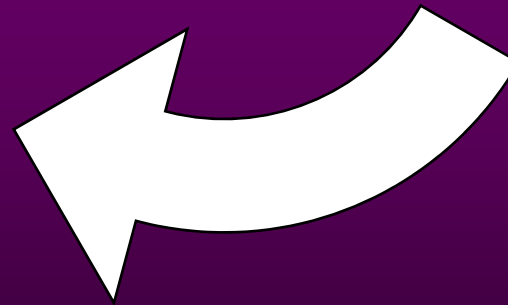


Management In HSES



Objective

- **This course is to provide intensive instruction in the basic skills needed to manage HSES.**

Management in HSES

- I. **HSES Management System**
- II. **Leadership Commitment**
- III. **Responsibility of Line/Staff Management**
- IV. **P-D-C-A**
- V. **Quality in HSES**
- VI. **Proactive vs Reactive**

Management in HSES

- VII. HAZID & Risk Analysis**
- VIII. Incident Causation**
- IX. HSES Culture**
- X. Management of Change**
- XI. Review & Audit**
- XII. HSES & Profitability**

I. HSES Management System

- What is HSES Management System?

HSES Management System is an organized and Structured means of ensuring that an organization is capable of achieving and maintaining high Standards of HSES performance.

I. HSES Management System

- **What is the factor to be considered?**
 - Systematic Documentation and Filing
 - Well Structured Organization filled with sufficient competent individuals
 - Systematic management of site conditions including,
 - Health implication
 - Security control
 - Environmental control and monitoring
 - Site safety concerns

II. Leadership Commitment

- **Top Management
Commitment as Vision**
- **Management is HSE
Driving Force**
- **Playing Leadership from
Top to Bottom**
- **Creation of HSE Culture**
- **Establishing Management
Accountability**

II. Leadership Commitment

- **Quality of Excellent Leadership**

“Leadership is much more of an art, a belief, a condition of heart, than a set of things to do.”

Max De Pree “Leadership is an Art”

- **Proven Successful Leaders**
- **Empowerment**

III. Responsibility of Line/Staff Management

Line Function

Those that have a responsibility for an operational function that directly contributes to production and outputs.

Staff Function

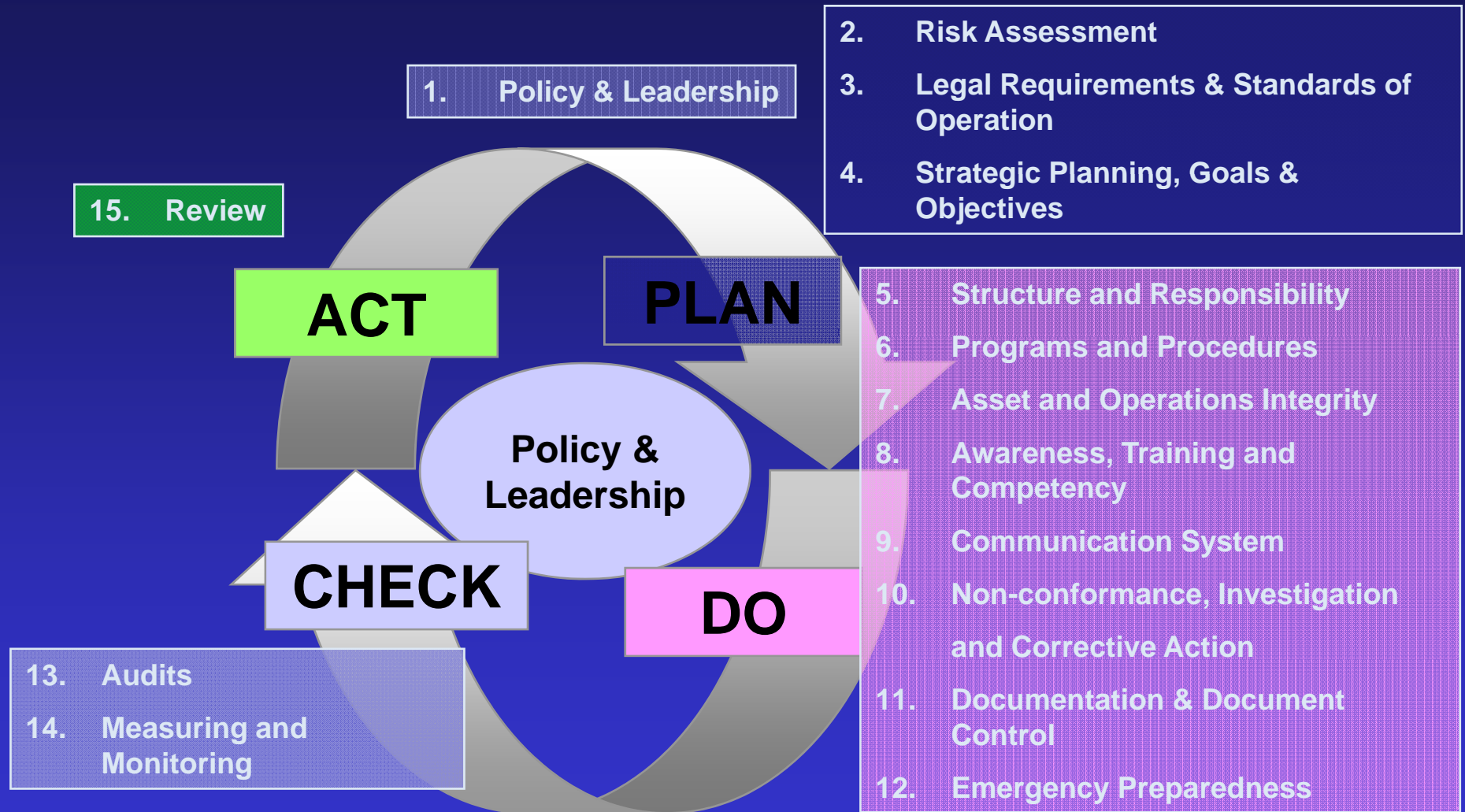
Those that do not contribute directly to production and output, but have a strong influence on organizational effectiveness. Staff functions often exist to help executives or line managers execute legal or administrative functions when the executives do not have the time or expertise.

III. Responsibility of Line/Staff Management

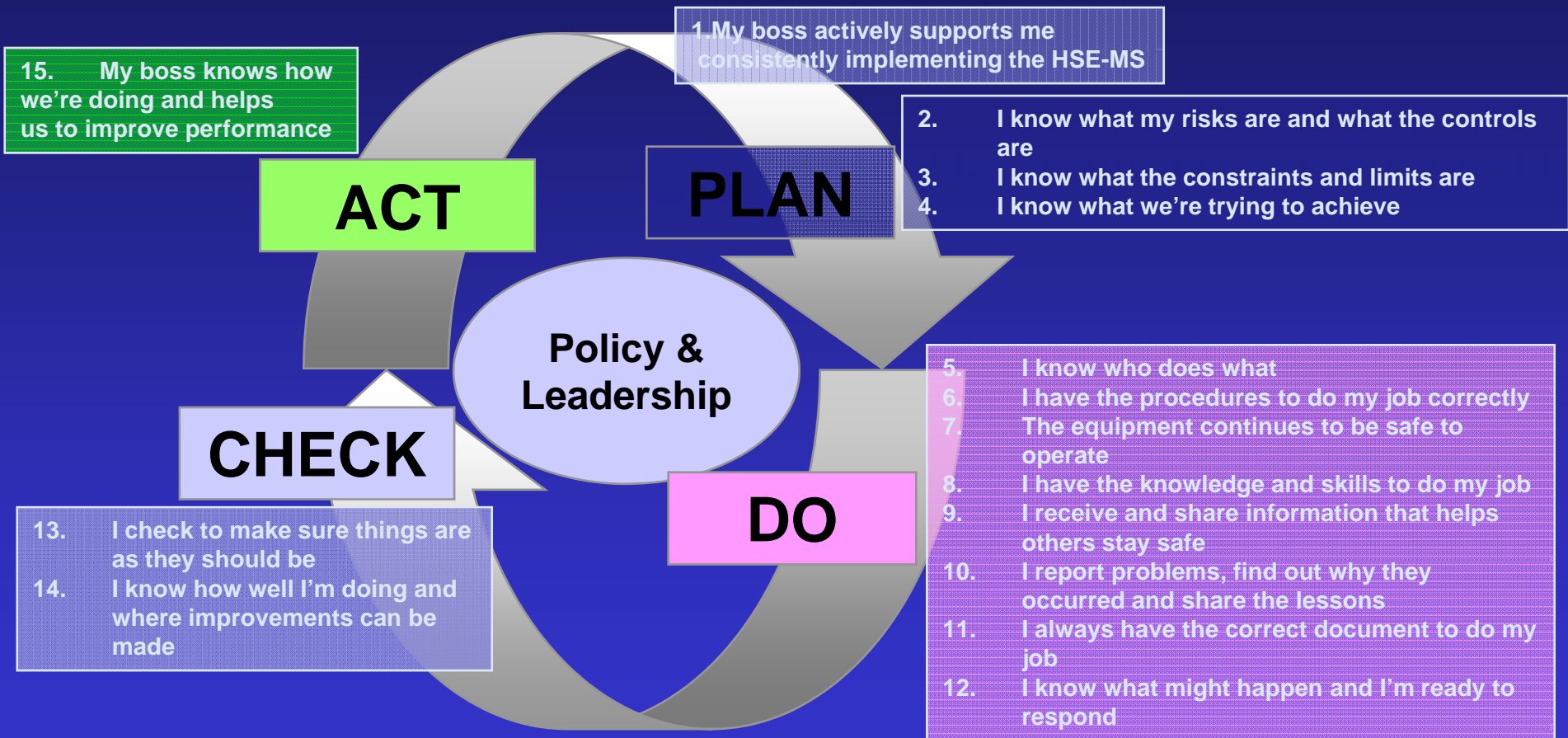
- Question? L or S?

1. Develop incident prevention and loss control procedure -- L
2. Make recommendation based on injury statistics reports -- S
3. Conduct Job Safety Analysis -- L
4. Hold workplace safety meetings -- L
5. Advise management in the formulation of safety policy -- S
6. Ensure compliance with regulatory standards -- L

IV. P-D-C-A



IV. P-D-C-A

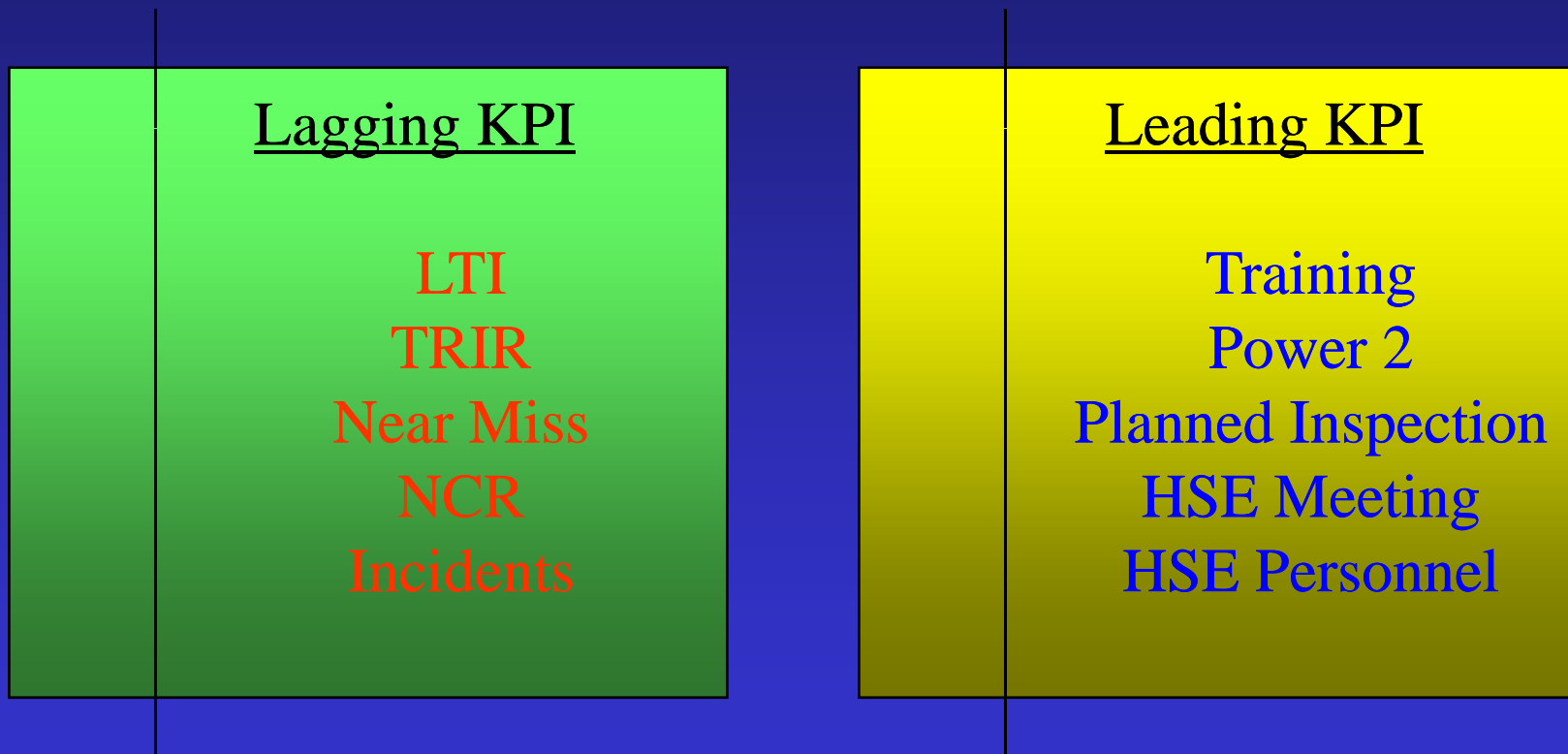


V. Quality in HSES

- **How to acquire Quality in HSES?**
 - **Commitment**
 - **Communication**
 - **Coordination**
 - **Collaboration**
 - **Training**

V. Quality in HSES

■ How to measure Quality in HSES?



VI. Proactive vs Reactive

■ Proactive Monitoring

- Regular monitoring of progress in achieving objectives and targets
- Performance profile against defined criteria
- Periodic Inspection and testing of facilities, protection systems and equipment against their assigned performance standard
- Periodic examination of document records and audit trails.
- Observation of work practice and the behavior of the first line supervisors to assess compliance with safe systems of work
- Etc.,

VI. Proactive vs Reactive

■ Reactive Monitoring

- Injuries resulting from incidents
- Medical emergencies and evacuation
- Other loss events such as equipment or environmental damage
- Incidents including near misses
- Previously unidentified hazards and effects
- Changes that have been missed
- Cases of Non-compliance
- Etc.,

VI. Reactive vs Proactive

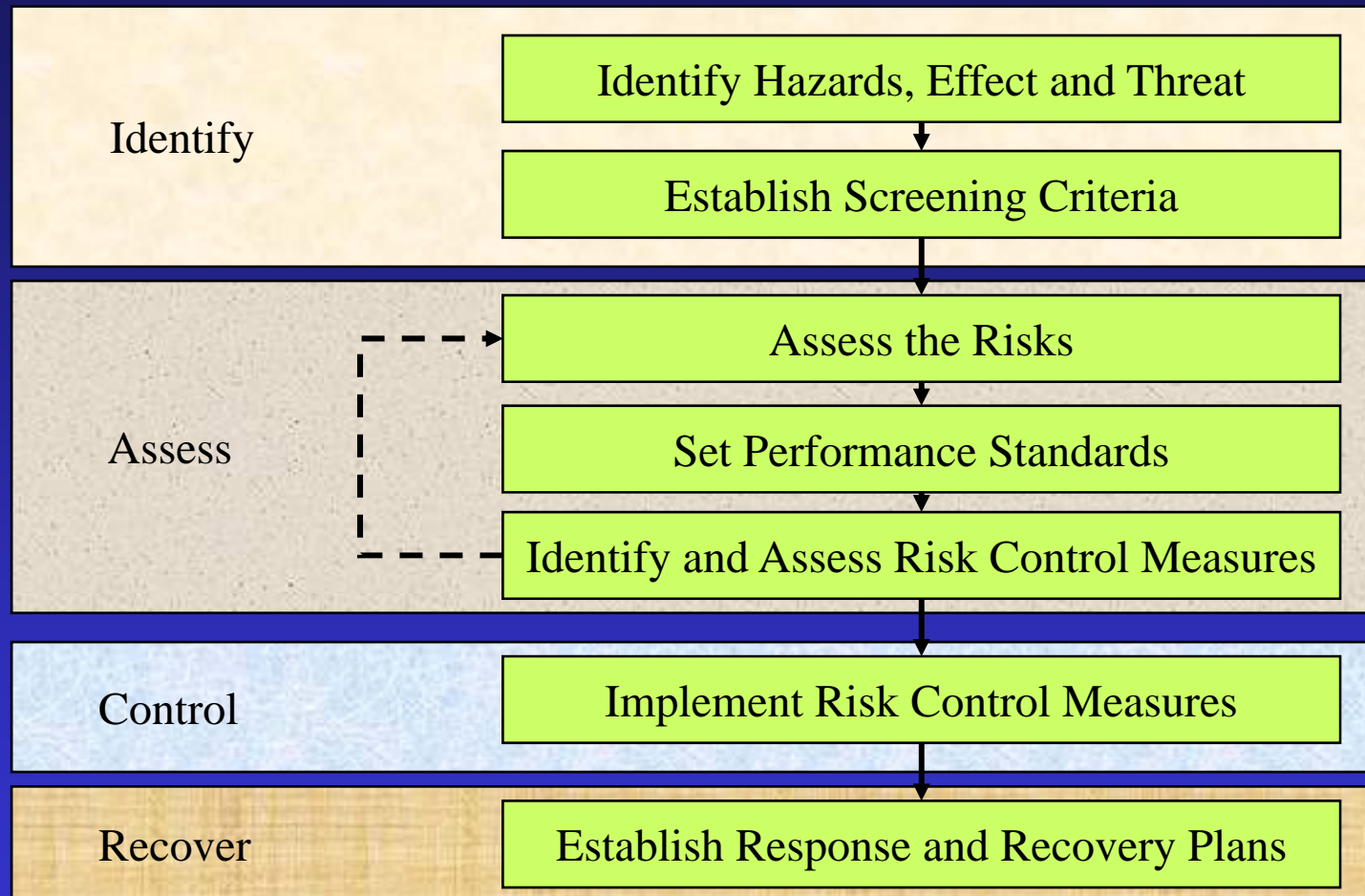
Proactive measures provide information about the efficiency and effectiveness of activities, actions, or processes *that precede incidents* and positively influence HSES performance.

Reactive measures are *post-incident* measures that focus on past failures and past incidents.

Proactive measures are effectively implemented over a certain period of time, corresponding reactive measures will decrease.

Be Proactive

VII. HAZID & Risk Analysis



VII. HAZID & Risk Analysis

Risk Assessment Matrix Table

HSE Risk Assessment Matrix										
Potential Consequence Severity					Probability of Occurrence					
Score of Level	People (P)	Assets (A)	Environment (E)	Reputation (R)	1	2	3	4	5	6
					Never heard of in industry	>3 Million hours in Co. or heard of in industry	1-3 Million hours in Co.	250K-1 Mill. Hours in Co.	100K-250K hours in Co.	<100K hours in Co.
0	No Injury/ Near miss	No Damage/ Near Miss	No Effect/ Near Miss	No Impact/ Nearmiss	LOW RISK CATEGORY: SCORE OF 0 - 3 FURTHER ACTION REQUIRED					NO
1	Slight Injury/Illness (First Aid Treatment Case)	Slight Damage	Slight Effect	Slight Impact	MEDIUM RISK: SCORES OF 4 - 9 Reduce in so far as is reasonably practicable					
2	Minor Injury/Illness (Medical Treatment Case)	Minor Damage	Minor Effect	Limited Impact						
3	Major Injury/Illness (Lost Time Injury/Illness)	Localised Damage	Localised Effect	Large Impact	HIGH RISK: SCORE OF > 9 Unacceptable risk, must be reduced as far as is practicable					
4	Single Fatality (Fatality/Permanent Disability)	Major Damage	Major Effect	Major National						
5	Multiple Fatalities	Extensive Damage	Massive Effect	Major International						

VIII. Incident Causation

- **It must be clearly understood that the primary cause of the accident is not necessarily the most important feature; secondary causes, usually in the form of system failures will persist unless action is taken.**

VIII. Incident Causation

Primary Cause of Incident

Unsafe Act

Working without authority.

Failure to warn others of danger

Using dangerous equip.

Using wrong equipment

Failure to issue control measures

Horseplay ..etc ..etc

Unsafe Conditions

Inadequate or missing machine guards.

Defective tools or equipment

Fire Hazards

Ineffective housekeeping

Excessive noise

Poor ventilation and lighting ..etc...etc..

VIII. Incident Causation

Secondary Cause of Incident

Management System Pressure

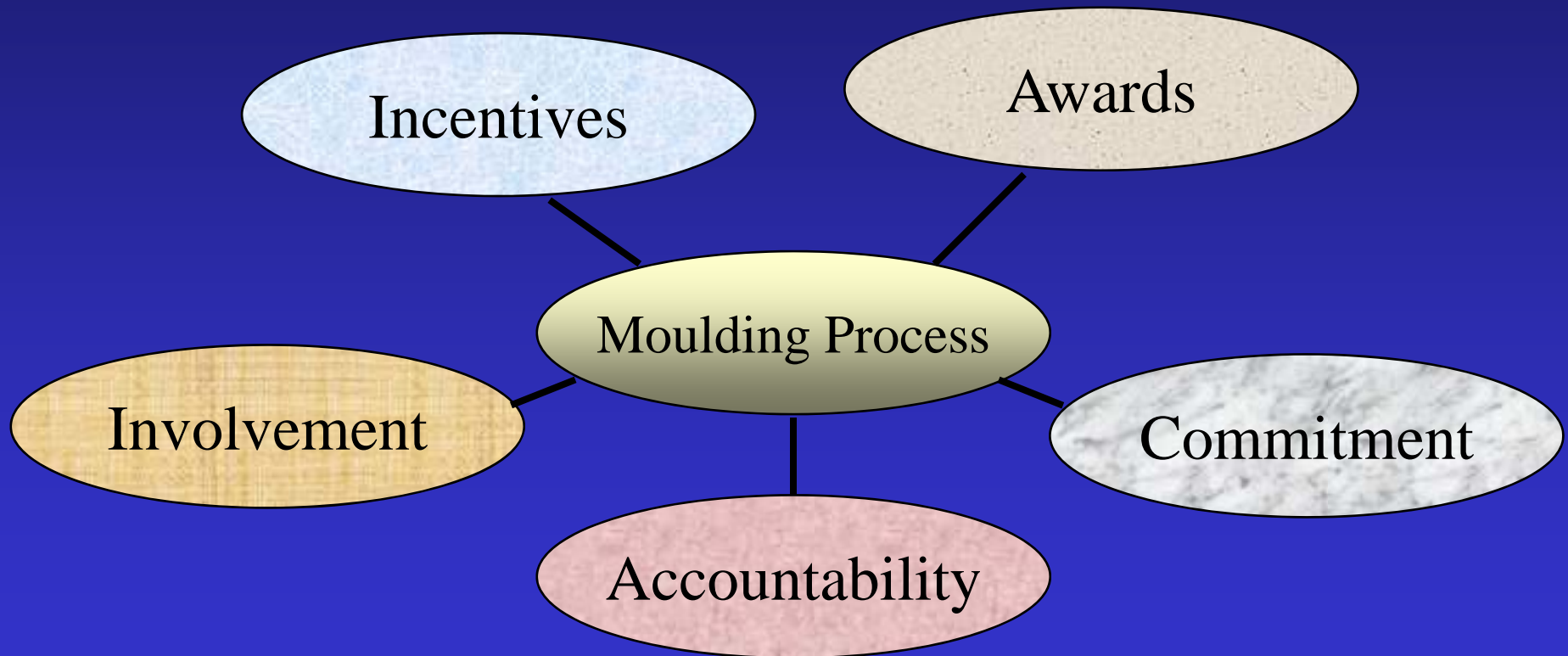
**Financial restrictions
Lack of commitment
Lack of policy
Lack of standards
Lack of training**

Social Pressure

**Group attitude
Trade customs
Tradition
Society attitudes to risk
taking
'Acceptable' behaviour
in the workplace**

IX. HSES Culture

■ How to create HSE Culture?



IX. HSES Culture

- *Communication of Management Vision and Commitment*
- *Accountability of Both Management and Employees*
- *Employee Involvement*
- *HSES Promotion*
- *Daily Talk on HSES Topics*
- *Awareness of Positive Culture Creation*

X. Management of Change

- Objectives,

To effectively and safely manage any change of process in line with the construction progress.

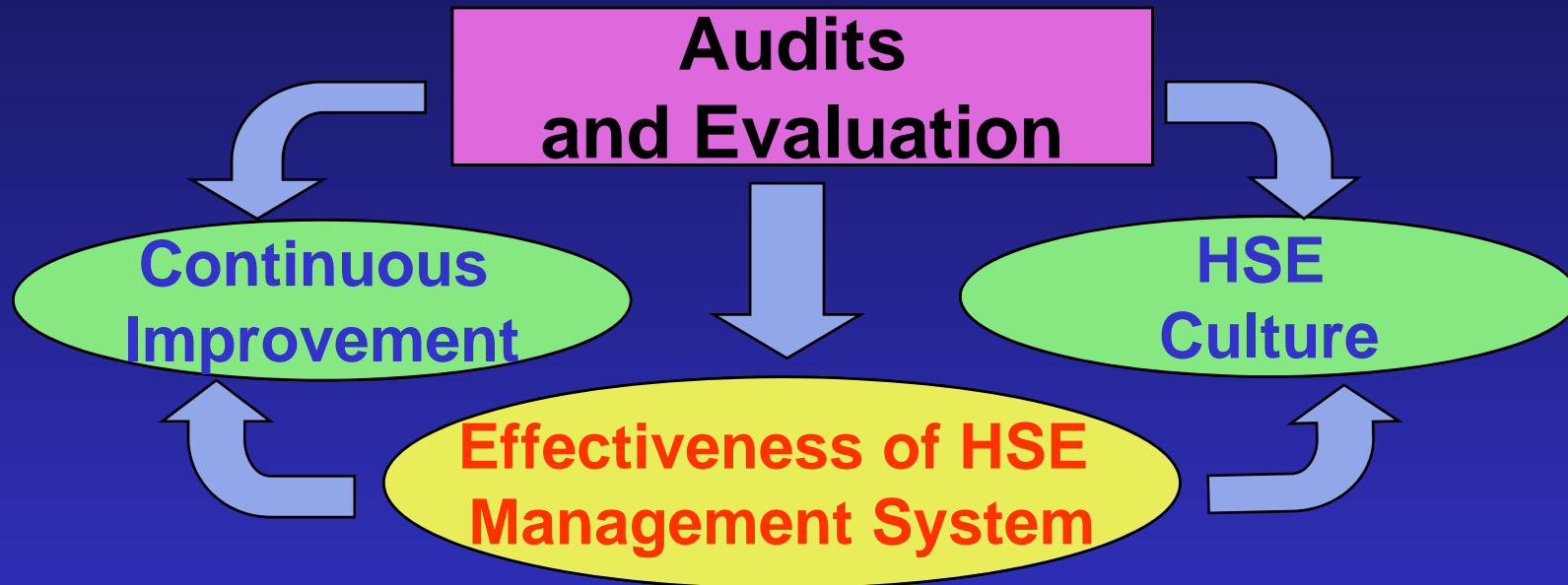
X. Management of Change

- **Identification/Notification of Change**
 - ✓ **Any proposed change will be informed**
- **Assessment of Change**
 - ✓ **JGC / Subcontractor's competent person assess the impact**
- **Communication and Approval of change**
 - ✓ **All Changes identified will be communicated**
 - ✓ **All Changes will be approved by JGC SM, CM and HSES management.**
- **Documentation**
 - ✓ **All Changes will be clearly documented to allow traceability**

XI. Review & Audit

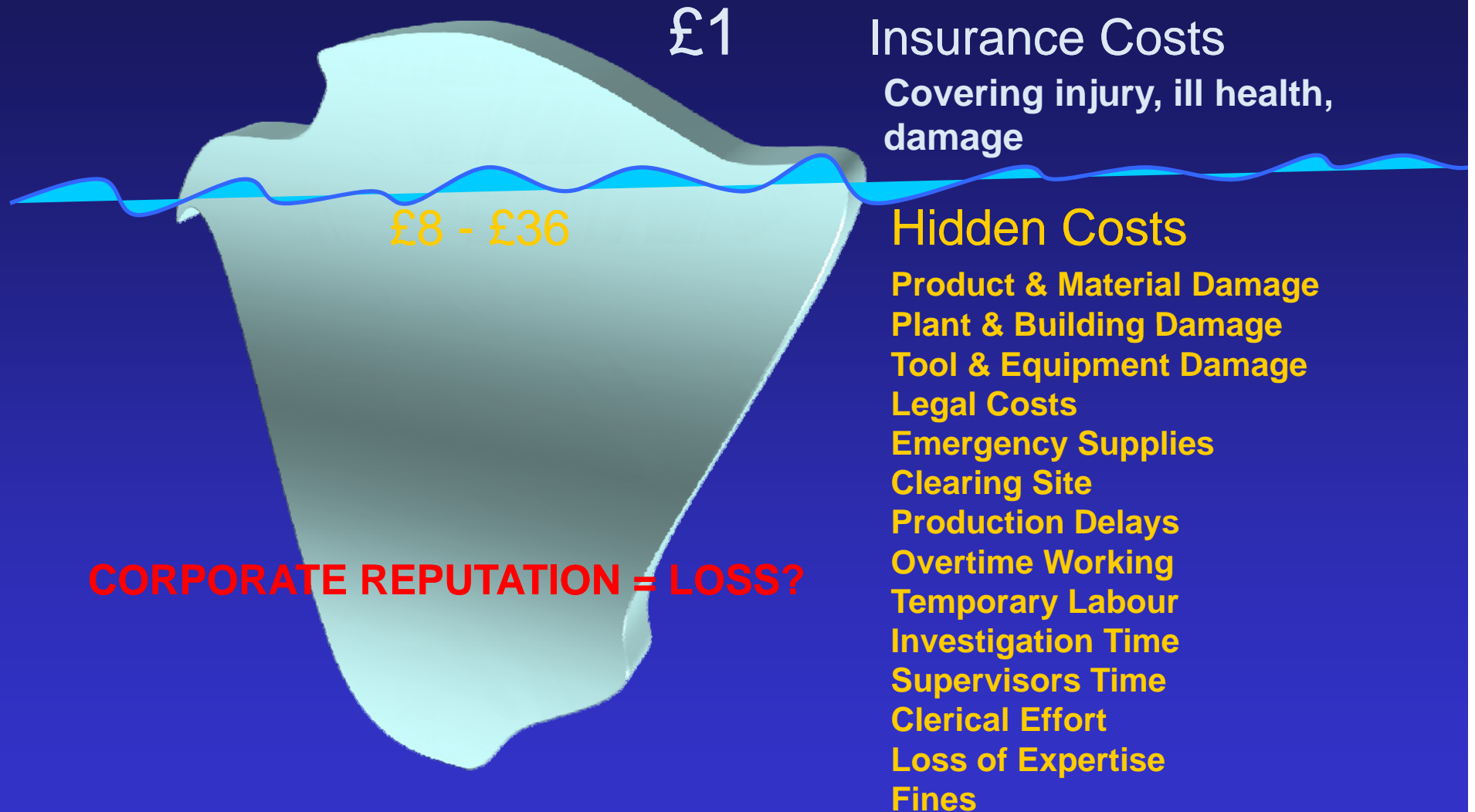
- **Providing assurance that the controls, arrangements or procedures necessary to achieve the objectives of the Management System have been established.**
- **Confirming by measuring the degree of compliance with these controls and procedures, and stimulating discussion on their continued effectiveness and improvement**

XI. Review & Audit



- Learn from research, benchmarks and reference
- Discard what did not work.
- Assess again and repeat the process

XII. HSES & Profitability



XII. HSES & Profitability

- **High Cost of Failure**
- **The threat and consequence of prosecution or other enforcement action**
- **The potential loss of future business**
- **The moral imperative – the expectations of society**
- **The incalculable cost of human suffering, much of which is so easily preventable**

Lastly,

Highest Standard of Management in HSES should be through Systematic Operation of Proactive Activities, Multi-directional Analysis and HSE Culture Creation under the robust commitment of Top Management.

Basic Principle Lies in Integration of People's Competency and Capability into the System with Communication, Cooperation and Collaboration.