IMR Integrated Quality and Safety Management System

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Background

- All cargo vessels <u>above 500 GRT</u> must base their operation on IMO conventions such as SOLAS, incl ISPS, MARPOL and STCW, in addition to ISM (IMO regulations) and the ILO convention MLC.
- These conventions and regulations forms the basis of the IMR Safety Management System (SMS) which we established in 2001/2002.
- Starting point was the ERVO 2000 meeting in Galway, Ireland where Lloyds presented the ISM code and invited to a ISM training course in London and gave us a set of "strawman" documents to develop our own ISM system.
- We have since then continuously expanded the SMS iaw new conventions, new regulations, and gained knowledge and experience.



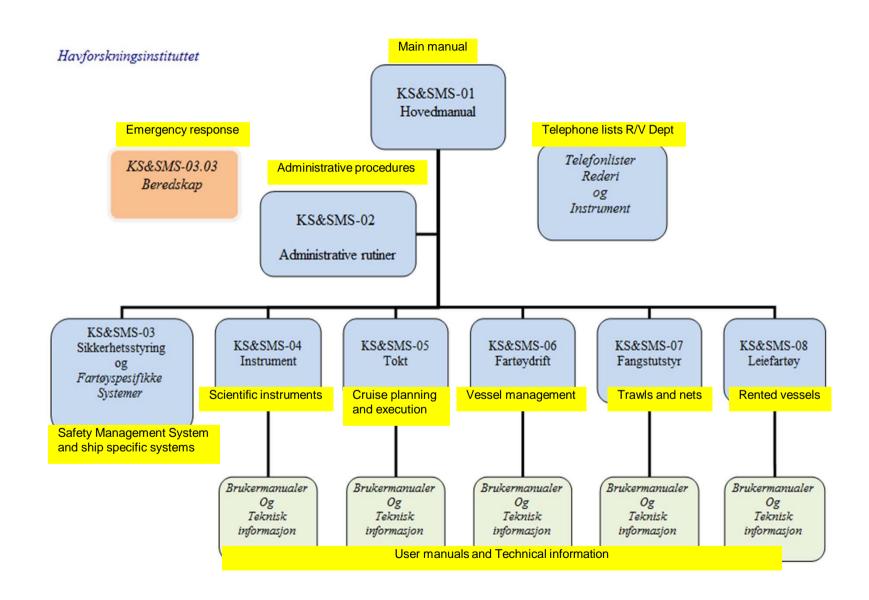
Quality Management System

- IMR/RV Department has developed and expanded on an internal non-certified QMS over many years to cover all activities regarding:
 - Vessel operations, maintenance, logistics, budget control etc
 - Scientific equipment operations, logistics, storage etc
 - Datahandling, data reduction, data storage and data transfer

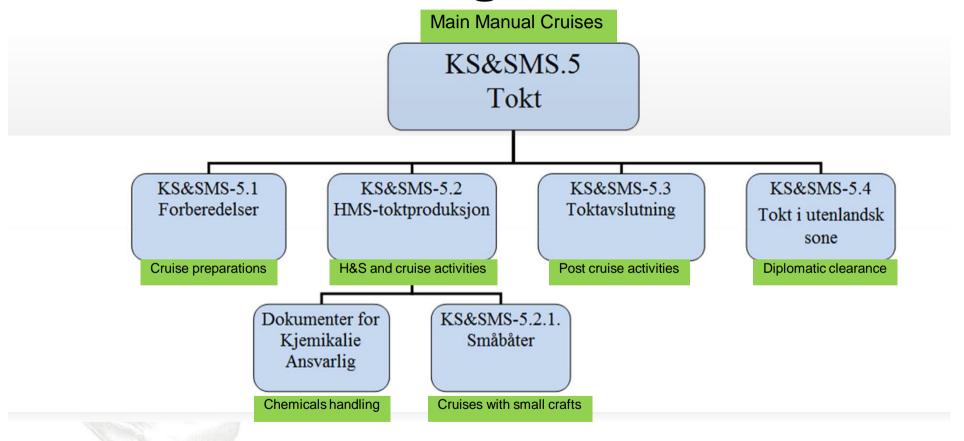




Web based quality management handbook



Cruise Planning and Execution





DNV GL Integrated QA & SMS

ISM – Safety Management

ISO 9000 – Quality Assurance

Integrated Quality & Safety Management System

OHSAS 18001

Health & Safety

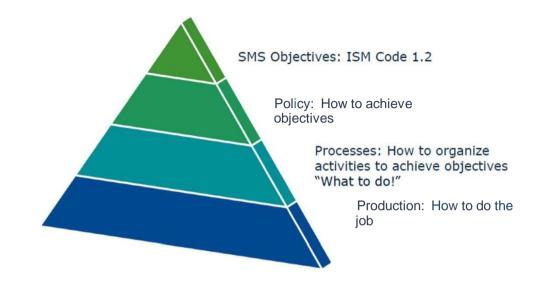
ISO 14000 – Environmental management ISO 5001-Energy management



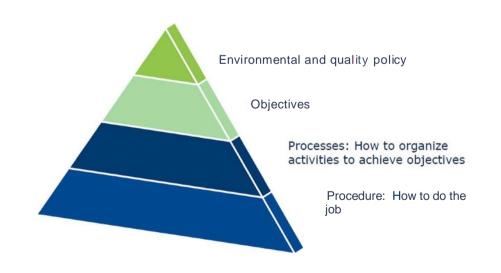
Certification project

- Formal project start: 23 May 2014
- Document review ISO 9001 + 14001 August 2014
- Initial audit ISM/ISO 9001 + 14001 (Focus: Implementation)
- Sample audit initial stage:
 1 large ship (2d) + 1 small ship (1d) (Ongoing)
- Closing NCs (if any)
- Recommendation for certification
- Certificate !!!!





ONV-GL ISO 14001 / 9001





DNV•GL



Integrated management systems Ship operating companies

Safety, Quality, Environment and Occupational Health and Safety

DNV Maritime





Det Norske Veritas $^{\text{TM}}$

SEAMLESS

GUIDELINES FOR IMPLEMENTING AND AUDITING MANAGEMENT SYSTEMS INTEGRATING ISO AND ISM CERTIFICATION

Seamless certification provided by DNV

The maritime industry is increasingly turning to ISO standards to drive excellence and unlock its potential to meet and exceed customer expectations. This is in addition to the mandatory requirements in the ISM-code. There are many common requirements and a combination of these systems leads to efficient management of safety, quality, environmental issues, occupational health and safety, and energy performance. DNV provides certification for ISO 14001/9001/OHSAS 18001 as an Accredited Certification Body. ISO 50001 is offered as an unaccredited service. Through our specially trained Seamless auditors available at key locations worldwide, we are able to help our customers maintain ISO certifications while significantly reducing the cost and time required. Seamless certification is only available to companies holding a DNV issued Document of Compliance.

Executive management

Objectives and policies

| ISM | OHSAS 18001 | 9001:2000 | 14001:2004 | Functional requirements/areas to be considered | |
|-------|-------------|-----------|------------|---|--|
| 1.2 | 4.2 | 5.1 | 4.2 | The policy and objectives should reflect the | |
| 1.4.1 | 4.2 | 5,3 | 4.9 | intention of the each of the standards. | |
| 2.1 | 4,3,3 | 5,4,1 | 4.3.3 | Safety and environmental policy. | |
| 2.2 | 4.4.3 | | 4.4.3 | Objectives and targets of each relevant function and level, | |
| | | | | Objectives and targets at each relevant function | |
| | | | | and level. Internal communication. | |
| | | | | Objectives and targets at each relevant function | |
| | | | | and level. Internal communication. | |

System management

| ISM | OHSAS 18001 | 9001:2000 | 14001:2004 | Functional requirements/areas to be considered | |
|-------|-------------|-----------|------------|--|--|
| 1.4.3 | 4.1 | 5.1 | 4.1 | Organisational responsibilities. Authority. Internal | |
| 1.4.6 | 4.3.4 | 5.8 | 4.3.3 | audits. Management (Master's) review. Communication | |
| 3.2 | 4.4.1 | 5.4.1 | 4.4.1 | lines. System performance parameters. Reporting | |
| 3.3 | 4.4.3 | 5.5.2 | 4.4.3 | system. Resources and support. Control of | |
| 12.1 | 4.4.4 | 5.5.3 | 4.4.4 | documents. Continual improvement. | |
| 12.2 | 4.4.5 | 5.6 | 4.4.5 | Designated person(s). | |
| 4 | 4.5.4 | 6.1 | 4.5.5 | Quality management representative, Customer needs | |
| | 4.6 | 6.2.1 | 4.6 | and satisfaction, | |
| | 4.3.1 | 4.2 | 4.3.1 | Significant environmental aspects, Environmental | |
| | 4.4.1 | 5,5,3 | 4.4.1 | management representative, Communication - | |
| | 4.4.3 | 8,2,1 | 4.4.3 | external interested parties. | |
| | | | | Occupational health and safety risks where control | |
| | | | | measures need to be applied. OH&S management | |
| | | | | representative. Communication - external, internal | |
| | | | | parties. | |

Integrated QA and SMS for "small RVs"

What are the minimum requirements for smaller vessels?

- Depends on national rules & regulations, which are based on international conventions, and "adjusted" to size, trading area and type.
- It is not just about size, people also matter. Who is covered by the Seafarers' Bill of Rights (MLC)?

SMS is mandatory for the following Norwegian ship types:

Section 1

Scope of application

These Regulations apply to Norwegian:

- a) ro-ro passenger ships certified to carry more than 12 passengers;
- passenger ships engaged on domestic voyages and certified to carry more than 100 passengers;
- passenger ships engaged on foreign voyages and certified to carry more than 12 passengers;
- d) cargo ships of 500 gross tonnage and upwards;
- e) fishing vessels of 500 gross tonnage and upwards; and
- mobile offshore units.

These Regulations do not apply to ships belonging to or used by the Government and which are not used for commercial purposes.

Other countries may have different legislation





Compliance?

| Rules & Regulations | Compliant? | Why | Why not |
|---------------------|------------|---------|---------|
| MLC | Yes | Because | |
| MARPOL | No | | Because |
| Etc. | | | |

When adapting an existing system for larger vessels to smaller vessels, the challenge is to find the minimum requirements without deluting too much!

Range of use – almost equal (in terms of procedures)...

"G.O. Sars":

12. Interne referanser

"Hans Brattström":

KS&SMS-03-02 Skipsoperasjonsmanual Eksporter til PDF **■ 2. Mannskap og stillingsinstruks** 3. Familisering, opplæring og evaluering 4. Daglig drift, fartøy 5. Daglig drift, forskning KS&SMS,3,2,0-05 Kapittel 5. KS&SMS.3.2.5-01 Prosedyre for tråling HKS&SMS.3.2.5-03 Prosedyre for opptak av rigger KS&SMS.3.2.5-04 Prosedvre for mistet flytende utstyr KS&SMS.3.2.5-05 Prosedyre for Hugin KS&SMS.3.2.5-06 Hugin - Nødprosedyre KS&SMS.3.2.5-07 Prosedyre for multinett HKS&SMS.3.2.5-08 Kapteinens toktrapport 6. Arbeidstillatelser og operasjoner med økt risiko 7. Øvelser og beredskap 8. Verne og Miljøarbeid 9. Avviksrapportering 10. Vedlikehold og sjekk av kritisk utstyr 11. Verifikasjon og revisjon

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KS&SMS-03-02 Skipsoperasionsmanual
                                                       Eksporter til PDF
 2. Mannskap og stillingsinstrukser

■ 3. Familisering, opplæring og evaluering

 4. Daglig drift, fartøy
 5. Daglig drift, forskning
         KS&SMS.3.2.0-05 Kapittel 5.
         KS&SMS.3.2.5-01 Prosedyre for tråling
         KS&SMS.3.2.5-03 Prosedyre for opptak av rigger
         KS&SMS.3.2.5-04 Prosedyre for mistet flytende utstyr
 ■ 6. Arbeidstillatelser og operasjoner med økt risiko
 7. Øvelser og beredskap

■ 8. Verne og miljøarbeid

  9. Avviksrapportering
    10. Vedlikehold og sjekk av kritisk utstyr
 11. Verifikasjon og revisjon

■ 12. Interne referanser
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Advantages

- Cross-company appreciation of the system and, hopefully, setting the operational side up a notch or two!
- Treating risk/incidents/follow-up processing/reporting for all vessels in the same manner
- Safety levels should not depend on vessel size







Questions?