

Leadership Role in Risk Management

CII-ER Safety Symposium and Exposition 2014
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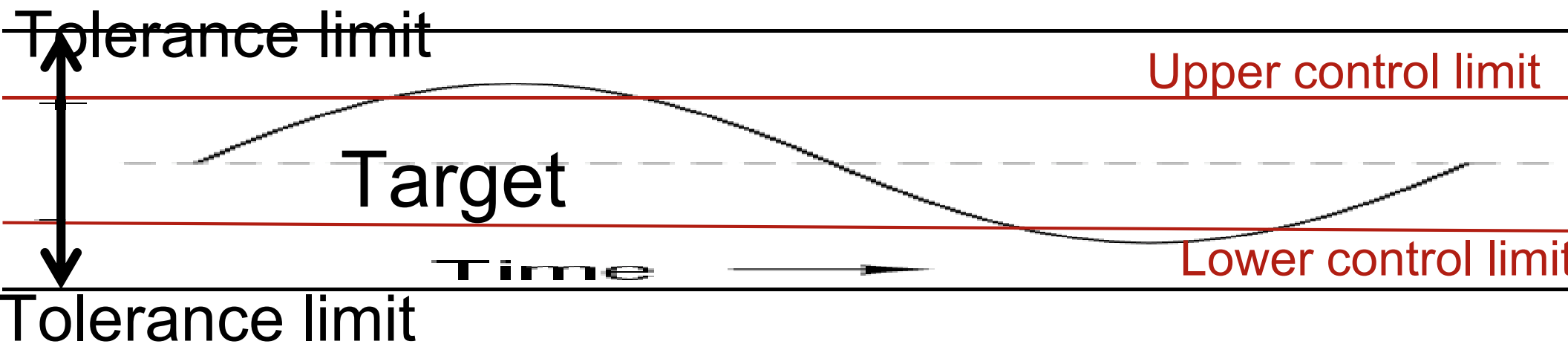
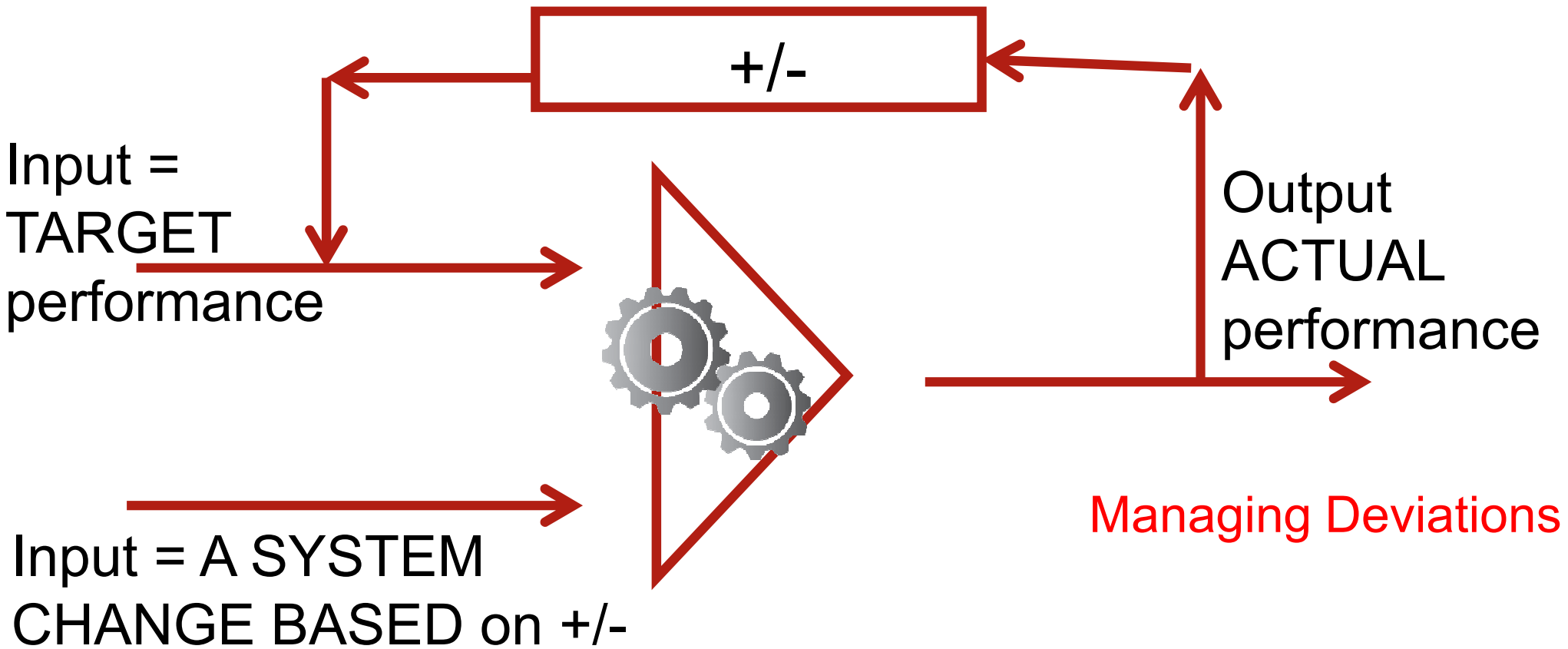


ADITYA BIRLA GROUP

Think about tomorrow, today!

Birendra Verma, Joint President & Group Head, Safety

A Basic System




How to avoid incidents ?



- Identify hazards
- Know risks – (Probabilities * Consequences)
- Risks can and must be managed.
- Losses can't be impacted effectively without managing risks

List all the potential hazards



- 
- A background image showing a volcanic eruption with a large plume of white and grey smoke rising into a clear blue sky. The foreground shows dark, rocky terrain.
- ↓ ↓ Process operations -
 - ↓ ↓ Employee health -
 - ↓ ↓ Employee safety -
 - ↓ ↓ Environment -
 - ↓ ↓ Reputation -
 - ↓ ↓ Security -

Risk Matrix



Severity	Consequences				Increasing frequency of Occurrence (Probability)				
					A	B	C	D	E
	People/ Values & Principles	Assets/ Economic Impact	Environment	Reputation	Has never occurred in our Industry	Could / has occurred in our Industry and could reoccur	Could / has occurred in our Company and could reoccur	Could / has occurred several times in one year in our Company and could reoccur	Could / has occurred several times in one year in the same place and could reoccur
0	No impact	No damage	No effect	No impact					
1	First aid case	<\$25k	Slight damage	Part of local population					
2	Medical treatment case	\$25k-100k	Local minor damage	Local population / CEO					
3	Lost time or multiple medical treatment cases	\$100-500k	Local major damage	Local news / BOD / Official Report					
4	Single fatality	\$500-1 million	Major environmental damage	National news / Board of Directors / Official Departments					
5	Multiple fatalities	>\$1 million	Massive environmental damage	International news / Shareholder /MOL/MOE / F					

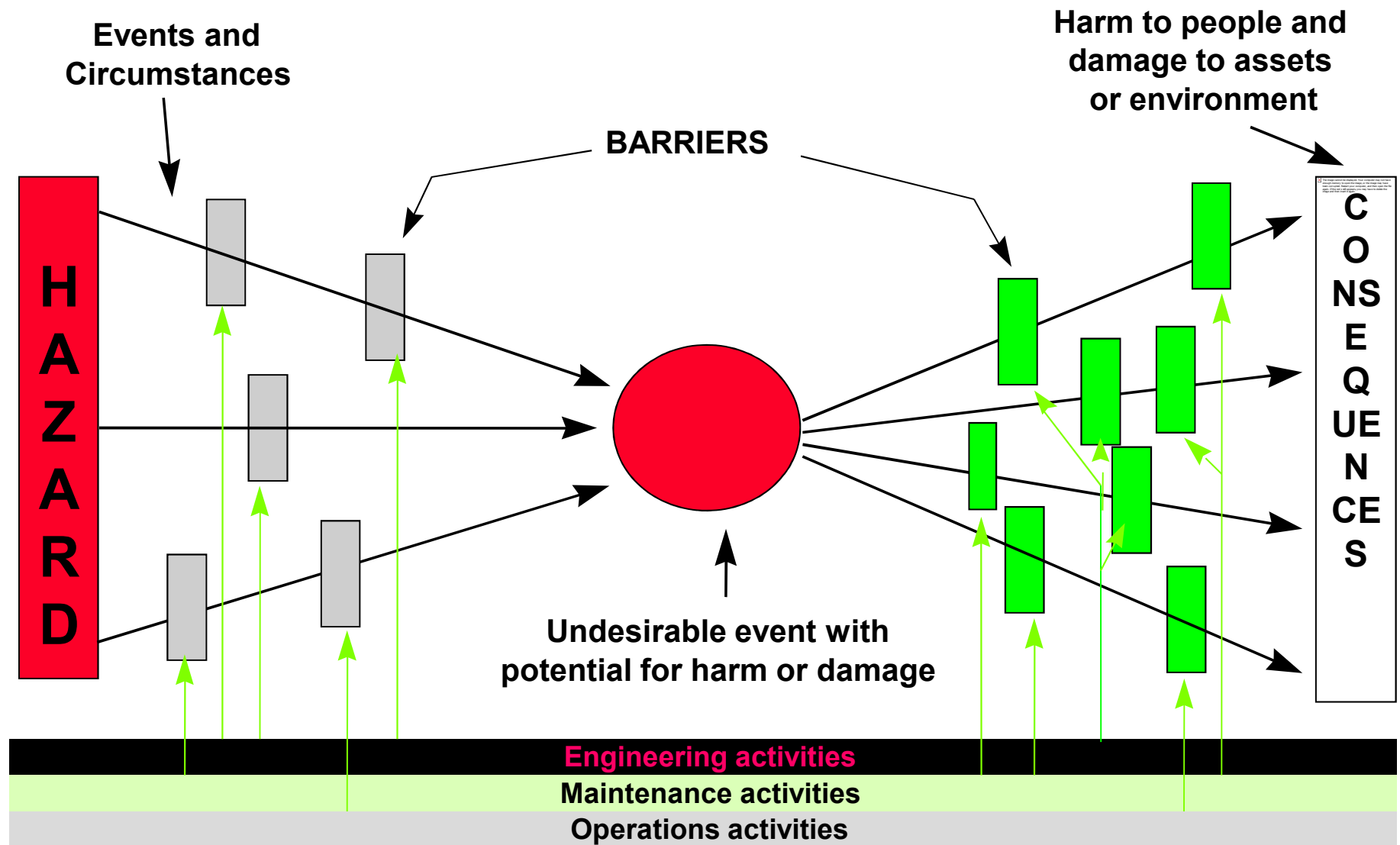
How does matrix help ?



The risk can be easily assessed by selecting a category, e.g. People, and then selecting an item from the risk matrix on the consequence screen.

	Manage for continual improvement
	Demonstrate ALARP
	Intolerable

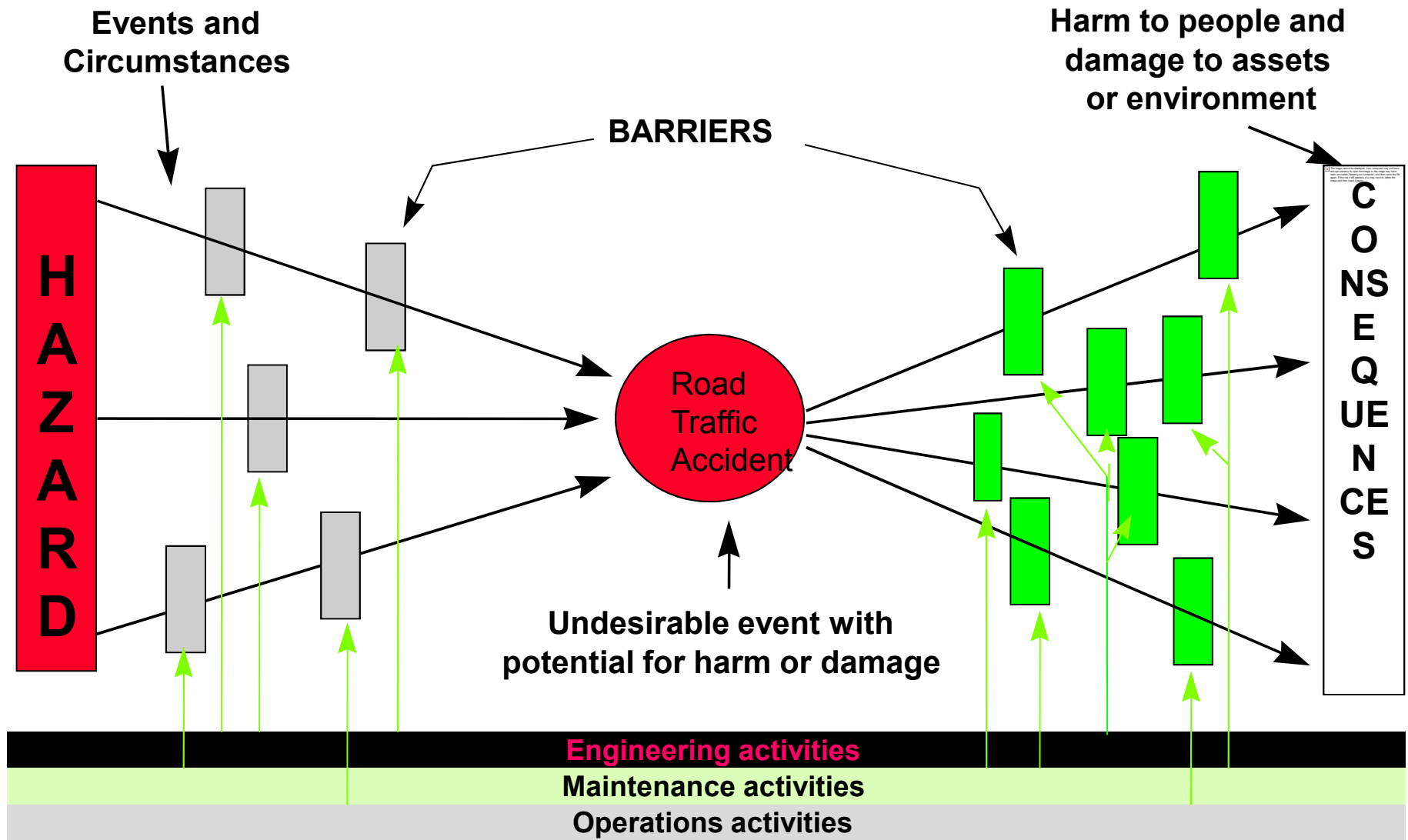
Risk Management Barriers ?



- Safe Technology –based on Process Hazard Analysis , Risk Mitigating Design
- Verified and authorized at design level and installed as intended , verified
- Doubled checked through Pre-startup Safety Review (PSSR)
- Written Operational Manual with clear indication of process capability & limitation
- Adequate Training, Job Cycle Check , Observation and Audit

- Facility capable to minimize consequences
- System exists for energy isolation – LOTO, PTW, JSA, Supervision
- Use of correct PPEs as assessed in Risk Assessment
- Physical barriers , Access Controls
- Learning – Correction and Prevention

Failed Management Barriers ?



- Well designed vehicle with ABS
- Qualified, trained and experience driver
- Well maintained, OEM certified, tyre conditions
- Load as per capacity

- Driven within safe speed, Seat Belt, No intoxicated,
- Safe Road
- Precautions in line with Journey Risk Management
- Fatigue Management – Rest / Sleep

Management Barriers ?



PROCESS

- Designed in line with standards code
- All safety features including interlocks included
- Initial and cyclic Process Hazard Analysis (PHA) done and recommendations are taken care
- Maintenance-Preventive and Protective in place

TASK

Routine / Non-routine

- Risk Assessment
- Job Safety Analysis
- Safe Work Procedure / SOP / Method Statement
- Skilled / Training / Certification
- LOTOTO
- PTW
- Tool Box Talk
- Supervision
- Audit / Inspection
- Job Cycle Check

BEHAVIOUR

- Visible Felt Leadership
- Challenging Goal and Targets
- Clear Safety Policy and Principles
- High Standard of Performance
- Supporting Safety Organization
- Integrated Safety Organization
- Progressive Motivation
- 2 Way communications
- Safety Observation Visit – Walkabout
- Continued Training / Skill Development
- Contract Safety Management
- Transport Safety

How does Risk Assessment Helps ?



- To identify and quantify or rank risks
- To focus attention on the most important deficiencies
- To determine if systems, facilities or activities are acceptable
- To “cover” the organization from liability
- To comply with legal requirements
- To include them in our safety objectives

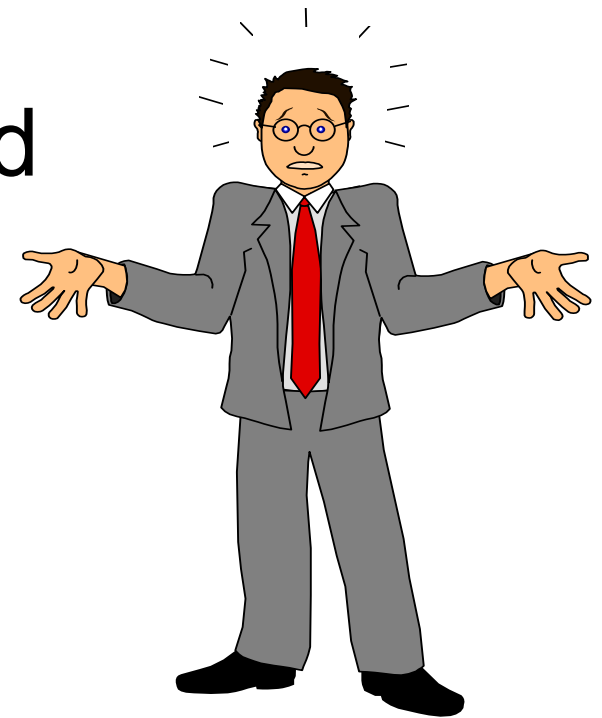
Risk Assessments:



To do them, or not?

To avoid corporate liability, there are three tests to pass:

- Corporate Negligence,
- Corporate Complacency, and
- Corporate Inactivity



Where no risk assessment was done, and the risk therefore was not identified.

(i.e. We did not know that all maintenance work is not done in accordance with the procedures!)



Corporate Complacency

Where the risk was identified and assessed but then ignored.

(i.e. Its always been like that and never been a problem before).

Corporate Inactivity



Where the risk was identified and assessed but inappropriate action was taken.

(i.e. We issued a memo).



Risk Management ?



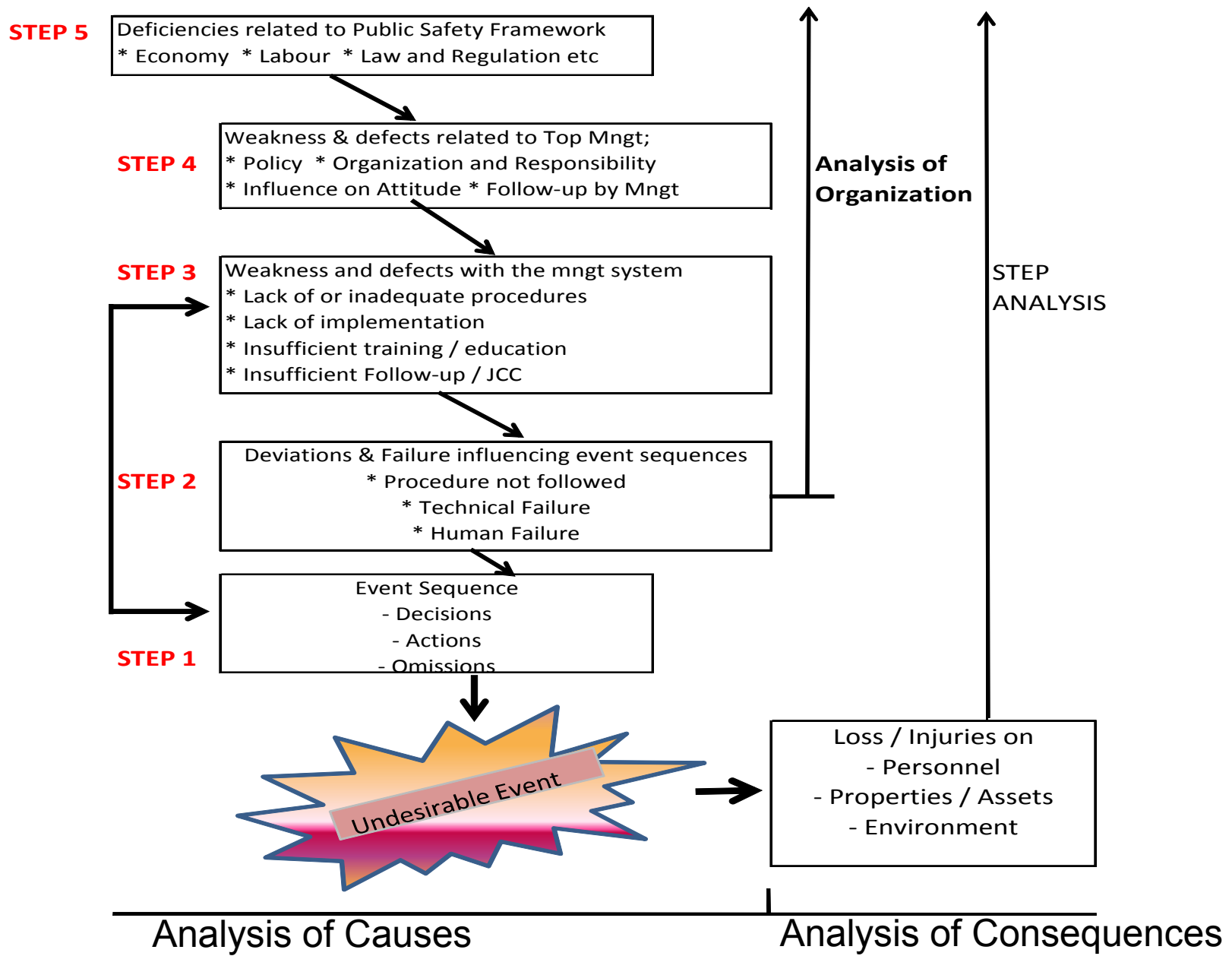
1. Elimination
2. Reduce / Replace
3. Engineering – Sensors, LOTO
4. Administrative Control
 - a. Procedures & Training
 - b. PTW / line break
 - c. Warning / Communications
 - d. Tool Box Talk
5. Personal Protective Equipment



Who is accountable ?



Management System Failure Model Resulting Incidences



Observe - Identify Risks



What are missing barriers ?

With this concept in background

assess whether you as part of management

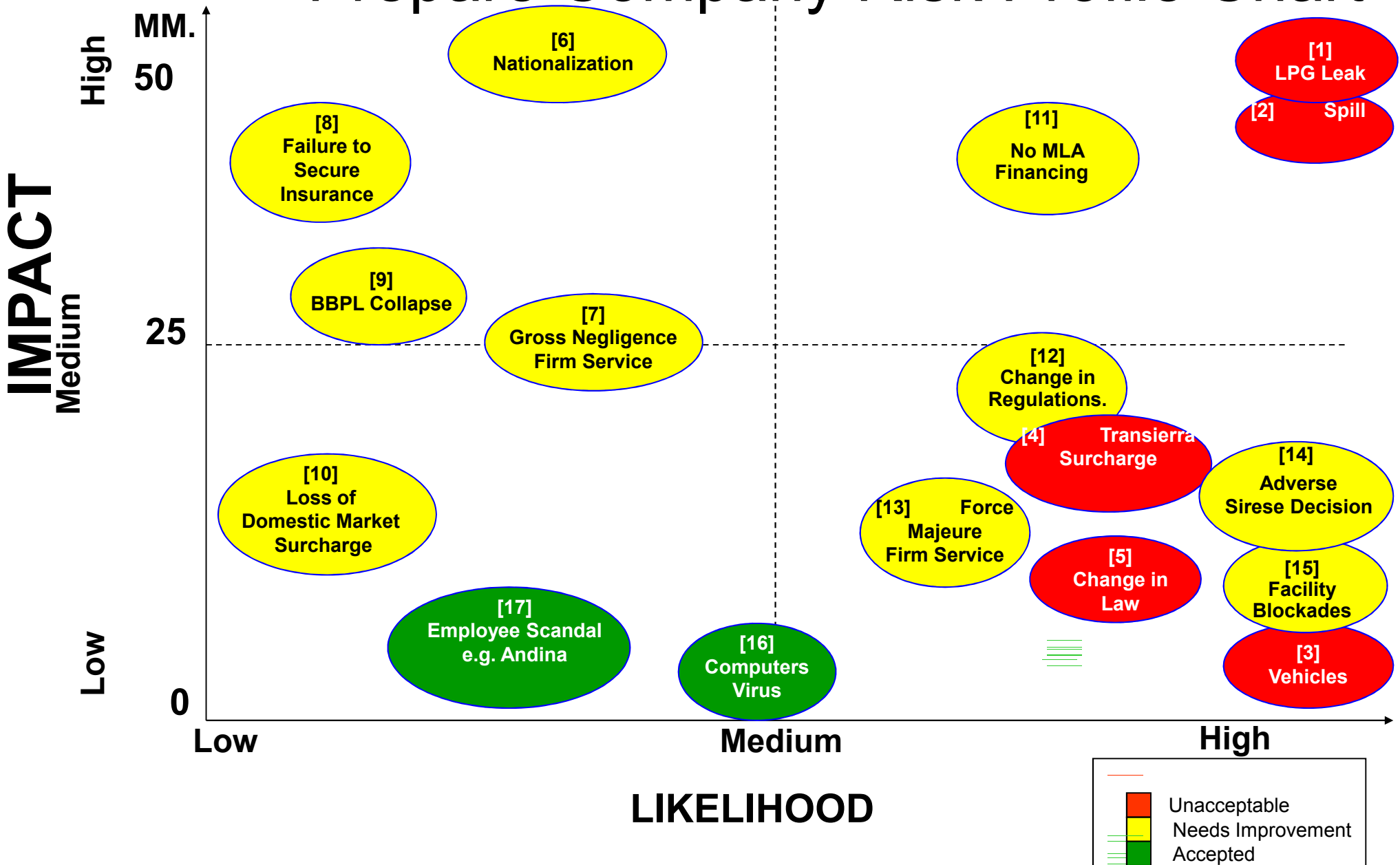
Are you helping organization to manage

Risks in RED Zone

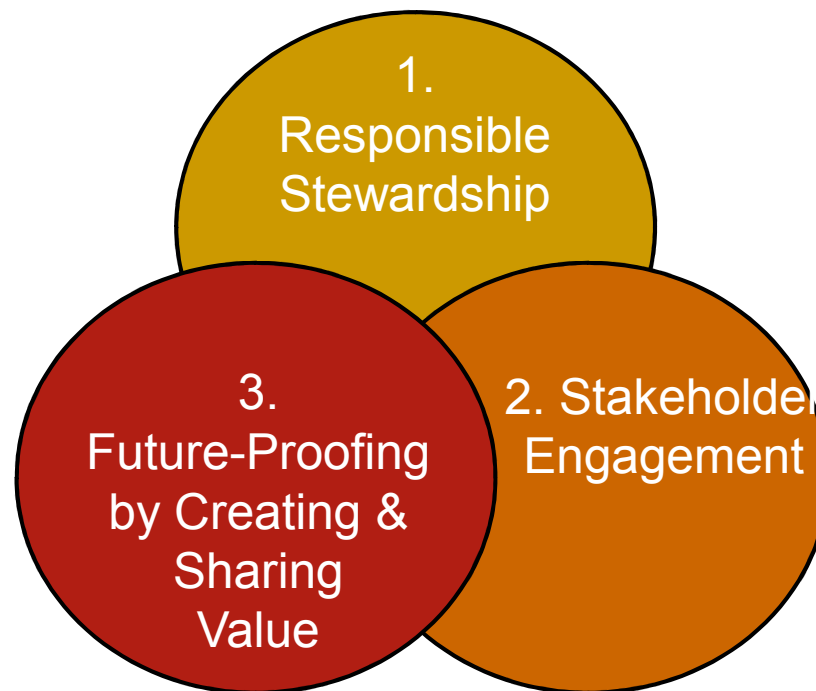
Residual Risks Assessment



Prepare Company Risk Profile Chart



Thank you



Think about tomorrow, today!