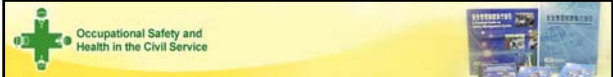PROVISION OF TRAINING ON SAFETY
MANAGEMENT SYSTEM FOR CSB

How to develop and implement SMS
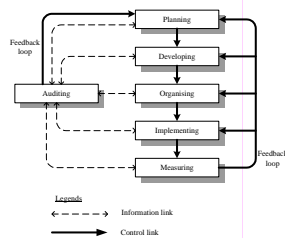- Initial Status Review
- Safety Plan

Before establishing or enhancing the Safety Management System in government bureaux/departments, relevant personnel may want to examine the present situation. One way of assessing the existing occupational safety and health performance of an organisation is to have an initial status review. Results of the review will become a baseline for improvement and facilitate planning for future development.

How to establish a safety management system?

1. Develop
- **Planning**
  - Initial status analysis
  (only in the first time)
  - Periodic status analysis
  - Risk assessment

- **Developing**
  - Safety Policy
  - **Safety Plan**

Planning
Developing
Organising
Implementing
Measuring
Auditing
Feedback loop
Feedback loop

Legends
←------→ Information link
———→ Control link

How to develop a safety management system?

- *Development* of a safety management system involves **planning and developing.**
- The planning stage answers the questions "Where are we now? And " Where do we want to be?"

Requirements in planning stage

- To identify the safety and health objectives
- to set out a clear policy on the safety and health objectives
- To estimate in the financial and other resources implication

---

Current state versus future state

- Where does your organization fall on scale measuring excellence in safety and health performance?
- What standards, goals and targets has management set?
- What's their time frame?
- What does that say about your needs and how the audit should be conducted?

How to achieve the targets?

- Conduct initial status analysis (review) for the first time in identifying the safety and health objectives
- Carry out preliminary hazard analysis
- Establish measurable performance standards for monitoring performance; and
- Conduct periodic status analysis(review)

Initial Status Review(ISR)

- BS 8800 recommended that organisations should carrying out ISR of their existing arrangements for managing OSH
- Labour Department uses the term 'Initial Status Analysis (ISA)"

Initial Status Review(ISR)
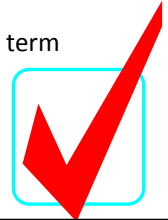
Initial Status Review(ISR)

- **Definition**

  ISR is a review of existing arrangements for managing OSH. It provides information that will influence decisions on the scope, adequacy and implementation of the current SMS as well as providing a **baseline** from which progress can be measured. (BS8800)

Baselines

- Baselines are critical components of the improvement process. They provide the points of reference for all improvement efforts based on managements communication of organization expectations tied to measurements and standards of excellence.
- The intent of safety baselines is to develop a comprehensive picture of safety conditions and problems which then serves as a starting point for improvement efforts and follow-up actions.

Where are we now and where should we be?

- Organizations should use ISR and risk assessments to compare their existing arrangements and risk controls with:
  - requirements of relevant legislation dealing with OHS management issues;
  - existing guidance on OHS management available within the organization;
  - best practice and performance
  - efficiency and effectiveness of existing resources devoted to OHS management

Initial Status Analysis(ISA)

- F&IU(Safety Management) Regulation recommends ISA should compare the existing arrangements with:
  - the requirements of relevant legislation
  - the existing guidance
  - the best trade practice and trade performance
  - the efficiency and effectiveness of existing **resources** devoted to SMS

Workshop Discussion

The aim of ISA(ISR) of an organisation is to answer the question 'Where are we now?"

- What are the adequate resources should be provided for critical safety and health issues?

Adequate resources should be provided for critical safety and health issues such as the:

- design, provision and maintenance of a safe place of work for all employees;
- design, provision and maintenance of safe means of access to and egress from each part of the workplace;
- design, provision, and maintenance of any article, plant, equipment or machinery for use at work in a safe manner;
- provision of systems of work that are planned, organised, performed, maintained or revised, so as to be safe, particularly for safety-critical process operations or services;
- performance of ongoing hazard identification and risk assessments, and compliance with the general principles of prevention as set out in the legislation;
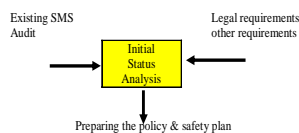

Adequate resources should be provided for critical safety and health issues such as the:

- provision and maintenance of welfare facilities and PPE;
- preparation of emergency plans and the provision of first-aid training;
- reporting of accidents and dangerous occurrences to the Authority and their investigation;
- provision and dissemination of safety and health information, instruction, training and supervision as required;
- operation of safety and health consultation, employee participation and safety representation programmes;
- review and keeping up-to-date the safety and health policy in order to prevent adverse effects on the safety and health of employees from changing processes, procedures, and conditions in the workplace;

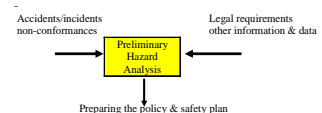**Adequate resources should be provided for critical safety and health issues such as the:**

- appointment of people responsible for keeping safety and health control systems in place and making them aware of their responsibilities;
- establishment of monitoring arrangements, including safety and health inspections and audits, which should be used by the employer to ensure ongoing compliance with legal duties, responsibilities and controls;
- development of in-house safety and health competence;
- employment of external safety and health experts as required;
- use of standards, codes of practice, guidelines, or industry practices;
- co-operation required from employees and disciplinary procedures for noncompliance.

First Step : ISR(ISA) Questionnaire

Existing SMS Audit   →   Initial Status Analysis   ←   Legal requirements other requirements

Preparing the policy & safety plan

- Develop an ISR Questionnaire
- Questionnaire covers the identification of legislation, guidance, code of practice and resources
- Send the ISR Questionnaire to Department
- Obtain the ISR Questionnaire with relevant documentation
- Clarification of answers of the questions if required

Second Step: Preliminary Hazard Analysis

Accidents/incidents non-conformances   →   Preliminary Hazard Analysis   ←   Legal requirements other information & data

Preparing the policy & safety plan

- Visit the workplace and conduct a PHA.
- Basic steps include:
  - to classify work activities i.e. to prepare a list of work activities and gather information
  - to identify hazards:
  - to determine risk
  - to assess the existing control and residual risk
  - to suggest risk elimination or control measures and priority

The modern office environment presents an array of potential hazards that can be avoided by taking simple precautions.

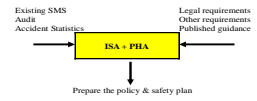|	
1. OFFICE ENVIRONMENT • Temperature and air conditioning • Humidity • Ventilation • Contaminated air • Passive smoking • Ozone • Photocopiers • Sick building syndrome • Lighting • Colour • Office floor space **2. SAFETY IN THE OFFICE** • Office accidents • Manual handling	**3. KEYBOARD EQUIPMENT** • dimensions for seated workstations • Area of work-surface • Volume of leg-space • Viewing distance to work • Seat pan height • Glare and reflection • Using a mouse • Keyboard and telephone operations **4. REST BREAKS AND EXERCISE** • Eyestrain • Muscle care and preparation

---

Third Step: Establish measurable performance standards

Existing SMS
Audit
Accident Statistics

Legal requirements
Other requirements
Published guidance

ISA + PHA

Prepare the policy & safety plan

- Gap Analysis
  - Identify the standard required
  - Identify the major potential risks
  - The existing arrangement
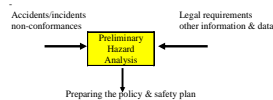 - Gaps and recommendations
- Writing Gap Analysis Report

Planning is essential for the implementation of safety and health policies.

- Should include steps to ensure legal compliance and procedures for dealing with emergency situations
- Using legal requirements and benchmarking to make comparisons
- Profiling organisation's safety and health risks
- Decide what the priorities are and identify the biggest risks.

Profiling organisation's safety and health risks

Consider all activities, taking account of possible harm to:
- employees;
- contractors;
- members of the public;
- those using products and services;
- anyone else affected by the activity, such as neighbours.

Decide what the priorities are and identify the biggest risks.

Accidents/incidents
non-conformances

Legal requirements
other information & data

Preliminary Hazard Analysis

Preparing the policy & safety plan

- A vital part of the planning program is work-site analysis (preliminary hazard analysis) involving a variety of work-site examinations, to identify not only existing hazards but also conditions and operations in which changes might occur to create hazards.
- Effective management actively analyses the work and work-site, to anticipate and prevent harmful occurrences.
- Risk assessment is an important tool for more intensive analysis to identify hazards and potential hazards not previously recognized, and to determine protective measures.

Decide what the priorities are and identify the biggest risks.

Methods to identify hazards :
- Conduct a comprehensive baseline work-site surveys, recording of those hazards and potential hazards.
- Including records of injury/illness and incidents; injury/illness/incident investigations; inspections; job hazard analysis, where identification is a prelude to hazard elimination and control; regular analysis of procedures and systems of work; use of legislation, codes of practice and government guidance material; product information, safety standards, industry or trade guidance; personal knowledge and experience of managers and employees; reporting of hazards by employees, fostered by prompt attention to issues so identified; expert advice and opinion.
- Hazards are documented in a **hazard register**.

Devised a system for Risk assessment:
- Consideration of a range of factors, including nature of the hazard, health effects, the likely severity of injury, the number of employees exposed to the hazard, work organisation, layout and general condition of the work environment, training and knowledge needed by the person to work safely in that environment, and the need for control measures.
- Hazard analysis and risk assessment is **a continuous process**, with reassessment upon change in the workplace or the availability of new information on the hazard, and the conduct of periodic safety and health analysis reviews to monitor the effectiveness of controls and identify any further hazards.

Risk Control
- When considering risk controls, discuss the issues with workers and think about what is already being done, then compare it with the industry standard
- The risk assessment might have to concentrate more on the broad range of risks that can be foreseen:
  - where the nature of the work may change fairly frequently or the workplace itself changes and develops (such as a construction site);
  - where workers move from site to site.

Risk Control
- Where feasible, hazards are prevented by effective design of the jobsite or job.
- Where it is not feasible to eliminate them, they are controlled to prevent unsafe and unhealthy exposure.
- Effective management prevents or controls identified hazards and prepares to minimize the hard from job-related injuries and illnesses when they do occur.

Documentation

- Systematic documentation conveys management expectations and work instruction to employees.
- Can be stand-alone or as part of the safety management system.

Formulate a safety plan to fulfill safety policy, objectives, and targets.

The plan should include the following:
- setting clear performance standards;
- defining work programmes – the plan for achieving each objective;
- designating responsibilities;
- setting time frames for tasks to be completed.

Safety Management Plan Overview

Safety Planning as Management Tool
- *Setting of goals, targets and standards to achieve objectives.*
- *Selecting the best strategies to meet objectives from among a series of alternatives.*
- *Legal requirements, organizational resources and the degree of risk associated with the task or operation are factors to consider.*

Safety Management Plan Overview

Safety Planning as Management Tool
- *Adoption of a risk assessment process.*
- *Deciding in advance 'what to do', 'how to do it', 'when to do it' and 'who is to do it'.*
- *Help to focus and maintain attention on organization objectives, ensure economical operation maintaining the best use of resources and exercise management control.*

Safety Management Plan Overview

Types of Plans and Corporate Planning
- *Strategic plans, management plans and operational plans.*
- *Coordination and implementation of these three types of plans is known as corporate planning.*
- *Requires an assessment of the relative strengths and weaknesses within the organization and an appraisal of opportunities and threats posed by the external business environment, both of which will affect the achievement of objectives.*

Key Contents of Safety Management Plan

- *Successful implementation of an organization's safety management system requires plans to be developed that clearly set out how the objectives and targets for the introduction of a management system will be achieved by.*
  - *Assigning responsibilities for achievement of objectives and targets at relevant functions and levels of the organization.*
  - *Outlining the means and timeframe by which objectives and targets are to be achieved.*

Key Contents of Safety Management Plan

Objectives, Targets and Performance Indicators
  - Examples
- *Objective: Eliminate injuries associated with manual handling.*
- *Target: Zero injuries in a financial year.*
- *Indicator: Percentage of injuries associated with manual handling.*

Key Contents of Safety Management Plan

Objectives, Targets and Performance Indicators
  - Examples
- *Objective: Provide safety induction training for all new employees.*
- *Target: Training to be provided in first week of employment.*
- *Indicator: Percentage of new employees given safety induction training in first week.*

Key Contents of Safety Management Plan

Setting Objectives
- *Setting objectives in relation to safety policy, the arrangements for its implementation and the performance standards to be achieved.*
- *Assessment of current procedures and practices is required here and will identify internal and external safety strengths and weaknesses.*

Key Contents of Safety Management Plan

Setting Standards
- *For securing control, cooperation, communication and competence.*
- *As basis for setting safety targets for departments and individuals.*

Key Contents of Safety Management Plan

Procedure for Setting Safety Standards
- *The identification of hazards, i.e. the potential causes of harm.*
- *The assessment of risk, i.e. the likelihood that harm will be realized.*
- *The elimination or control of risk by determining suitable preventive and protective measures.*
- *The implementation of the control measures through the provision of resources, information, training and supervision, etc.*
- *The monitoring and review of the implementation programme to provide a basis for measuring achievement and improvement.*

Key Contents of Safety Management Plan

Evaluation of Alternative Strategies
- *Aim to select the most appropriate and efficient method.*
- *Considering various strategies for risk prevention and control and evaluating each mechanism to determine the most workable.*
- *Decision making is required.*

Key Contents of Safety Management Plan

Steps in Decision Making Process
- *Diagnoses and definition of the problem.*
- *Development of alternative preventive and protective measures.*
- *Evaluation of alternative solutions.*
- *Selection of the best alternative.*
- *Implementation of the decision.*

Key Contents of Safety Management Plan

Monitoring to Evaluate Success
- *Proactive strategies: inspections, tours, surveys and audits, etc.*
- *Reactive strategies: accident, incident, ill health and claims investigation, etc.*
- *Communication is needed to ensure that sufficient management and employee feedback.*

Key Contents of Safety Management Plan

Outcome from Planning
Answers to questions:
- *What needs to be done, i.e. identifying requirements for the safety management system.*
- *What is to be done, i.e. setting clear performance criteria.*
- *Who gets it done, i.e. identifying who is responsible.*
- *When it is to be done by, i.e. setting time scales.*
- *What should be the result, i.e. identifying the desired outcome.*

WRITING THE SAFETY PLAN

- Since the safety plan is to be tailored to suit the organization (facility), the format may be varied accordingly. Suggested components of the plan are set out in the following power points, but are not exhaustive.

Plan title and authority

The plan should clearly identify:
- the name of the facility and the operator or occupier
- the identity, scope and status of the safety plan
- the location of the facility
- preparation details, including the date of preparation and other terms of reference
- authorisation details (person(s) responsible)
- contact details
- document control information.

The format of safety plan

Section	Contents
0.1	Table of Contents
0.2	Issuance Status Record
0.3	Distribution List
0.4	Control of Safety Plan
1.0	PLANNING
1.1	Hazard Identification, Risk Assessment and Control
1.2	Legal and Other Requirement

The format of safety plan

Section	Contents
1.3	Objectives
1.4	Resources
1.5	Safety Management Programme
1.6	Documentation
2.0	**DEVELOPING**
2.1	Safety Policy
2.2	Safety Policy for Individual Project

The format of safety plan

Section	Contents
3.0	**ORGANIZING**
3.1	Safety Organization
4.0	**IMPLEMENTING**
4.1	Safety Training
4.2	In-house Safety Rules
4.3	Personal Protective Equipment Programme
4.4	Emergency Preparedness

The format of safety plan

Section	Contents
4.5	Evaluation, Selection and Control of sub-contractors
4.6	Safety committee
4.7	Evaluation of Job Related Hazards
4.8	Safety Promotion
4.9	Process Control Programme
4.10	Occupational Health Programme

The format of safety plan

Section	Contents
5.0	**Measuring**
5.1	Safety Inspection
5.2	Accident and Incident Investigation
6.0	**Auditing**
6.1	Safety Audit/Review
6.2	Continual Improvement

The format of safety procedure

- Purpose:
- Scope
- Responsibility
- Definitions
- Associated documents
- Instruction for forms
- Procedure
- Checklist

49

How to make safety and health procedures

- Step 1   What are your needs for procedures
- Step 2   Collect information about the activity
- Step 3   Prepare procedure
- Step 4   Implement the procedure
- Step 5   Review the procedure

Safety procedures

50

Step 5 Review

When you have found out why a procedure is not working, you can decide to:

- Revise the procedure - perhaps your needs have changed
- Develop a new procedure
- Change your standards
- Determine whether you need to change your work procedure

Safety procedures

51

Emergency preparedness and response

- Contingency plans need to be established to mitigate the effects of any emergency that might affect the organization. As well as assessing the risks posed by the organization's own operations and practices, the organization also needs to be aware of hazards posed by neighbours, which may affect the organization.
- Organizations need to return to business as soon as possible, so they need to put in place plans for minimizing disruption following an emergency evacuation. Typical areas to be considered include:
  - Recovery of software for information technology systems.
  - Safe recovery of undamaged plant and equipment from the original site.
  - Maintaining the safety management system at temporary sites.
  - Reviewing the operation of the safety management system in the light of the emergency to identify any areas of failure.

Writing the emergency plan

1. **Plan title and authority**
2. **Table of contents**
3. **Aim and objectives of the plan**
4. **Introduction**
   - *Facility description*
   - *Definition of an emergency*
5. **Hazards**
6. **Types and levels of emergency**
7. **Emergency functions and organisational structure**
   - *Roles of agencies, groups, industry and the community*
   - *Facility emergency control*
   - *Identification of emergency people*
8. **Emergency procedures**
9. **Emergency resources**
   - *Facility emergency control centre*
   - *Emergency equipment*
   - *Emergency alarm system*

10. **Activation of the emergency plan**
    - *Initial advice to the emergency services*
    - *Emergencies with potential for environmental impact*
    - *Special cases*
11. **Reporting of an emergency**
12. **Termination of an emergency**
13. **Management of the plan**
14. **Supporting information**
    - *Safety, health and environmental information*
    - *Location maps*
    - *Site layout plans*
    - *Emergency contact numbers*
    - *Other supporting information*
    - *Glossary of terms and abbreviations*

Part 2

MANAGEMENT OF THE EMERGENCY PLAN

1. **Training and education**
2. **Support action**
3. **Operational control**
4. **Record keeping**
5. **Documentation and documentation control**
6. **Investigation following an emergency**
7. **Exercises and testing of the plan**

8. **Implementation of the plan**
9. **Monitoring and review**
10. **Auditing**
11. **Updating of the plan**

Key actions in implementing safety plan effectively

Top management
- should take positive steps to address human factors issues and to encourage safe behaviour. They need to recognise that the prevailing health and safety culture is a major influence in shaping people's safety-related behaviour.
- Make the necessary resources available to successfully implement safety plan. Resources include human resources and specialised skills, organisational infrastructure, technology and financial resources.

Middle and Front line Management
- Keep any documentation proportionate to the complexity of the risks concerned
- Agree realistic timescales for implementation of any plans with workforce.
- Ensure all concerned are clear on their role and responsibilities, and understand the steps they need to undertake to meet the objectives.
- Demonstrate commitment to delivery at all levels within the organisation, using a variety of communication channels to engage workforce in implementation.
- Keep people informed of progress and maintain a focus in the key risks and issues.
- Measure progress of implementation against clear milestones or performance indicators and make necessary adjustments if there is early evidence that requirements are not being met.
- Make full use of expertise available on safety committees and other forums) to deliver.

Key actions in implementing safety plan effectively

Worker consultation and involvement
- Involve and consult staff/workers and representatives throughout any implementation, by ensuring you have systems in place that allow workers to raise concerns and make suggestions, eg staff suggestion schemes, online communities, committees etc.
- Make sure you consider all feedback, take action or provide a prompt response.

Competence
- Ensure the competence of individuals is developed through experience and training, managers are providing coaching and the organisation learns by making use of specialist advice as required.
- Use the results of progress reviews to feed into future training plans – this helps with continuous improvement and avoids complacency.