

NUCLEAR SAFETY DIRECTORATE - BUSINESS MANAGEMENT SYSTEM		
TECHNICAL ASSESSMENT GUIDE MANAGEMENT FOR SAFETY		T/AST/039
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1. Purpose and scope

1.1 The principles of nuclear safety which the Nuclear Installations Inspectorate (NII) uses to assess licensees' demonstration of safety in design, construction, commissioning, operation and decommissioning of nuclear plant and nuclear waste management are expressed in the Health and Safety Executive's Safety Assessment Principles for Nuclear Plant (SAPs)^[1]. This Technical Assessment Guide discusses how SAPs concerned with management for safety will be interpreted and applied.

1.2 The SAPs include a distinct section on management systems (SAPs P315-P322). However, management for safety can be considered to encompass or be relevant to topics which are also covered by other SAPs. There is some overlap between topics addressed in this TAG and those covered by other guides, notably those on Human Factors^[2], Training^[3], Quality Assurance^[4] and Records Storage^[5]. The aim of this TAG is to provide an overview of these guides as appropriate, and to present more detailed discussion of the approach taken by NII in assessing how a licensee's established policy for safety has been implemented by the management of safety system, supported by adequate quality assurance arrangements.

1.3 Reference in the text is made to SAPs which are associated with these topics, and to relevant Nuclear Site Licence Conditions and TAGs. The importance of the NII publication Managing for Safety at Nuclear Installations (MSNI)^[7] cannot be over-emphasised; the assessor is directed to that document to expand on section 4.2 of this guide. External standards or guidelines which provide a useful source of guidance or reference are also cited where they are relevant.

1.4 This TAG contains *guidance* to advise and inform NSD inspectors in the exercise of their professional regulatory judgement. Comments on this guide, and suggestions for future revisions, should be recorded on the appropriate registry file.

2. SAPs addressed

2.1 This TAG provides the underlying source of assessment guidance which covers SAPs P315 - P320 and P322. Other relevant SAPs which are referenced in this guide include P321 and P328. This guide identifies other TAGs and Reports which provide more detailed and in-depth guidance to assessment of specific topics which come under the broader heading of Management for Safety.

2.2 The intention of SAPs P315 - 320 and P322 is to assist the assessor in checking that the licensee has developed and implemented suitable arrangements to address Management for Safety. This includes the development and implementation of Quality Assurance arrangements that enable safety-related activities to be formally managed and controlled. (Licensees can, and in most cases do, extend those formal

arrangements to non safety related activities). The following paragraphs provide interpretation of these SAPs.

2.3 P315 - The Licensee should establish a safety culture, starting at the highest level with management commitment in the form of a safety policy. The development of a good safety culture should be encouraged by management seeking, through effective communication, the co-operation of all levels of staff in contributing to improvements in safety performance.

2.4 P316 - The safety policy should be promulgated via identification of responsibilities and accountabilities for safety performance to all levels of staff who are involved in safety activities related to the plant.

2.5 P317 - The Licensee should develop and implement a quality system that covers all phases of the plant from design through to decommissioning. These arrangements should be reviewed periodically to ensure that they remain adequate and effective. Verification activities such as inspection, monitoring, review and auditing should be carried out by personnel who have appropriate levels of expertise, authority and independence from the activity being performed.

2.6 P318 - The Licensee should document the quality assurance arrangements, normally in the form of a plan or programme, for each phase of plant life. These documents should indicate the Commitment of senior management to the development and implementation of formal arrangements that are based on national and/or international standards of Quality Assurance. These arrangements should take into account best practice.

2.7 P319 - The documented arrangements should be prepared by the licensee prior to the commencement of any of the phases of the plant. These arrangements should identify those activities/systems that are essential to safety. A graded approach to the application of management controls appropriate to the level of safety required should be used. Organisational representations together with levels of responsibility and authority should be included in the arrangements together with principal interfaces. The programme or plan should be supported by lower tier documents such as Departmental Procedures and work instructions. The totality of the arrangements should enable the Licensee to manage, control and monitor all phases of the life of the plant and ensure that these processes are visible and repeatable.

2.8 P320 - The Licensee should develop, as part of these overall arrangements, systems for the management of records relevant to plant safety. The arrangements should provide for the identification, development, amendment, storage and disposal of records. The Licensee should develop a records schedule that includes records useful to plant modification, improvement, operation and decommissioning.

2.9 P322 - The licensee should maintain a system for plant operational feedback which is complemented by the collection of external national and international information relevant to the safe operation of the plant.

3. Relationship to licence and other relevant legislation

3.1 Licence Condition 17: Quality assurance

The purpose of LC17 is to ensure that the licensee sets out the managerial and procedural arrangements that will be used to control and monitor those actions necessary in the interests of safety, and to demonstrate compliance with the site licence conditions (and in particular the arrangements made under them) and any other legislation. LC17 can therefore be applied to **how** the licensee fulfils all the obligations required by the other licence conditions. Since the standard site licence was introduced, guidance for safety management systems, eg HSE's Successful Health and Safety Management (HSG65) ^[6], Managing for Safety at Nuclear Installations (MSNI) ^[7] and Approved Code of Practice, Management of health and safety at work (MHSW) ^[8], has focussed attention on the key aspects of management systems which address health and safety issues generally. The process of managing and controlling the nuclear hazard via the corporate management system should have the aim of delivering high standards and goals set by the licensee which at least meet any standards required by the law.

3.2 Licence Condition 36: Control of Organisational Change.

The purpose of LC36 is to ensure that the licensee has arrangements in place to control changes to its organisational structure and resources which may affect safety on licensed sites. The NII must ensure that the licensee retains the ability to carry out its obligations under the appropriate Acts and the licence conditions. This licence condition therefore impacts on management re-organisations, changes in safety-related responsibilities of posts, corporate centre changes which may affect the provision of technical and other support services, changes in resource levels and the retention of an adequate range and depth of technical competence to remain the "informed customer" for the control of contractors. Guidance for LC36 is

currently being developed.

3.3 Other Licence Conditions which have direct interdependence with LC17 and which are covered in documents referenced in this Guide include:

- LC6 - Documents, records, authorities and certificates
- LC10 - Training
- LC12 - DAPs and SQEPs
- LC20 - Modification to design of plant under construction
- LC22 - Modification or experiment on existing plant
- LC23 - Operating Rules
- LC24 - Operating Instructions

4. Advice to assessors

Under this section, the headings are introduced generically in **para 4.1** and then the content is expanded to provide detail against which assessment should be made.

This assessment advice covers a wide range of safety management and related topics. Detailed guidance is provided in some areas, whilst in other areas reference is made out to other specific NSD developed guidance and published information.

4.1 Scope of management for safety

1) Safety should be a paramount business objective of any organisation, and experience has shown that safety is vital in contributing to the continued viability of high hazard businesses. One of the functions of the corporate management system is to manage activities so as to deliver safety in terms of:

- i) protecting employees and others who may be affected by the activities undertaken;
- ii) protecting the environment;
- iii) ensuring the continued success of the organisation; and
- iv) ensuring compliance with legislative and regulatory requirements.

2) Management for Safety (MfS) can be viewed as being concerned with matters which can be grouped under the following main headings and topic areas which are expanded in subsequent paragraphs in this section.

i) Management Systems to deliver safety

- Policy
- Organising, including:
 - Control
 - Communication
 - Co-operation
 - Competence
- Planning and Implementation
- Measurement
- Audit
- Review

ii) Safety culture

- Corporate commitment and promotion of safety culture
- Individual attitudes to, and awareness of, safety issues

iii) Management of change

- Change control
- Organisational change
- Contractorisation
- Downsizing and Delaying

iv) Training

v) Quality Assurance

vi) Documentation and records systems

3) The following sections discuss the areas of the six headings above, and provide guidance for the approach the assessor should take when reviewing the licensee's arrangements and provision for Management for Safety.

4.2 Management for Safety systems

1) The NII approach to Management for Safety is discussed in "Managing for Safety at Nuclear Installations" [7]. This is a policy document which is a statement of the principles the NII uses to judge the adequacy of any proposed or existing system for managing safety at a nuclear installation. The principles have been developed from the HSE model described in HS(G)65 [6], together with the NII's operational experience of regulating the nuclear industry under the statutory licensing system.

2) General guidance for anyone proposing to install or operate any licensable nuclear installation in England, Scotland or Wales is included in "Nuclear Site Licences. Notes for Applicants" [9]. This is an HSE - NII publication which is HSE's policy for dealing with the legal requirements for licensing and the duties and responsibilities placed upon users of such sites. NII, on behalf of the Executive must be satisfied that the applicant organisation is the day-to-day user of the installation and has an adequate management structure and resources to discharge the obligations and liabilities connected with the licence. It is anticipated that the applicant will develop and submit a management prospectus which demonstrates a commitment to health and safety. The management prospectus can be regarded as that part of a licensee's safety case which deals with management issues. Although "Notes for Applicants" addresses new licensees, the requirement for a management prospectus (or safety management prospectus) applies equally to existing licensees seeking a new licence. NII expects the safety management prospectus to be a living document, in the same way that a plant or station safety case is a living document.

3) The assessment of Management for Safety systems is based on reviewing the licensee's top level Management for Safety documentation, eg. the safety management prospectus, followed by reviewing other appropriate safety documentation and by questioning the licensee directly to establish whether there is compliance with the requirements below.

4) Review of the safety management prospectus should establish that the licensee has in place the following basic requirements in respect of the topics in **4.1 2) i)** above.

i) A Board level organisational structure which reflects the licensee's ability to manage its business with due regard for safety through its management structure, accountabilities and level of resources. This should include provision for the Board to receive advice on safety matters independently of the operational Director(s).

ii) A written safety policy statement which sets out the licensee's Board-level

commitment to meeting its responsibilities for safety. The policy should set out the organisation's objectives for health and safety and the arrangements for providing, implementing and maintaining an adequate management for safety system. The licensee's policy should be developed at its sites by local arrangements which show how the corporate policy is being developed and implemented at those particular sites.

iii) The licensee's organisational arrangements should be capable of readily planning and implementing the aims and objectives identified in the safety policy. Responsibilities should be clearly defined together with clear lines of authority through the organisation.

The licensee's organisational arrangements should provide the means of effective managerial control through positive leadership, good managerial systems and clear identification of responsibilities which promote and secure commitment of employees to health and safety objectives.

The organisational arrangements should provide effective channels of communication, such that the safety policy and senior management commitment are widely understood, and so that the means of implementing the policy, by plans, standards, procedures and systems are known to employees and others working on the site. Effective communication should be encouraged at and between all levels within the organisation.

The organisational arrangements should allow all parties to co-operate in the achievement of safety through a combination of participation, commitment and involvement.

The organisational arrangements should provide the means of assessing the skills and competence required for performing safety-related tasks, and for ensuring that a systematic approach is taken to recruitment and selection of personnel, and for training them for their tasks. Training is covered by a separate TAG [3].

iv) Planning and implementation covers in particular the adequacy of overall plans for safety management, the adequacy of standards or targets for safety performance and the adequacy of risk assessments. Standards for the control of risk during design, construction, commissioning, operation and decommissioning of nuclear installations include the licensee's design safety guidelines, codes of practice, international safety guides and codes, and appropriate British Standards. Licensees should set their own standards or targets for safety performance in line with the aims and objectives of the corporate safety policy, and should take into account positive indications for improvement of safety culture as well as minimisation of accidents and incidents through improved risk assessment.

Safety cases which justify the design, contribution, commissioning, operation, modification and eventual decommissioning of a nuclear installation are a key part of a licensee's planning process for a management of safety system.

v) Once targets for safety performance have been set and agreed, an active system of monitoring and feedback into the MfS is required to measure performance against the targets. This should be achieved by a system of self-monitoring and peer review which will check the achievement of targets and objectives, check whether procedures and work practices are realistic and compatible, and will check compliance with performance standards.

A system of independent monitoring by the Health and Safety Department (or equivalent function) should also be established to provide an independent view of performance against corporate standards and requirements.

Licensees should also have arrangements in place for investigating incidents and "near-misses". The arrangements should establish a process of investigation and analysis of the causes of incidents and their subsequent effects so as to facilitate corporate learning. This should be part of the operational feedback system which also takes into account available world-wide information.

vi) Audits should be conducted at regular intervals to establish that the whole of the health and safety management system is functioning correctly. This includes the adequacy of the organisational arrangements, planning and implementation of safety arrangements and the adequacy of self and independent monitoring.

vii) Results of audits of the system should form part of the safety review carried out by the Board. Recommendations made by the Board for actions to improve the Management for Safety can be fed into the appropriate part of the MfS cycle.

viii) Review of the safety management system should take into account the results of self monitoring and independent monitoring of safety performance. Overall reviews should be performed by, or on behalf of, the Board member accountable for safety. The Board should consider reports on safety and review the corporate safety policy at regular intervals.

5) HSE Operations Unit (OU) has developed an aide memoire for assessing the management of health and safety in a structured fashion. The OU work was originally included in the HSE Field Operations Directorate (FOD) Guide to the Assessment of Health and Safety Management Systems, and has subsequently been adapted for other parts of HSE. The aide memoire addresses the six main aspects of the framework of Management for Safety systems identified above, i.e.:

Policy;

Organisation;

Planning and Implementation;

Measurement;

Audit ;

Review.

6) These main elements of HSG65 are known as “POP/MAR”. A question set drawn from the aide memoire is included in **Appendix 1**.

7) Other bodies also carry out major inspections of nuclear facilities in accordance with their own developed aides memoires. These include IAEA OSARTs (Operational Safety and Review Teams), World Association of Nuclear Operators (WANO) and International Nuclear Plant Operators (INPO).

4.3 Safety culture

1) SAP P315 identifies the need for the establishment of a safety culture which will underpin, enhance and support the safety actions of all individuals and organisations involved in nuclear safety related activities. The declaration of and commitment to a clearly stated safety policy are pre-requisites of a safety culture. INSAG-4 [10] defines safety culture as “ that assembly of characteristics and attitudes in organisations and individuals which establishes that, as an overriding priority, nuclear plant safety issues receive the attention warranted by their significance” [10] .

2) HSE publication The Tolerability of Risk from Nuclear Power Stations [15] highlights the importance which HSE places on the value of an organisation's safety management systems and safety culture, and identifies the need for good procedures to be supported by a culture which disposes every individual in the organisation towards safe working practices.

3) The need to reinforce an appropriate safety culture is recognised in recent papers by the Nuclear Safety Advisory Committee (NuSAC, previously ACSNI). Training and communication at all levels of the organisation have important parts to play in raising awareness of the individual and team roles in improving safety culture. It is important to note that the primary influence on the attitudes and values of an organisation must originate at senior levels of that

organisation.

4) The influences of regulatory bodies should not be overlooked. It is important that the licensee "owns" its safety arrangements and does not simply look to the regulator to steer it on how to carry out its activities safely.

5) Safety culture describes attitudes and values rather than physical processes or management systems and procedures. However, tangible manifestations of safety culture can be observed and monitored, as individual and corporate attitudes towards safety can impact upon a diverse range of activities, arrangements and performance, including:

- i) safety performance (as monitored through selected indicators);
- ii) housekeeping;
- iii) personnel attendance at training courses;
- iv) provision and use of systems and practices intended to support safety (eg, operational feedback, team briefing arrangements, log-keeping, provisions for reporting safety concerns, management walk-about, etc).
- v) questioning attitude and proactive style

6) Some influences on safety culture may result from approaches which the licensee is taking to organisational issues such as staff reduction, personnel working conditions and workload, etc. The NII will subject the licensee's working arrangements, goals and practices to scrutiny where there are concerns about the impact that these factors might have on safety culture. It should be noted that the correlation between some indicators of safety culture and indicators of plant safety performance, such as reactor trips, maintenance backlogs, etc, may not be immediately apparent because there may be a time lag between changes in culture and their effects on plant performance, and there is not always a one-to-one correlation between such indicators.

7) Further details on assessment of safety culture is given in the TAG on Human Factors [2].

8) A series of questions, which will help the assessor to determine whether a positive safety culture exists and to measure its success, may be found in Appendix A2 to IAEA Safety Series No 75-INSAG-4, Safety Culture [10].

4.4 Management of change

1) Organisations face continuous pressure to change in order to meet their business objectives in a competitive market place. Licence Conditions ensure that licensees have adequate arrangements in place for controlling changes to certain activities:

- construction or installation of new plant (LC19)
- modification to design of plant under construction (LC20)
- changes in the phases of projects or site activities (LC21- commissioning, LC35 - decommissioning)
- modification or experiment on existing plant (LC22)
- operating rules (LC23)
- operating instructions (LC24)
- organisational or resource change (LC36)

In general, the Executive, through NII, may approve licensees' arrangements made under certain LC conditions, such that no alteration or amendment can be made without further Executive approval. Changes to plant and/or operational arrangements are dealt with in

inspection guidance, in the groups of LCs covering Control of Plant Design and Status, and Control of Operations [13]; this present guide outlines NII's expectations for management of organisational change which may affect safety.

2) The nuclear industry is particularly under pressure to become competitive within the world market for nuclear services (eg decommissioning and waste management) and within the UK market for electricity generation. Cost reductions are being focussed in three main areas:

- i) use of contractors,
- ii) organisational change, by restructuring, delayering and/or downsizing, and
- iii) focusing on core activities (range reduction).

3) The licensee must retain the ability to carry out its obligations under the appropriate Acts and the licence conditions. This includes retaining adequate corporate and technical knowledge and resource to maintain safety cases and be the "informed customer" when dealing with contractors.

4) Assessment of Management of Change should take account of the following factors:

- i) An effective policy for the management of change and an effective management system to make it work;
- ii) An adequate organisational and management structure to manage changes effectively, with clearly defined responsibilities for:
 - a) overall management of change system, eg a co-ordinator or champion
 - b) the change process and monitoring its effectiveness
 - c) communication to, and discussion of changes with, affected persons and organisational units
 - d) initiating change
 - e) assessing change
 - f) authorising change (including levels of authorisation relative to the potential hazards associated with the change)
 - g) implementing change
 - h) regulatory interaction with NII;
- iii) Provisions to identify risks, enablers, indicators and countermeasures, and proactive monitoring to ensure that changes are progressed and can be reversed if necessary;
- iv) Audit and Review to monitor and improve the effectiveness of the system.

The following paragraphs provide detail for assessment of contractorisation and delayering and downsizing, providing reference to additional guidance.

5) Contractorisation

- i) Section 7 of the NI Act imposes an absolute duty on the operator on a licensed site to prevent injury and damage in relation to nuclear matter. This duty is solely imposed on the site licensee and cannot be borne by others such as contractors. Additionally, the licensee must comply with the licence conditions imposed by the Health and Safety Executive using its powers under section 4 of the NI Act. Consideration of the above and other relevant legislation (e.g. MHSW) leads to the following fundamental principles:
 - a) The licensee must oversee and take responsibility for the impact of

contractors' work.

b) The licensee must be able to demonstrate that it retains adequate safety management (including control and supervision) of all nuclear safety-related work which is carried out on its behalf by contractors.

c) The arrangements for implementing the overall Safety Management System (encompassing licensee and contractor(s) provisions) should be robust, auditable and include appropriate use of recognised Quality Assurance standards.

ii) The following Safety Assessment Principles, are particularly relevant to licensee's management of contractors: P315, P316, P317, P318, P319, P320, P321, P322, and P328.

The assessor should also be aware of other terminology which applies to "contractor" combinations and which therefore requires attention,

eg:alliancing, usually where companies with common and complementary business activities combine for mutual market benefit

partnering, where a contractual situation exists, but this can be long-term with both parties benefiting from mutual aims and objectives.

NII has published papers and audit reports which give insight into the requirements for proper use of contractors by licensees, eg ASD Project Assessment Report No.300/97 [11].

6) Downsizing and Delaying

i) A recurrent feature of licensees' recent business reviews has been proposals to reduce the numbers of staff directly employed by the licensees. For practical purposes, these reductions are generally achieved through some combination of:

a) Downsizing - removal of staff resulting from restructuring the business or reappraising resource requirements

b) Delaying - removal of tiers of management or supervision, often associated with empowerment of remaining personnel

c) Contractorisation - replacement of directly employed resource with resource from a contracted agent. (see above)

ii) The principal criteria for assessment of such organisational changes (and, in turn, for a substantive case by the licensee) are:

Does the proposal result in loss of personnel who carry out a safety-related role without the need for that role also being removed; and/or

Does the proposal increase the workload on personnel who carry out a safety-related role.

iii) Regarding operational staff, SAP P328 states that "The minimum staffing levels of suitably qualified and experienced people and the minimum level of operational equipment necessary to ensure safety in normal or fault conditions should be specified." NII assessors should also seek to ensure that adequate attention has been given by the licensee to addressing the retention of appropriate numbers of staff with skills and knowledge to maintain and improve safety performance. The question of the demographic structure of the organisation, recruitment and succession planning policy should also be investigated.

iv) Implementation of the proposals should be proactively monitored and reviewed by the licensee to ensure that any degradation of performance is identified and corrective action

is applied to restore any erosion of safety functions resulting from the changes.

v) An NII published paper which gives detail on assessing licensee downsizing and delayering, including checklists, is ASD Project Assessment Report No.129/96 [¹²].

4.5 Training

1) The value and importance of training in supporting safety of nuclear installations is recognised by SAP P321. Licence Condition 10 in the standard site licence places particular legal duties on the licensee.

2) Provision by the licensee of facilities or other means to ensure employees are suitably qualified and experienced is an integral part of the Management for Safety system.

3) A separate TAG [³] has been written, and assessors are referred to this for specific guidance.

4.6 Quality Assurance

1) Quality is defined as "The totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs". Quality Assurance is an essential part of an effective management system. It provides a disciplined approach to management, which ensures that arrangements are in place for the management and execution of all activities that may affect safety, throughout the lifecycle of a project or installation. Again, a specific LC, no.17, covers this important area.

2) The objective of the QA licence requirement is that the licensee should set out the managerial and procedural arrangements that will be used to control and monitor those actions necessary for the safety of the site.

3) The documented system should lend itself to systematic monitoring which gives confidence that intended actions have been completed to defined requirements and that any breakdown, including managerial controls, are identified and corrected.

4) Current guidance may be found in Inspection Guidance, Phase 3 [⁴].

4.7 Documentation and records systems

1) Licence Condition 6 requires that the licensee makes adequate records to demonstrate compliance with the Conditions attached to the Licence. The Licensee is required to make and implement adequate arrangements to preserve records for a period of 30 years or such other periods as the Executive may approve. Additionally, LC17 requires that adequate Quality Assurance arrangements are developed and implemented by the Licensee. An essential part of these arrangements is the development of procedures which detail the generation and control of records. These procedures should, as a minimum, detail:

i) responsibilities for the identification (normally through record schedules) and control of records

ii) methods, conditions and monitoring of storage / retention commensurate with the nature of the record and the media used

iii) means of retrieval and update

iv) levels of security to protect from corruption, unauthorised access, loss or damage

v) duration of storage

vi) arrangements for the review and disposition of records

vii) arrangements for the periodic auditing of the control and storage of records.

2) The detail of a number of these aspects is dependent on the physical nature of the record. The TAG on Records Storage [5] provides detail of the characteristics of records media, their legal admissibility, security of access, storage and maintenance.

Appendix 1. Management of Safety question set

A1.1 This appendix identifies the issues and questions which inspectors should consider when using HSG65 to assess the adequacy of health and safety management. It can be used as an aide memoire to structuring interviews, assessing documents, analysing audit findings and writing reports.

POLICY

Definition: The general intentions, approach and objectives of an organisation and the criteria and principles on which actions and responses are based. "Policy statements" refer to the written records of the policy of an organisation.

Key Issue: Is there an effective health and safety policy and an effective management system to make it work?

- Do directors have a clear view on what they wish to do and achieve in health and safety? Is this reflected in what they do?
- Is there a "real" policy of health and safety?
- What are the aims/objectives of the policy? What are the aims and objectives of directors, owners, etc?
- Is there clear thinking and a coherent approach on this topic in the minds of directors, etc?
- Does the policy express best practice and achieve compliance with legal standards?
- Does the written policy express the practice on the ground?
- Is the scope of the policy adequate?
- What are the strengths and weaknesses in the current position?
- Is there evidence (in board minutes etc) of strong commitment to such policy

ORGANISING

Control

Key Issue: Is there an adequate management structure to implement the policy.

Control is concerned with the clear allocation of health and safety responsibilities especially where organisations or sections of an organisation collaborate and work together, eg on a major construction contract or project during maintenance work. Control also refers to those arrangements for holding persons accountable for health and safety responsibilities.

The aim here is to ascertain if there is an adequate structure, processes and procedure to control the organisation as a whole.

- Are the responsibilities for health and safety clearly identified?
- Is it clear who will plan and make decisions, who will implement the plans, who will measure performance, who will review and secure improvements and who will audit the arrangements?
- Are responsibilities allocated to line management with specialists acting as advisers?
- the role and contribution of all specialists and advisers clearly spelt out?
- Is the role and contribution of the relevant health and safety committee(s) clearly defined?
- Are there any conflicts between health and safety responsibilities and other job demands?
- Are health and safety responsibilities included in job descriptions, (where used), or any other similar documents, eg performance standards, etc?
- Do line managers clearly understand what good health and safety management in this topic area involves?
- Are issues of overlapping responsibilities adequately addressed?
- Are all levels of management required to set annual health and safety objectives for their area of responsibility?
- Are there performance standards or similar, to define the nature of the work to provide positive motivation in pursuit of these health and safety objectives (assessments of the adequacy of the plans and standards (where they exist),

should be left to the planning section)?

- Do work instructions also cover safety functions (integration of activity and safety)
 - How are managers and others held accountable for their health and safety responsibilities?
 - How do managers hold those below them accountable for health and safety?
 - Are there review or appraisal systems which assess health and safety performance - consider informal and formal systems - essentially, does health and safety performance matter?
 - Are there any disciplinary procedures covering health and safety performance and are they applied in practice - has anyone been disciplined for failure to comply with health and safety requirements?
 - Is there evidence that review and discipline procedures are consistently applied both to management and other employees?
 - How are the health and safety issues considered during the setting of manning and supervisory levels?
 - What are the strengths and weaknesses in the current position?
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ORGANISING

Co-operation

Key Issue: Are there adequate and appropriate arrangements to secure the trust, participation and involvement of all employees?

- Are there any health and safety committees, what is the adequacy of the membership and what is the "quality" of activities?
- Is there any involvement of "front-line" workers in writing procedure systems or establishing standards of performance?
- Is there any involvement of "front-line" workers in hazard spotting and problem solving?

- Are there any suggestion schemes and competitions relevant to this issue?
 - Is there any "front-line" worker involvement in accident/incident investigation?
 - What accidents/incidents/near misses, etc, have employees and others been asked to report?
 - Is there any involvement of "front-line" workers in measuring and auditing activities?
 - What happens if individuals raise concerns over health and safety issues?
 - Is there a procedure or a mechanism for resolving disputes and safeguarding the position of an individual worker?
 - What is the number, role and attitude of safety representatives
 - Do "front-line" workers feel confident that they can raise health and safety issues without fear of blame or recrimination?
 - Is there any evidence of a just and principled "no blame" culture?
 - Identify both strengths and weaknesses in the current position?
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ORGANISING

Communication

Key Issue: Are there adequate arrangements to secure adequate information flows into, within and from the organisation?

- Is adequate and relevant health and safety information acquired?
- Is adequate information readily available within the organisation?
- Is pertinent information brought to the attention of those who need to know?
- Is there adequate and appropriate written information on health and safety, eg, policies, standards, rules, procedures, guidance, training materials, etc?
- Are documents written in sufficient detail relevant to the risk and

circumstances?

- Are documents in a style/language suitable for the user?
- Are all levels of employee adequately informed on health and safety issues relevant to this topic?
- Is the health and safety policy distributed to all employees?
- Is the written material sufficient to enable effective measuring and auditing?
- Is there a standard or guidance on how H & S information guidance should be written?
- Are posters, newsletters, videos, etc used in a structured way so as to support particular target plans or priorities?
- Are directors and managers "visible" on health and safety, eg do they undertake health and safety tours, regularly chair health and safety committees, get involved in accident/incident investigation?
- What face to face contacts and discussions are there on health and safety issues?
- Are there any team briefings or other similar cascade systems which cover health and safety?
- What discussion is there on health and safety topics and health and safety performance within management meetings?
- Are there any "tailgate" or "tool box" talks?
- How does information from the bottom of the organisation reach the top?
- Is adequate and appropriate information prepared for external users, eg off-site emergencies, etc?
- What are the strengths and weaknesses in the current position?

ORGANISING

Competence

Key Issue: Are there systems and arrangements to secure the competence of all working on site?

- Are adequate and appropriate health and safety criteria applied during recruitment, placement, transfer and promotion of staff?
- Is there assessment of health and abilities (both physical and mental) at recruitment and any subsequent transfers or promotions, etc?
- What system exists to ensure adequate training on health and safety?
- Is there a systematic identification of training needs?
- Is there provision of training at induction, job change, operation and other change and refresher training?
- Is there adequate supervision of trainees and other learners pending the achievement of competence?
- Are there arrangements for the structured assessment of competence?
- Are there arrangements to ensure cover for critical health and safety jobs and responsibilities, eg emergency response?
- Are all levels of employee adequately and appropriately trained in health and safety relevant to their job and are they competent?
- Is adequate health and safety advice available?
- Is there adequate health surveillance?
- What are the strengths and weaknesses in the current position?

PLANNING AND IMPLEMENTATION

Definition: Planning is used to describe the process by which the objectives and methods of implementing the health and safety policy are decided. It is concerned with allocating resources (eg money, time or effort) to achieve objectives and decide priorities. It ranges from general topics dealing with the direction of the

whole organisation to detailed issues concerned with standard setting and the control of specific risks.

Key Issue: Are there adequate processes to generate plans and performance standards to implement the policy?

- Is there an overall plan or programme to progress of health and safety issues within the organisation?
- Does the plan indicate that resources are being allocated proportionately and appropriately, ie, are the priorities the right ones?
- Are individual health and safety targets set for managers and supervisors, and if so are they adequate and appropriate and do they support the overall plan and programme on health and safety for this topic?
- Are there appropriate hazards/risk assessment and performance standard setting **processes** to cover the full range of risks? (Inset 10 in HSG65 outlines the range of topics for which performance standards may be required).
- Are the risk control arrangements devised adequate and appropriate?
- What are the strengths and weaknesses in the current position?

Implementing

- Are the risk control measures consistently implemented and effective?
- What is your judgement of the overall compliance with standards and legal requirements?
- Based on the above assessments are adequate resources being devoted to health and safety and are sensible priorities being established?
- What are the strengths and weaknesses in the current position?

MEASURING

Definition: Measuring means the collection of information about the implementation and effectiveness of plans and standards. This involves a variety of

checking or 'monitoring' activities.

Key Issue: Is there adequate and sufficient measurement of performance both before and after accidents/incidents?

Active Monitoring

- Is there sufficient and appropriate active monitoring of performance to check on the implementation of plans and standards? Is it sufficiently focused by frequency and/or detail in relation to risk priorities?
- Is the active monitoring and checking undertaken by line managers?
- Are adequate responses made to situations where it is discovered there are imminent risks to individuals?
- Is there selective investigation of sub-standard performance to ensure that those issues with significant serious potential are investigated thoroughly?
- Do the investigation systems consider both immediate and underlying causes?
- Are corrective and remedial actions identified and prioritised and dealt with in order of importance?
- Is there any cross-analysis of the information from active monitoring to identify common failures, features and trends?
- What checks are made by line management to ensure the quality and quantity of the operation of the active monitoring system?
- What are the strengths and weaknesses in the current position?

Reactive Monitoring

- Is there an adequate reactive system to investigate accidents and incidents?
- Does the reactive monitoring include adequate reporting of: injuries, and cases of ill health, other loss events (if a total loss approach is adopted); all other incidents including all those with potential for injury, ill health or loss; hazard reporting and other defect reporting; the reporting of other weaknesses or omissions in performance standards during the course of work?

- Is the reactive system "owned" and operated by line managers?
 - Are adequate emergency and first aid responses made to deal with sources of imminent danger?
 - Is there a selective investigation system which ensures that events with significant serious potential as well as serious consequences are investigated more thoroughly?
 - Are investigations thorough, identifying both immediate and underlying causes?
 - Are the correct remedial actions identified as a result of investigation and prioritised and dealt with in order of importance?
 - Is there analysis of data to identify common failures, features and trends?
 - Are suitable checks made by line management to ensure the quality and quantity of the reactive system?
 - What are the strengths and weaknesses in the current position?
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REVIEWING

Definition: Reviewing is used to describe activities involving judgements about performance, and decisions about improving performance. Reviewing is based on information from 'measuring' and 'auditing' activities.

Key Issue: Is there adequate and sufficient performance review to ensure that lessons learned are effectively put into practice to improve performance throughout the organisation?

- Is appropriate action taken to remedy defects and weaknesses identified by the measuring processes?
- Are effective follow up systems and checking procedures used to ensure that all remedial actions are carried out?
- What is the current position with the backlog of remedial actions?
- What overall performance reviews on this topic are submitted to senior

management and what is their nature, extent and frequency?

- Are performance indicators used to assess performance?
 - What are the strengths and weaknesses in the current position?
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AUDITING

Definition: Auditing is the structured process of collecting independent information on the efficiency, effectiveness and reliability of the total health and safety management system and drawing up plans for corrective action.

Key Issue: Is there adequate auditing of the health and safety management system?

- Is there an adequate, reliable and comprehensive auditing system in place to audit the health and safety management system?
- Does the system assess the adequacy of the core management processes of health and safety management?
- Does the audit process assess the adequacy and completeness of the arrangements for identifying suitable controls for the full range of risks encountered?
- Does the audit system also assess the implementation and effectiveness of risk controls?
- Does the audit process have credibility and is it supported by senior management?
- Are audits carried out only by suitably trained, experienced and competent auditors?
- Is there a clear audit methodology which ensures consistency and reliability?
- Are audits undertaken by those who are "independent" of the management of the area audited?
- Are audit recommendations suitably prioritised and fully implemented?

- What are the strengths and weaknesses in the current position?
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• Footnote: Whilst this guidance document predominantly addresses management for safety for operating plants and sites, the principles apply equally to the effective management for safety of decommissioning and waste management.