reporting due to the new system tracking accidents, near misses, incidents and hazards.
- RIDDOR reporting went down from 7 in 2006/07and 2007/08 to 4 in 2008/09 and 2009/10.

	2005/06		2006/07		2007/08		2008/09		2009/10	
	No.	**Rate**	**No.**	**Rate**	**No.**	**Rate**	**No.**	**Rate**	**No.**	**Rate**
Accidents	70	5.63	62	4.44	52	2.52	73	4.82	61	2.91
RIDDOR	4	0.24	7	0.50	7	0.34	4	0.30	4	0.19

- The SHEQS Director recently received an award at the Babcock International Group Safety Excellence Awards recognising his efforts in promoting safety. Babcock's Networks Division has received a number of prestigious awards including the RoSPA Gold Award in May of 2009 and 2010 for their work in occupational health & safety.
- Babcock's Networks Division has been recognised by the British Safety Council and was granted an international safety award (the British safety council international safety award) in 2009 for a specific project.

2.5. Success factors

- The importance of safety is recognised throughout the Networks Division, right from the executive board through to those in the field on the front line, and this is lead from the top.
- Increased ownership safety both at an individual and collective level.
- Improved communication on health and safety across the organisation.
- Increased incident and near miss reporting.

- Increased accident reporting due to better tracking processes and procedures
- Improved quality of near miss, incident and accident reporting allowing statistical analysis of areas for improvement to enable preventative measures to be put in place and generates benchmark data.

2.6. Further information

www.babcock.co.uk – Babcock International Group Website

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2.7. Transferability

Babcock's Networks Division learns from incidents and injuries that happen within other divisions across the Babcock Group as well in other organisations and in other industries. The learning from past events, other divisions and other organisations as well as consultation with employees has created a bespoke programme of health and safety specific to the needs of the organisation.

Due to a close working relationship with their clients, who face similar challenges there is continued interest in the current health and safety initiatives and their outcomes at Babcock's. Although any safety programme would need to be bespoke to the needs of the organisation in question and its employees, the general principles and the underlying model of the safety programme which has been implemented in Babcock's Networks Division could be translated effectively to other organisations and other industries.

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