Human Element strategy and research

Overview

The term 'human element' refers to the various human and organisational factors operating in the maritime industry:

- ship crews and shore-based management
- regulatory organisations
- designers and constructors
- charterers and insurers
- trainers
- dockyard workers
- accident investigators

MCA’s Human Element strategy was first adopted in 2002, and aims to improve maritime safety and reduce marine pollution. It affects every area of MCA's activities, and maritime safety and security.

It’s vital for shipping businesses to manage the Human Element effectively, which means taking human abilities, limitations, and weaknesses into account.

How Human Element works in the maritime industry

Human behaviour needs to be managed at all levels whether it is active seafarers at work on board ships, the regulator developing national and international regulations, or senior managers developing policies in shipping companies.

The policies and strategies developed will set out how ships and their crews operate, and how safely they do so.

To create a safe working environment, maritime businesses need to understand the complex and often subtle interaction between all these varied factors:

- recruitment and selection policies and methods
- crew competence, training, experience and teamwork
- conditions of service, loyalty, motivation, morale
- design, construction and ergonomics
- stress and fatigue
- security
- living and working conditions
- manning levels, hours of work, watch keeping patterns and schedules
- management policies
- safety management systems
- operational systems
- organisational culture, safety culture, just culture
- culture of continuous improvement or merely compliance, workforce engagement and senior management commitment
- trading patterns
- standards of build and certification
- maintenance of ships
- international and national regulations
MCA’s Human Element strategy and research

This strategy aims to improve safety management and performance in an organisation.

It began with researching human element issues, with the aim of raising awareness of them and developing specialist expertise within MCA.

MCA works with a wide range of organisations, from the International Maritime Organization (IMO) to representatives from the maritime industry, other industries, academics and researchers.

The strategy is reviewed regularly to make sure it meets the needs of MCA and the maritime industry and carefully combines regulatory and non-regulatory elements.

Improving Human Element management skills, and encouraging a ‘safety culture, is done by:

- commissioning and sharing research into Human Element issues
- developing and sharing Human Element tools and guidance
- working with other safety-critical industries e.g. rail, aviation, off-shore industries
- engaging with the UK shipping industry
- promoting the adoption of lessons learned from research projects
- continued interaction with IMO and the Human Element Working Group
- improved working relationship with the European Maritime Safety Agency (EMSA)
- developing the concepts of ‘safety culture’ and ‘just culture’ within the industry
- putting a strategy in place to deal with the serious issue of fatigue amongst seafarers
- looking at ways to improve Human Element training as part of the standard seafarer training syllabus

The schematic diagram shows the 6 human and organisational factors or the ‘Human Element’ at work in the maritime industry:

1. Ship factors
2. People factors
3. Working and living conditions
4. Organisation on board
5. Shore-side management
6. External influences and environment
MCA’s Human Element Work at International Maritime Organization (IMO)

MCA is active at IMO’s Maritime Safety Committee (MSC), Environment Protection Committee (MEPC), Human Element, Training & Watchkeeping (HTW) meetings, and at other committees where Human Element-based contributions are needed.

MCA contributes to the IMO’s strategy for addressing the Human Element, which is designed to increase awareness and encourage action throughout the IMO and its members by:

- including an ‘action plan’ for several important issues
- including a checklist to encourage IMO bodies to consider Human Element issues when developing and amending mandatory and non-mandatory instruments
- encouraging those with Human Element expertise, knowledge and interest to take part in relevant Sub-Committees, to strengthen Human Element input
- creating a framework for consideration of ergonomics and the work environment