

# Safety Culture

Health & Safety Briefing No. 07

January 2017



**In recent years a strong Safety Culture has been increasingly recognised as vital if the risks of accidents are to be minimised. But what does the term mean.....?**

## **Background**

Whether we consider major accidents leading to the loss of many lives or smaller accidents in the workplace leading to loss of life or injury to individuals, an organisation's safety culture is almost invariably a major factor leading to the event.

The term safety culture was first introduced and defined by the International Nuclear Safety Advisory Group (INSAG) of the International Atomic Energy Agency (IAEA) following the Chernobyl accident [1].

In some cases, getting the job done more quickly (for a variety of reasons) is put ahead of trying to ensure that it is done as safely as possible. For example, people at various levels in the organisation may be aware of a workplace hazard, a dangerous practice or a procedure which is not being followed, but choose to turn a blind eye because it reflects 'custom and practice' or because raising a concern is unlikely to lead to action and may not be welcome.

An organisation's safety culture comprises the shared attitudes, beliefs and behaviours that create the environment in which this and related 'failures' happen. All technical systems (hard systems) are embedded in these 'soft' systems. Safety culture is a sub-set of the wider culture of the organisation regarding the basic assumptions that it uses to learn and cope with problems. This broader culture exists in various forms and can be manifested in a number of ways [2,3]. It is important to realise that safety culture is set from the top as part of this wider culture within the organisation. It reflects management commitment and whether safety is consistently put before meeting production or cost targets.

It should be noted that achieving high standards of industrial safety does not guarantee excellence in more complex 'process safety' performance. Awareness of measures to reduce the risk of 'organisational accidents' and the role of safety culture in these requires particular attention. Here, the interaction between engineered safety systems, procedures and the underlying culture is more complex [4]. The book by Professor James Reason is an excellent introduction to the issues [5]. The IAEA have set out the factors which it believes underpin a strong nuclear safety culture and suggested some practical approaches to building a strong safety culture and provided some prompt lists to achieve a positive safety culture including question sets intended to assist organisations in reviewing their own culture [6,7]. These apply more widely to safety culture in the context of 'high hazard' organisations.

## **Definitions of safety culture**

The UK oil and gas industry [8] have reflected the above points and put it succinctly as *'The way safety is perceived, valued and prioritised in an organisation'*

Various more comprehensive definitions have been given for safety culture. For example, the definition of safety culture given by the Health and Safety Commission (now the Health and Safety Executive) and which is widely quoted, is [9]:

*'The safety culture of an organisation is the product of the individual and group values, attitudes, competencies and patterns of behaviour that determine the commitment to, and the style and proficiency of, an organisation's health and safety management. Organisations with a positive safety culture are characterised by communications founded on mutual trust, by shared perceptions of the importance of safety, and by confidence in the efficacy of preventative measures.'*

## **Characteristics of a strong safety culture**

From various studies [10-14], it is clear that certain factors appear to characterise organisations with a positive safety culture. These factors include:

- A recognition of the importance of leadership in 'setting' the culture and associated 'expectations' and then demonstrating visible commitment and actions that support the desired culture. Leadership must act in such a way that trust is generated throughout the organisation.
- The way that problems are identified and decisions are made and how the need for these to ensure that safety considerations are always given priority. This is reflected in the working environment and in work processes and procedures.
- The involvement of all employees and contractors. An acceptance in practice that everybody has accountability for safety and a role to play, and that they understand the importance of their contribution and act accordingly- with strong support for safety related decisions, even when they may have an impact on production.
- Encouraging a questioning attitude and a response within the organisation which listens, encourages and values feedback and diverse views - even when these may not be what people want to hear.
- Seeking continuous improvement and open minded assessment of ways to improve with resources made available for team working to suggest, implement and support improvements - what is commonly referred to as a 'learning organisation'.
- Effective communications about the issues involved are given strong emphasis in leadership communications and team briefings which are part of a two way process also incorporating the feedback from those at the workplace who best understand what is happening in practice. Agreed goals which demonstrate commitment are well communicated and understood.

- Maintenance of competence so that everybody understands the importance of safety culture and has the knowledge and 'people skills' to deal effectively with the issues raised.
- Strong independent oversight and scrutiny arrangements to ensure that intentions are being put into practice and that the organisation is achieving its aspirations in practice. This must lead to honest and open appraisal and visible action to address identified deficiencies.

Improving safety culture is something which must be seen as a long term and systematic process since change has to be 'embedded in the bloodstream of the organisation'. It needs to be based on an initial assessment of the existing safety culture, determining priorities for change, the actions necessary to affect the change, and then going on to review progress and seek continual improvement. In addition to the more recent IAEA Reports referenced above, there are now a range of 'tools' which are available for assessing and developing safety culture [e.g. see References 9 and 11].

## References and Further Reading

1. Safety Culture - INSAG Report 75-INSAG-4 - International Atomic Energy Agency (IAEA), Vienna 1991.
2. Schein E.H, 2004, 'Organisational Change and Leadership', Third Edition, Jossey-Bass.Business and Management Series.
3. Taylor J. B, 2010, 'Safety Culture - Assessing and Changing the Behaviour of Organisations', Gower, Publishing Limited, 2010'
4. Taylor R H et al, 'A Study of the Precursors Leading to "Organisational" Accidents in Complex Industrial Settings', Process Safety and Environmental Protection. Volume 93, 50-67, 2015.
5. Reason, J, 1997, 'Managing the Risks of Organisational Accidents', Ashgate Publishing Ltd., ISBN 184014:1042.
6. INSAG15, 'Key Practical Issues in Strengthening Safety Culture', IAEA (Vienna), 2002.
7. IAEA, . 'Developing Safety Culture in Nuclear Activities - Practical Suggestions to Assist Progress', Safety Reports Series No. 11, IAEA, Vienna 1998.
8. Step Change in Safety, see <https://www.stepchangeinsafety.net>.  
Third report of the Advisory Committee on the Safety of Nuclear Installations - Organising for Safety - Health and Safety Commission, 1993 - ISBN 0118821040.
9. HSE Research Report 367, 2005, 'A Review of Safety Culture and Safety Climate Literature for the Development of the Safety Culture Inspection Toolkit'.
10. 'Reducing Risks: Protecting People' - HSE's Decision Making Process; HSE Books, ISBN 0717621510, <http://www.hse.gov.uk/risk/theory/r2p2.pdf>.
11. HSE Human Factors Briefing Note No.7, Health and Safety Executive, [www.hse.gov.uk/humanfactors/topics/O7culture.pdf](http://www.hse.gov.uk/humanfactors/topics/O7culture.pdf).
12. World Association of Nuclear Operators (WANO), 2013, PL2013-01, 'Traits of a Healthy Safety Culture', [http://www.wano.info/Documents/PL\\_2013-01\\_Traits\\_of\\_a\\_Healthy\\_Safety\\_Culture.pdf](http://www.wano.info/Documents/PL_2013-01_Traits_of_a_Healthy_Safety_Culture.pdf).
13. IOSH, 'Promoting a Positive Safety Culture - A Guide to Health and Safety Culture', 2014, [www.iosh.co.uk/freesafetyguides](http://www.iosh.co.uk/freesafetyguides)
14. Institution of Civil Engineers, 'Safety Culture-Gap Management for Designers and Contractors' see <https://www.ice.org.uk/disciplines-and-resources/best-practice/safety-culture-gap-management>

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