Alarm management lifecycle for oil & gas
Improving safety, profitability and human factors
We all know that safety and profitability are cornerstones of a sustainable operation.

Increasingly we appreciate how crucial is the contribution of the alarm system.

Are you being challenged to improve your alarm system performance?

“Sometimes I dream of process alarms and then they wake me up.”

Control Operator, Major UK Operator

Why ABB

With ABB as your alarm management partner, we are able to support you with a wide range of products and services that follow your alarm system from cradle to grave throughout the alarm management lifecycle.

ABB Solutions

We can help you achieve:

- Compliance with industry standards and good practice
- Improved safety and environmental performance
- More flexible and efficient plant operation
- Increased production and equipment availability
- Smoother start-up and shutdown
- Operational human factors improvements / reduced operator stress

“This is what success looks like. Our facility alone had 6 trips in 2008 compared to 25 in 2007, and 17 in just the second half of 2006. This has a significant business value.”

Operations GM, Rashpetco
Alarm management lifecycle.

**Philosophy**
- ABB Solutions
  - Alarm philosophy review / preparation (service)

**Identification**
- Hazard and risk analysis
- Purpose and consequence of alarm
- ABB Solutions
  - Awareness training - ½ day (service, fixed price)
  - Project Alarm Assessment (service, fixed price)

**Rationalization**
- Comparison against alarm philosophy criteria
- ABB Solutions
  - Alarm rationalization workshop / coaching (service)
  - Alarm rationalization management (service)

**Detailed Design**
- Alarm System Requirement Specification (ASRS)
- ABB Solutions
  - Tailored alarm ASRS (service)
  - Alarm system requirements guidance (service)

**Implementation**
- Planning
- Documentation
- Testing
- Training
- ABB Solutions
  - Performance monitoring tools (800xA alarm operations)
  - Master alarm database (AlarmInsight manager)

**Operation**
- Supporting tools for alarm handling
- Alarm response
- Training
- ABB Solutions
  - Operator supporting tools (800xA alarm operations)
  - Operations training - 1 day (service, fixed price)

**Maintenance**
- Calibration
- Testing
- Replacement and repair
- ABB Solutions
  - Maintenance procedures (service)
  - Test methods (service)

**Monitoring and Assessment**
- Comparison against performance goals
- KPI visualization
- Process performance
- ABB Solutions
  - Performance assessment / benchmark (service)
  - Periodic KPI reports (800xA alarm history and reports, KPI report service)
  - Alarm consolidation and analysis tools (AlarmInsight monitor)
  - Process assessment and guidance (service)

**Audit**
- Workflow and processes
- ABB Solutions
  - Nuisance alarm management (services)
  - Nuisance alarm management tools (AlarmInsight monitor)
  - Alarm flood management (service)
Alarm management, operational human factors and process hazard services:
- Alarm management consultancy services for new build, set up of it and upgrade projects
- Alarm management training
- Planning and management of alarm management improvement projects
- Alarm management workshops, coaching and mentoring
- Operational human factors training
- Operational human factors consultancy and improvement planning
- Assessment and improvement of control room ergonomics
- Control system upgrade and hot cut over planning
- Alarm management performance and monitoring tools
- Alarm reporting services

800xA alarm management enhanced tools and products (available as additional options):
- 800xA alarm operations
  - Features include alarm shelving; alarm handling; alarm grouping; alarm helper and KPI visualization
- 800xA alarm history and reports
  - Provides long term storage of alarms and automatic alarm KPI reporting and distribution
- Alarmsight monitor
  - Extended version of 800xA alarm history and reports
  - Features include event consolidation from multiple DCS or plants, enhanced alarm analysis tools and web clients
- Alarmsight manager
  - Alarm documentation and MOC support for integration with master alarm database

For further information please contact:

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