

## SERVICE BRIEF:

# User Centered Management System Gap Analysis

### The Situation:

All production facilities seek to continuously improve their operation particularly in the areas of Safety, Health, Environmental, Reliability, and Profitability. The staffs at these facilities commit tremendous time, effort and capital trying to improve policies, processes and procedures to gain a competitive advantage.

But are you working on the right things? What areas are best to concentrate on? Where is your facility weak? Where is it strong? What are the best in class performers doing? How can you get there?

### The Solution:

User Centered Design Services is an associate member of the Abnormal Situation Management Consortium®, Ian Nimmo was previously the Program Director for the Consortium and led all of the benchmarking studies for the consortium. Through his involvement in numerous cross-industry site studies at Power Plants, Refineries, Petro Chemical and Iron and Steel manufacturing plants, he was instrumental in setting a standard for industry and in providing the Consortium with an Effective Practices Guideline. UCDS partner John Moscatelli has extensive process plant and instrumentation experience with a practical background in Shift Team Leadership. We can bring this experience to your site in the form of a Management System Gap Analysis. For this analysis we'll visit your site, talk to your personnel and compare how existing site policies are intended to work, how those policies actually work in the trenches, and how they compare to industry Best Practice.

The ASM Consortium Effective Practices Guidelines are organized under seven practice categories:

1. Abnormal Situation Understanding
2. Management Structure and Policy
3. Training and Skill Development
4. Communications
5. Procedures
6. Control Building Environment
7. Process Monitoring, Control and Support Applications

They can deliver the following results:

- Employees understand what abnormal situations are, how often they arise, and why,
- Processes effectively minimize the impact of abnormal situations,
- Management's communications of goals, processes, and status is effective and comprehensive,
- Employees' knowledge and skills are continuously and appropriately enhanced,
- Employees work in a supportive culture, and in an appropriate and safe environment,
- Management finds opportunities to innovate and apply technologies to continuously improve, and
- The change that results from continuous improvement is well managed.

### **THE METHOD:**

The Management System Gap Analysis performs an in-depth review of the following management systems:

- Organization & Culture
- Safety Policy & Risk Assessments
- Procedures
- Incident Investigation
- Staffing
- Operator Expectations
- Training & skill development
- Shift working practices & rotation
- LOTO
- MOC
- HazOp
- Alarm Management
- Human Interface Design
- Communications Practices
- Human Factors & Control Building Work Space Design

### **The Process:**

The typical process for performing a Management System Gap Analysis starts with a few preliminary conversations to determine the particulars of the study. We can apply this methodology to a single facility or all facilities throughout a Client's system.

We schedule a site visit to perform the Management System Gap Analysis. Typically two representatives from UCDS visit the site. During this process UCDS performs interviews with multiple representatives from the following areas: Senior Management, Department Management, Instrument Engineers, Instrument Supervisors and Technicians, Process Engineers, Training Supervisors, Trainers, Procedure Writers, Control System Engineers and Technicians, Operations Supervision (all levels), Field and Console Operators, Health and Safety, Process Safety Management, and Business Planning. These interviews are typically an hour long. We prefer to interview Operators at their duty stations during morning and evening shifts. This puts the operators more at ease, and minimizes scheduling issues and overtime costs for the Client. The Client should plan on a significant number of personnel being interviewed during the visit, and budget the internal cost appropriately.

After the site visit, UCDS requires a short period to analyze the data and generate a report. This report contains a full analysis of the completeness of the current site policies, how those policies are implemented on site, and how those policies compare to Best Practice. If desired, UCDS can return to the site to present findings to Management.

### **Benefits:**

This process allows Management a unique opportunity to gauge their site performance versus industry Best Practices. It will provide invaluable feedback to aid in focusing continuous improvement effort in areas where the greatest impact can be made.

### **Related Services:**

User Centered Design Services offers additional consulting services in most of the areas covered by the Management System Gap Analysis. As gaps are identified, we can work with the Client to develop plans to bring the site up to Best Practice status.

User Centered Design Services is also uniquely qualified to help clients identify potential operator rationalization and consolidation cases for both console and field operators by performing a **Console Staffing Assessment** and a **Field Operator Staffing Assessment**. We can help determine the optimum make-up of the operations work team through a **Work Team Design Assessment**. Please see the Service Briefs for more information on our full array of services.