Human factors in the control room

Regulatory bodies worldwide are rightly regarding ‘human factors’ as a key element in the overall safety envelope of any potentially hazardous process.

The contribution of the operator in the complex and challenging environment of today’s control room is coming under increased scrutiny, particularly against the background of pressure on operator numbers and the introduction of complex technology.

During an unplanned event, whether a major process problem, a significant trip event or a major incident, the performance of the control room operator is key to the successful management of the event and to minimising the consequential effects.

Often the operator is the difference between a serious event and a safe shutdown. Poor, incorrect or slow diagnosis and reaction to circumstances can have significant safety, environmental and business consequences.

What we offer
The control room performance assessment is a short, focussed look at the factors that can influence the performance and behaviour of the operations team based in the control room. It looks at the following main areas:

- Responsibilities and job design
- Human / machine interface
- Alarm systems
- Communications
- Procedures
- Environment
- Alertness and fatigue
- Training and competence

The review is suitable for all control room environments, both legacy panel based layouts and more modern screen-based designs and is applicable to a wide range of sectors, including oil and gas, chemical and utilities.

The review process uses internationally recognised standards and guidelines, as well as regulatory guidance as a definition of ‘best practice’.
The review delivers a written report within two weeks of a short (2-day) site visit. The report highlights good practice and any areas of deficiency. The report can then be used as a baseline and as a measure supporting a programme of improvement.

Benefits
- Improved safety as the risk of human error is made as low as reasonably practicable
- Improved performance of operators
- Compliance with legislation and regulatory expectations
- Provides a baseline measure for further improvement

Why ABB?
ABB has a background of human-centred engineering and its dedicated human factors team brings together expertise in operational organisation and culture, competency assessment, HMI design, alarm management, ergonomics, and control room architectural consultancy.

ABB works with a large number of blue chip clients across the world on human factors projects and has a record of successful delivery of practical, people oriented delivery.