DELIVERY OF SAFETY MANAGEMENT SYSTEM ASSESSMENTS

Technical Paper
This technical paper describes an efficient and consistent approach to Safety Management System assessments, which utilises DNV GL’s International Sustainability Rating System (ISRS™) and safety culture framework to assess the human, technology and organisational aspects of a Management System.

The Challenge
Management systems are key to the growth of organisations. These systems help provide the structure that underpins the on-going delivery of performance. There are an increasing number of organisations that are investing significant efforts to drive improvement in their organisation’s health and safety performance.

However, these safety systems need to be examined thoroughly and independently and compared against a wider group of industries to determine their robustness and effectiveness. If performance improvements are identified during the assessments, it is important for organisations to completely understand the implications and to identify how to implement these in a positive and efficient manner within their organisations.

Assessing Safety Performance
Industry recognises that there are three dimensions (Figure 1) to delivering performance of a safety management system.

The HOT triangulation, which denotes for human, organisation and technology, helps indicate any prevalent symptoms of safety challenges within an organisation’s safety management system. It helps identify the cause for these symptoms, in a systematic manner, by using the HOT triangulation questions. Addressing each of these questions helps to develop the recommendations and measures to reduce the identified risks, and therefore, improve the organisation’s safety performance.

DNV GL have found that the elements in the HOT Triangulation can be assessed effectively using an approach which utilises two connected activities: (1) Management System Assessment and (2) Safety Culture Assessment.

When used in parallel, these two activities can deliver better value to an organisation.

Figure 1: HOT dimensions of safety management
ISRS™ - Method for Safety Management System Assessments

DNV GL’s proprietary method called the International Sustainability Rating System (ISRS™) is a well-known method to assess safety management systems. It is an objective and systematic assessment that gives organisations a deep insight of the current performance of the management system. It also helps organisations identify how performance could be improved in the future and how they are doing in comparison to other organisations in diverse sectors. This can be achieved by benchmarking the results against data held by DNV GL, and an example of a benchmarking report is shown in Figure 2.

ISRS is based on a structured protocol, comprising fifteen management system processes which are further divided into sub-processes. The protocol is built around the concept of the maturity of the processes being assessed, and therefore unlike approaches based on checklists it provides deep insights to current performance, and how performance could be improved in the future. The use of ISRS™ tools also allows organisations to become fully engaged in the assessment process, which would aid in shaping and driving improvements to their management systems.

Safety Culture Assessments

These are widely used in a range of industries and in a range of assessment methods.

Safety culture can be defined as the attitudes, values and beliefs about safety shared by a group of people. It is the product of employee attitudes, beliefs and behaviour that determine the belief and commitment to, and robustness of an organisation’s safety management.

DNV GL has developed and refined its approach to safety culture and it is best described using the organisation’s safety culture maturity. The different levels of safety culture maturity are shown in Figure 3.

CASE STUDY -

GLOBAL SAFETY MANAGEMENT REVIEW
January to June 2017
Customer Name A FTSE250 Company

CHALLENGE

The client had worked hard to build a consistent management culture across its many legacy sites across the world, and while underlying occupational safety performance was good, major events were still happening at a worrying rate. The board and executives expressed deep concerns but were unclear about what to do to address the issue.

DNV GL SOLUTION

DNV GL assessed the adequacy and performance of the client’s management processes and benchmarked these against an agreed aspirational population. Concurrently, we conducted an organisational culture survey and then visited selected sites to verify the results, against benchmarking the outcome. DNV GL assessed 29 sites worldwide in 5 months using 3 teams all using a consistent approach and the same assessment tools. The project was delivered on-time and on-budget, and an online dashboard was used to provide regular updates to the client.

OUTCOME AND BENEFITS

DNV GL has developed and refined its approach to safety culture and it is best described using the organisation’s safety culture maturity. The different levels of safety culture maturity are shown in Figure 3.

DNV GL recommended that the client:

- Fundamentally rethought their approach to their operations.
- Built risk registers across the group so that all levels of management could identify and address hot-spots.
- Built appropriate management systems to guide the necessary changes in thought processes and enshrine the necessary changes in safety culture.
- Allocated responsibility for safety performance at appropriate levels, and allow some local flexibility in approach within a clearly defined governance framework.
- Implemented objective, clear and measurable performance monitoring, audit and assessment mechanisms and be excellent in analysing the feedback.
- Refocused executive site visits to encourage curiosity about what was yet unknown and to challenge existing assumptions, whilst recognising that red flags were a positive step in identifying an issue rather than a sign of failure.
- The client has accepted the recommendations and is mobilising its global operations to drive improvement with DNV GL’s assistance.
This measure helps organisations realise their level of maturity. It enables organisations to implement initiatives that suit the current maturity level in order to move on to the next safety culture maturity level. The most mature level of safety culture is a learning culture, which is defined as the ability to learn and actively avoid and recover from critical situations.

**An Approach to Management System Assessments**

This structured approach is broken down into five phases as shown in Figure 4. These stages are key in the successful delivery of Management System assessments, which DNV GL have delivered to numerous global clients.

**Audit versus Assessment**

A mature organisation should deploy both audit and assessment to drive compliance and improvement.

- **Audit** confirms compliance with specific requirements or standards. No coaching. Yes/No approach.
- **Assessment** looks at the extent of implementation or performance. Includes coaching on how performance may be improved. Variable approach.

DNV GL believes an integrated Safety Culture and ISRS assessment offers several advantages:

- Findings from the ISRS assessment assist in the collection and interpretation of Safety Culture data.
- Findings from the ISRS assessment help to support the development of Safety Culture improvement measures.
- Time efficiencies and less overall disruption to the organisation’s operations where each assessment is run side by side.
- Financial efficiencies to the organisation in running the two assessments in parallel.

**Conclusion**

This technical paper has communicated an approach on how to conduct a Safety Management System assessment. It provides a proven structured framework to the assessment of how an organisation manages safety and can be used to guide the future development of safety management within diverse businesses.
About DNV GL
Driven by our purpose of safeguarding life, property and the environment, DNV GL enables organizations to advance the safety and sustainability of their business. We provide classification and technical assurance along with software and independent expert advisory services to the maritime, oil and gas, and energy industries. We also provide certification services to customers across a wide range of industries. Operating in more than 100 countries, our 16,000 professionals are dedicated to helping our customers make the world safer, smarter and greener.

Further information
For further information contact:

James Jenkins, DNV GL, Manchester,
+44 20 3816 4985,
james.jenkins@dnvgl.com

www.dnvgl.com