Human element knowledge & skills framework - Regulation, Administration & Management Aert



International Regulator

- consider the human element
- take input from seafarers or their proxies, during the development or amendment process related to any Resolution, Instrument or Circular
- provide guidance on the human element aspects of the application and/or implementation of any proposed solution being provided for Administrations, ship owners/managers, seafarers and surveyors
- provide safeguards against single person errors and organizational errors
- present information for seafarers in a form that can be presented to and is easily understood by the seafarer
- consult human element experts in the development of solutions
- set the necessary levels of knowledge, skills, abilities and experience for personnel employed in the maritime sector to properly perform job tasks,
- properly manage risks through management systems, programmes, procedures, policies, training, documentation, equipment, etc.
- be aware of the necessary conditions to sustain the safety, health and comfort of those working on board
- reduce the risk of illness, injury, or death in the event of a catastrophe such as fire, explosion, spill, collision, flooding, or intentional attack
- consider desired human performance in emergency situations for detection, response, evacuation, survival and rescue and the interface with emergency procedures, systems, facilities and equipment
- provide detailed mandatory standards of competence and other mandatory provisions necessary to ensure that all seafarers are properly educated and trained, adequately experienced, skilled and competent to perform their duties in a manner which provides for the safety of life and property at sea and the protection of the marine environment

- prevent and suppress terrorism against ships and improve security aboard and ashore, in order to reduce the risk to passengers, crews and port personnel on board ships and in port areas, to the vessels and to their cargoes
- provide practical guidelines for the investigation of human factors in marine casualties and incidents
- establish and require the enforcement of, principles and rules which ensure a uniform minimum international standard for the safety of life at sea

Legislators/ Administrations

Fully understand:

- the importance of the requirements of pertinent IMO, ILO, WHO and regional instruments relevant to maritime safety and protection of the marine environment
- the essential importance of properly addressing the human element for safety of life at sea, safety of navigation and protection of the marine environment
- the need to promote safety of life at sea by establishing and requiring the enforcement of, principles and rules which ensure that a uniform national standard is maintained, at least in line with the required minimum international standard

Be fully conversant with and fully understand the need to implement:

- the international standards on ship safety, human security and quality ship management in the context of SOLAS 1974 (as amended); the International Regulations for Preventing Collisions at Sea, 1972 (as amended); and STCW 1978 (as amended)
- the contents of the ILO Maritime Labour convention 2006 (MLC, 2006)
- the rights, obligations and procedures to ensure international health security, within the context of the International Health Regulations 2005 (IHR)
- other regional instruments relevant to maritime safety and protection of the marine environment

• measures to prevent/suppress terrorism against ships and to improve security aboard and ashore, so as to reduce the risk to passengers, crews and port personnel and to the vessels and their cargoes, in accordance with the requirements of the **ISPS** Code

Recognize the need to:

• investigate human factors in marine casualties and incidents, and act on the findings

• properly consider the human element when developing/amending national maritime instruments related to safety, security and protection of the marine environment

Shipowners/ Shipmanagers **Fully understand**

- the essential importance of properly addressing the human element for safety of life at sea, safety of navigation and protection of the marine environment
- the importance of safety at sea, prevention of human injury or loss of life and avoidance of damage to the environment, in particular to the marine environment/property
- that the cornerstone of good safety management is commitment from the top
- the importance of safety at sea, prevention of human injury or loss of life, and avoidance of damage to the environment, in particular to the marine environment and to property, in accordance with the requirements of the ISM Code

Fully understand the need to:

- establish and communicate a policy for the human-centred approach to ship design/operations
- have a policy for using human element data
- maintain increased awareness of usability
- facilitate personal and technical interactions on human element issues



• seek and exploit expert guidance and advice on human element issues

• perform research to develop human element data as it is required

• develop or provide relevant staff with human element skills

• develop a plan to achieve and maintain the optimum level of usability throughout ship operations

• identify the specialist skills required and plan how to provide them

• manage a lifecycle plan to address HE issues

Be fully conversant with and fully understand the need to implement:

• pertinent IMO, ILO, WHO and other regional instruments relevant to maritime safety and protection of the marine environment

• the international standards on ship safety, human security and quality ship management in the context of SOLAS 1974, the International Regulations for Preventing Collisions at Sea, 1972 (as amended); and STCW 1978 (as amended)

• the ILO Maritime Labour convention 2006 (MLC, 2006), in respect of seafarers' employment and social rights to ensure a safe and secure workplace that complies with safety standards; fair terms of employment; decent working and living conditions on board ship; health protection, medical care, welfare measures and other forms of social protection

• the obligations and procedures to ensure international health security, within the context of the International Health Regulations 2005 (IHR)

• other regional instruments relevant to maritime safety and protection of the marine environment

• measures to prevent/suppress terrorism against ships and to improve security aboard and ashore, in order to reduce the risk to passengers, crews and port personnel on board ships and in port areas and to the vessels and their cargoes, in accordance with the requirements of the **ISPS** Code

> Crew photograph: Jalens Conference photograph: IMO