



Feasibility Study for an HSE MS Implementation in the Sonatrach Upstream Activity

“Approach for Self Assessment and Gap Analysis”

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PLAN

- Overview
- Assessment Reasons
- Gap Analysis Approach
 - ISO/OHSAS Gap Analysis
 - Safety Culture Assessment
- Gap Analysis Outcomes
- Extension To Self Assessment
- Conclusion

OVERVIEW

- Sonatrach chose to adopt ISO14001/OHSAS18001
- Effective implementation of an HSE MS
- Conduct an initial Review : Assessment Approach
 - Methodology to do Gap Analysis Against ISO/OHSAS
 - Methodology to Assess the Safety Culture
 - How Findings Should be Presented?
- It helps identifying weaknesses
- It will be easy to focus on the appropriate area

Why Do We Assess?



« *What gets measured,
gets done!* »*

*Peters and Waterman, *In Search of Excellence*

Why Do We Assess?

- Since 2001, Sonatrach has shown willingness to implement an HSE MS;
- It has never been applied effectively !

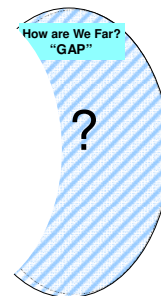
WHY?

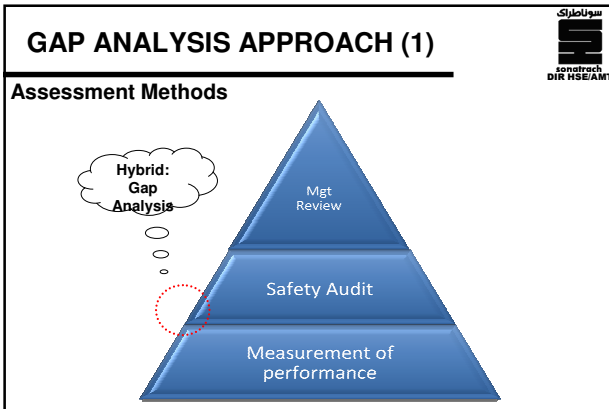
TO AVOID POSSIBLE IMPLEMENTATION FAILURE

Caused by:

- Cultural barriers (bad safety culture)
- MS weaknesses (bad practices)

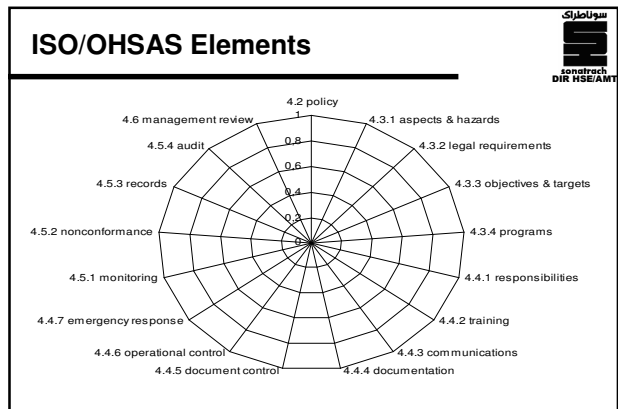
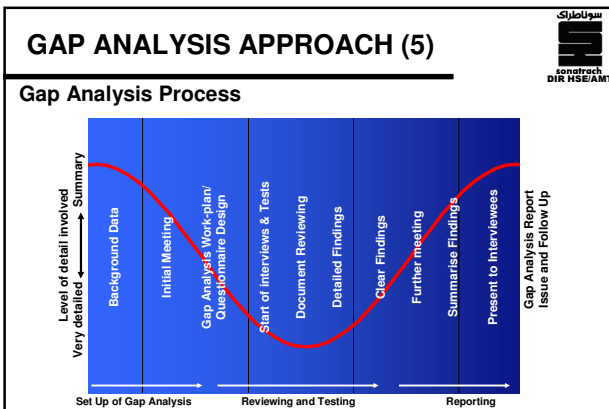
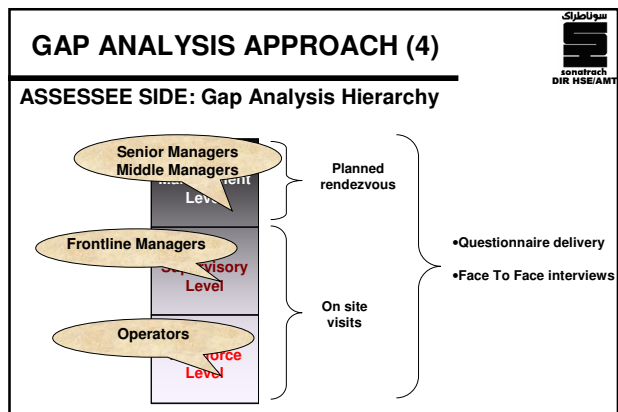
Why Do We Assess?





- ### GAP ANALYSIS APPROACH (2)
- Approach consists of Two Parts:
 - ISO/OHSAS Gap Analysis: Questionnaire Based Interviews, Document Reviewing, and on site Inspections.
 - Safety Culture Assessment : Questionnaire Based Survey;

- ### GAP ANALYSIS APPROACH (3)
- ASSESSOR SIDE: Gap Analysis Team**
- 6 members with relevant experience;
 - Multi-skilled with HSE knowledge;
 - Select a Leader:
 - coordinate
 - Strengthen any weakness
 - If contractor is involved: Allocate a member from contractor.
- TEAM MANAGEMENT**



ISO/OHSAS Questionnaire Design (e.g.)

4.5 CHECKING AND CORRECTIVE ACTION

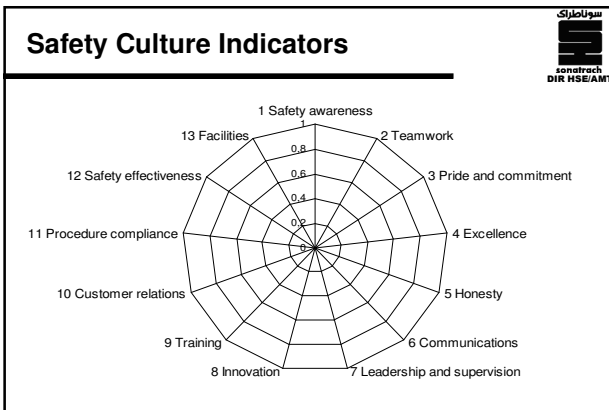
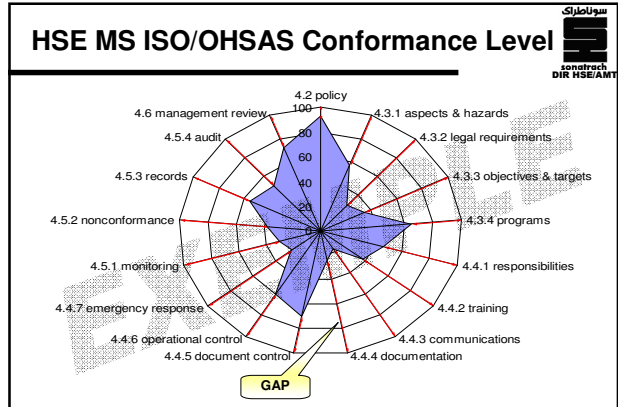
4.5.1 Monitoring and Measurement

60	4.5.1 The organisation shall establish and maintain documented procedures to monitor and measure, on a regular basis, the key characteristics of its operations and activities that can have a significant impact on the environment. This shall include information to be used to determine conformance with the organisation's objectives and targets.	> Does the organisation have documented procedures to monitor and measure, on a regular basis, the key characteristics of its operations and activities that can have a significant impact on the environment?	> L'organisation a-t-elle des procédures documentées pour surveiller et mesurer, de façon régulière, les caractéristiques principales de ses opérations et des activités qui peuvent avoir un impact significatif sur l'environnement?
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86 Statements

Possible Questions

Translated into French



Safety Culture Questionnaire Design (e.g.) (1)

SAFETY AWARENESS

To what extent do you agree or disagree with the following statements about safety awareness in your current department / unit / ward? Please circle one number on each line.

Statements	strongly disagree	disagree	Neutral	Agree	Strongly Agree
1- In our Company, people are aware of the safety hazards in their area and are careful to minimise and avoid them.		2	3	4	5
2- In our company, people think safety concerns do not relate to office workers.	1	2			
3- People are well aware of the safety hazards in their area and are careful to minimise and avoid them.				4	5
4- Around here, people don't think much about safety.	1	2	3	4	5

88 Statements

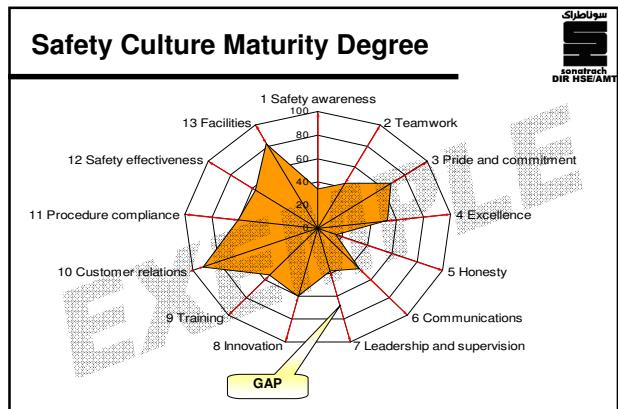
If the question doesn't pertain to you don't answer at all!

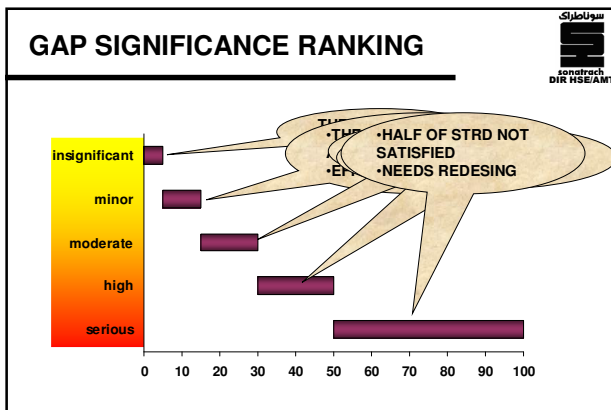
Safety Culture Questionnaire Design (e.g.) (2)

Safety Culture Indicator 1

Statement 1	1	2	3	4	5	Statement 1	1	2	3	4	5
Statement 2	1	2	3	4	5	Statement 2	1	2	3	4	5
Statement 3	1	2	3	4	5	Statement 3	1	2	3	4	5
Statement 4	1	2	3	4	5	Statement 4	1	2	3	4	5
Statement 1	1	2	3	4	5	Statement 1	1	2	3	4	5
Statement 2	1	2	3	4	5	Statement 2	1	2	3	4	5
Statement 3	1	2	3	4	5	Statement 3	1	2	3	4	5
Statement 4	1	2	3	4	5	Statement 4	1	2	3	4	5

%Agreement = $\frac{5}{16} = 31.25\%$



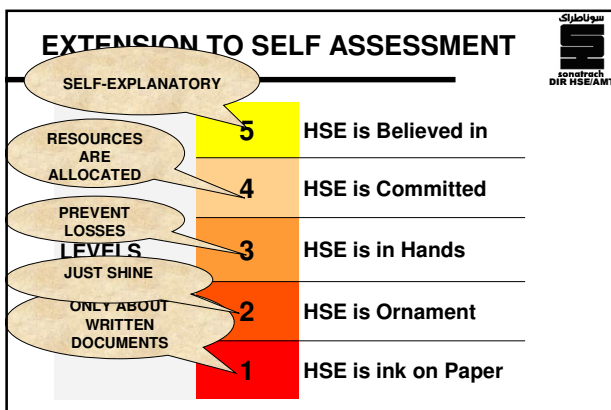


SWOT Profile (e.g.)

☺ STRENGTHS	⊖ WEAKNESSES
<ul style="list-style-type: none"> ☑ The safety message is well communicated ☑ General willingness to comply with rules ☑ Commitment to is clear ☑ High levels of job satisfaction 	<ul style="list-style-type: none"> ☒ Low levels of Management Credibility ☒ High levels of Job Insecurity and Stress ☒ It's see safety driven as a necessity
🕒 OPPORTUNITIES	⚠ THREATS
<ul style="list-style-type: none"> ☑ Good "vertical" relationships ☑ Good "horizontal" relationships ☑ Safety is considered as a strategic issue ☑ New regulatory approaches can be designed to promote high performance safety culture 	<ul style="list-style-type: none"> ☒ Limited "alignment" between Levels safety approaches make demands on competencies ☒ Inability to improve workplace relations could weaken flexibility ☒ Zero-accident goal may be difficult to achieve in current culture, programs

- ### How Should The Gaps Be Addressed?
- Correct the element
 - Redesign the element
 - In scheduled step by step plan
 - In SMART way

- ### REPORT LAYOUT
- EXECUTIVE SUMMARY
 - INTRODUCTION
 - SCOPE AN OBJECTIVES
 - GAP ANALYSIS PROCESS
 - i. Safety culture assessment procedure
 - ii. ISO14001/OHSAS18001 gap analysis procedure
 - iii. Project team members/ duties
 - SUMMARY OF FINDINGS
 - i. Reporting (Spider diagrams, Bar charts, SWOT, Gaps ranking)
 - ii. Current safety culture maturity status
 - iii. Current HSE management system status against ISO14001/OHSAS18001
 - IMPROVEMENT PLAN AND CORRECTIVE ACTIONS
 - CONCLUSIONS



- ### CONCLUSION
- Assess Capability and Readiness for an effective implementation;
 - Prepare the laying groundwork for implementation;
 - Consider Two key success factors:
 - ◆ The effective use of the approach
 - ◆ The effective assessment of findings

CONCLUSION



- Apply the approach within Sonatrach upstream;
- Ensure ongoing monitoring of the effectiveness of the existing HSE MS;
- Develop an assessment toolbox for appraising safety culture;
- Benchmark the outcomes of the approach with other results;
- Conduct further research to develop the proposed approach.

Thank You