

Presentation held at the ISO 31000 Conference in Paris on May 21st, 2012 abstract:

Human Factors, Management and Risk (an overview)

The complexity of the subject of the Session on Human Factors would allow a conference of its own right for a comprehensive holistic coverage. And the time available within one of the parallel sessions of the ISO 31000 Conference only permits a brief overview tracing some of the more marked items.

To say »addressing the human factor is at the core of risk management« is like saying »the human factor is at the core of business or at the core of life«! What we can gain from it is **never to forget the human factor**: without people you are going nowhere!

What do ISO 31000:2009 (E) and ISO 31010:2009-11 say about human factors? »Risk management takes human factors into account [section 3 (h)]« – and some indirect references. In the core process of risk management« outlined in sections 5.4 to 5.7 of ISO 31000 the focus is on process related human factors, reference to risk related human factors is made in the subsections on establishing the external and internal context but not within the core process!

Keeping in mind that risk [management] is (just) a management tool and that the most significant assignment for management is the guidance of employees (the **management triangle**: **p**lanning - **o**rganizing - **s**upervising) it is evident that management as well as leadership success depends on human factors. It is thus natural that

- Addressing human factors is at the core of management and
- Addressing human factors is at the core of risk and
- Analysis of human factors is vital for risk assessment!

Human Factors Management (»HFM«) is at the core of life. Critical industries as diverse as nuclear power plants, aviation, space exploration and medicine need a complex HFM. There are various approaches outside ISO 31000 available. The FAA issued order 9550.8 (its human factors policy) stating that human factors shall be systematically integrated into ... all FAA elements and activities associated with ... system operations.

Just like risk management HFM has to be tailored and aligned with an organization's external and internal context. While complexity requires Human Factors Analysis and Classification Systems and/or Human Reliability Analysis for most (notably smaller) entities a simple systemic approach is a good start for Risk Management. It would be helpful though to know about the Efficiency-Thoroughness Trade-Off-Principle (»ETTO«) which enables us to better understand what other people do or may do! The question to ask or to keep in mind in risk assessment is »**How will the process owner etto?**«

Implementing the core process as laid out in ISO 31000 (recorded assessment, treatment, monitoring and review of risk) and implementing a risk inventory are vital and they should go without saying also for smaller entities once they outgrow the direct control of all employees by the owner. But if reasonable keep it simple, classifying in three by three categories only using checklists wherever suitable. It might be helpful to add an Internal Controls Maturity Self-Assessment Tool as an indicator for the reliability of internal controls. But it is mandatory to **align Risk Management with Internal Audit**. Internal Audit will be operating on a higher level of maturity based on a qualified approach instead of a mere quantitative approach.

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