

Human and Organisational factor [HOF] essentials



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You shall consistently integrate HOF in your safety leadership



- integrate HOF in your safety vision
- ensure top management commitment for safety and develop a HOF mindset for all staff
- develop a systemic view looking at HOF in the whole system
- develop and communicate a strategy to integrate HOF

- lead by example
- provide the necessary resources for HOF integration
- promote means to receive feedback from staff
- ensure that HOF are systematically considered in your decision-making processes





You shall integrate HOF in your **risk assessment** and **change management** processes



- systematically consider HOF when defining your system
- identify and assess all risks, including those arising from HOF (e.g. stress, fatigue, communication, teamwork)
- address all risks, including those associated with HOF
- find the most adapted risk control measures considering HOF
- monitor all of the HOF residual risks left in operational activities

- regularly review your risks including those arising from HOF – and the safety measures implemented
- adopt a HOF approach to your change, from needs definition to implementation
- use specific HOF methods to identify potential safety risks related to the change
- define the roles, responsibilities and competencies of people involved in change management



You shall integrate HOF in your **organisational design** and **systems** 



- ensure that HOF is reflected in the organisational structure (linked to your risk assessment)
- ensure that HOF is reflected in all of your processes (linked to your risk assessment)
- ensure an end-user approach to design and change processes, tools and documentation
- ensure staff consultation and staff awareness on HOF



You shall integrate HOF when **defining objectives** and **planning activities** 



- define objectives considering HOF consistent with your strategy and most serious risks
- consider your HOF performance when reviewing your objectives
- ensure that your objectives are SMART (specific, measurable, achievable / agreed, realistic and time-bound)
- ensure that your safety objectives are cascaded down to all staff
- ensure that operational planning considers HOF risks





You shall ensure that you have competent staff at all levels



- link your competence management system to your risk assessment
- ensure that all staff (e.g. procurement, human resources, designers, maintenance) understand the importance of HOF

 include HOF expertise in your human resources processes, such as task analysis and design, selection, appraisal and training







You shall integrate HOF requirements in **all phases** of **the life cycle** of your assets



- integrate HOF requirements in your design and maintenance specifications
- ensure that your assets fulfil all the basic HOF requirements, following a user-centred approach (from design to tests at all stages)
- mandate all of your contractors, partners and suppliers to integrate HOF requirements
- adapt all of your maintenance activities to human capabilities



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## **Your communication** shall rely on HOF principles and methods



- ensure that your communication strategy includes HOF, risk assessment and performance
- ensure that both external and internal communication rely on HOF principles

- continuously monitor the efficiency of your safety communications
- ensure that HOF are considered in degraded/emergency communications





You shall integrate HOF in your performance evaluation and improvement processes

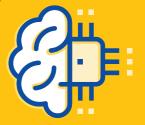


- define your performance evaluation and improvement processes based on your risk assessment integrating HOF
- integrate all of the residual risks left in your performance evaluation processes
- analyse all routine and abnormal deviations reported by staff and implement improvement actions
- define procedures to analyse incidents considering as many HOF as possible and review them continuously





You shall integrate HOF throughout automation deployment



- ensure that you consider all of the above-mentioned principles in automation deployment
- manage the risks due to automation effects on individuals and the organisation, including the teams and their tasks

 manage the risks due to new failure modes resulting from human–automation interactions





