Safety Management in Maritime Transportation
An introduction to the ISM Code

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Safety Management in Maritime Transportation

An overview and background information

- What triggered the adoption of the ISM Code?
- What is the ISM Code?
- What has it achieved?
- Is everybody satisfied?
Why was safety management needed in shipping?

Organizational cultures in shipping companies (T.-C. Mathiesen, DNV, 1994)

<table>
<thead>
<tr>
<th>Evasion culture</th>
<th>Compliance culture</th>
<th>Safety culture</th>
</tr>
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<tbody>
<tr>
<td>“When costs of complying with the Rules and Regulations is considered to be high, so are the benefits of evading them”</td>
<td>“a situation where the shipowners strive to comply with Rules and Regulations as this is the ‘Ticket to Trade’”</td>
<td>“a situation where owners are engaged in a continuous process to improve safety and see this as their management philosophy and operational mode to reduce losses”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“focus on the entire management chain; from the boardroom to the ship”</td>
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Early beginning in maritime safety management

Industry driven developments since the early 1980s

- International Chamber of Shipping (ICS)/International Shipping Federation (ISF)
- International Ship Managers Association (ISMA) (today InterManager)
- Det Norske Veritas (DNV)
Herald of Free Enterprise – capsize in 1987

Hon. Mr. Justice Sheen, Wreck Commissioner (UK)

- “The Board of Directors did not appreciate their responsibility for the safe management of their ships.”
- “From top to bottom the body corporate was infected with the disease of sloppiness.”
International Safety Management (ISM) Code

Adopted by IMO in 1993

- Submission by UK in 1987 to MSC 55
  - Consideration and Adoption of Amendments to the International Convention for the Safety of Life at Sea, 1974 – Ro-Ro Passenger Ferry Safety,” MSC 55/23/1
- IMO 16th Assembly in 1989
  - IMO Guidelines on Management for the Safe Operation of Ships and for Pollution Prevention, Res. A.647(16)
- IMO 17th Assembly 1991
  - Res. A.647(16) rewoke by Res. A.680(17)
- IMO 18th Assembly 1993
  - International Management Code for the Safe Operation of Ships and for Pollution Prevention, A.741(18)
## Structure of the ISM Code

The ISM Code contains of 16 Elements

<table>
<thead>
<tr>
<th>PART A – Implementation</th>
<th>9</th>
<th>Reports and analysis of non-conformities, accidents and hazardous occurrences</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>10</td>
<td>Maintenance of the ship and equipment</td>
</tr>
<tr>
<td>Safety and environmental protection policy</td>
<td>11</td>
<td>Documentation</td>
</tr>
<tr>
<td>Company responsibilities and authority</td>
<td>12</td>
<td>Company verification, review and evaluation</td>
</tr>
<tr>
<td>Designated Person(s)</td>
<td>13</td>
<td>Certification and periodical verification</td>
</tr>
<tr>
<td>Master’s responsibility and authority</td>
<td>14</td>
<td>Interim certification</td>
</tr>
<tr>
<td>Resources and personnel</td>
<td>15</td>
<td>Verification</td>
</tr>
<tr>
<td>Shipboard operations</td>
<td>16</td>
<td>Forms of certificates</td>
</tr>
</tbody>
</table>
Achievements of the ISM Code

What has the ISM Code changed?

- Clear defined minimum conditions for SMS on board ships world-wide
- Safety is a confirmed management responsibility
- Clarification of shore-based and ship-based duties and responsibilities
- Introduction of risk-based thinking and enhanced safety awareness in shipping operations
- A clear approach to SMS
  - Say what you do
  - Do what you say
  - Show that you do what you say you do
- SMS subject to verifications by government authorities
Critical voices in respect to the ISM Code

There are studies raising concerns about the ISM Code

- Issues listed in the studies
  - Related to the implementation of SMS on board
    - Excessive paperwork
    - Not always ship specific
    - Lacking human resources to deal with all the work
    - Missing links between ISM, ISO 9000 and ISPS

Photo: marineinsight.com
Industry stakeholder critique

Tanker Management and Self Assessment (TMSA)

- ISM is only basic safety management
- ISM compliance is “only” level 1 out of 4 levels in TMSA

Source: OCIMF - TMSA

Element 1
Management, Leadership and Accountability

Main objective
Provide direction and clearly define responsibilities and accountabilities at all levels within the organisation. An effective quality management system requires commitment at the highest levels of the organisation and clear definitions of the roles and responsibilities for everyone involved in its administration. Element 1 establishes these principles as part of the management system.

Aim
Through strong leadership, management promotes safety and environmental excellence at all levels in an organisation.

<table>
<thead>
<tr>
<th>STAGE</th>
<th>KEY PERFORMANCE INDICATORS</th>
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<tbody>
<tr>
<td>1</td>
<td>Management commitment is clearly defined in documentation that includes mission and vision statements, policies and procedures.</td>
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<td></td>
<td>Senior management demonstrates a clear commitment to implementing the safety management system</td>
</tr>
</tbody>
</table>

BEST-PRACTICE GUIDANCE
Mission and vision statements contain the high-level and long-term goals and aspirations of the company, such as zero incidents and zero spills. The company aims to reach these goals through continuous improvement.
Conclusions

Is everybody satisfied?

- The ISM Code has changed the shipping industry tremendously
- However, there is a debate if it changed the organizational culture in shipping
- Its success depends on management commitment shaping an individual SMS
- Of ongoing concern is the extra workload on board caused by the ISM Code
Thank you!

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