

---

# VMS MB 106 - The ISM Code : its development & implementation

VMS MB 106, AUGUST 1995 No other development at IMO will have such a universal impact as the International Safety Management Code (ISM Code). Its scope encompasses every ship to which the SOLAS Convention applies, together with Mobil Offshore Drilling Units.

This Bulletin deals with its conception and development up to its completion at the 65th session of the Maritime Safety Committee in May 1995.

The success of the Code will depend largely on the approach adopted in its assessment and its acceptance as a tool to assist in achieving compliance with IMO Conventions rather than an end in itself.

In preparing this Bulletin the author has drawn heavily from his paper entitled "Concept of the ISM Code" presented in London at the IMAS 95 Conference organized and sponsored by the Institute of Marine Engineers.

The ISM Code - Its  
development & implementation

Synopsis

Background

Chronological order of principal events

The "Scandinavian Star" disaster

Statutory requirements

---

Hierarchy of ISM Code instruments

Chapter IX (Regulations)

Implementation according to type of vessel

The ISM Code

The  
guidelines on implementation of the ISM Code  
by Administrations (IMO  
Guidelines)

Issuance and validity of DOC and  
SMC

The certification process

Annex  
1:  
Standards on ISM Code certification arrangements

ICS/ISF guidelines  
on the application of the ISM Code

Concluding comments

Author's biography

---

## Synopsis

No other development

at IMO will have such a universal impact as the International Safety Management Code (ISM Code). Its scope encompasses every ship to which the SOLAS Convention applies, together with Mobil Offshore Drilling Units.

This Bulletin deals with its conception and development up to its completion at the 65th session of the Maritime Safety Committee in May 1995.

The success of the Code will depend largely on the approach adopted in its assessment and its acceptance as a tool to assist in achieving compliance with IMO Conventions rather than an end in itself.

In preparing this Bulletin the author has drawn heavily from his paper entitled "Concept of the ISM Code" presented in London at the IMAS 95 Conference organized and sponsored by the Institute of Marine Engineers.

## Background

The governmental

origins of the International Safety Management Code (ISM) Code may be traced to the United Kingdom Department of Transport Merchant Shipping Notice M1188 issued in July 1986 following a report of the Court of Formal Investigation into a UK casualty. In emphasizing the need for good management both at sea and ashore, the Department stated that "Direct operational responsibility lies with the Master and it is proper for owners to delegate many management and technical activities to him and his crew; but nonetheless the overall responsibility of the shipping company requires the need for close involvement by management ashore." Significantly it recommended that "every company operating ships should designate a person ashore with responsibility for monitoring the technical and safety aspects of its ships and for providing appropriate shore-based back-up".

Notice M1188 also referred to the Court's emphasis on: the importance of the interview between the owners and a new Master; clear instructions and adequate standing orders to the Master and complementary standing orders from the Master to his crew; close cooperation and regular and efficient communication, in both directions, between ship and shore; and regular monitoring to ensure that the management policy was being implemented.

This "M" notice was considered to give "very sound advice" by the April/June 1987 Court of Formal Investigation into the "Herald of Free Enterprise" disaster (which occurred on 6th March 1987) and the United Kingdom took steps to introduce mandatory management requirements in respect of passenger ro-ro ferries only. The limitation to such ferries was based on perceived differences between the operation of ro-ro ferries (strict schedules, rapid turn around, multiple crews) and deep sea vessels. These proposals seemed reasonable and practicable and did not involve third-party auditing or verifications. Basically, the UK legislation requires the owners of UK registered passenger ro-ro ships engaged on short voyages to provide an operations book which, inter alia, includes the name of the designated person ashore having the duties described above (M1188). The designated person must: have direct access to the Board of Directors; be provided with sufficient knowledge and resources; and have appropriate knowledge and sufficient experience of ships at sea and in port to fulfill the stated duties. The

---

operations book is required to provide instructions and information on almost all aspects of ship operation under four principal headings: General; Ship in Port; Preparing for Sea; and Ship at Sea. The Master may deviate from the instructions within the book in the interests of the preservation of life or safety of the ship. The operations book is subject to inspection by any UK surveyor conducting a survey or general inspection of the ship. This background and a chronological summary of the principal events leading to the mandatory ISM Code and associated documents is provided for convenience in Table 1.

Table 1 - ISM Code Development - Chronological Order of Principal Events

Date  
Events and  
Comments

July  
1986  
Issue by UK of Notice  
M1188. Non-Mandatory advice on Good Management following a Court of Formal Investigation report critical of ship management. Recommends a "designated person ashore" responsible for safe operation.

March  
1987  
"Herald of Free  
Enterprise" Disaster.

June  
1987  
HOFE Court of Formal  
Investigation Report: "M1188 provides sound advise".

April  
1988  
IMO: MSC 55: UK  
Proposals for passenger ro-ro ferries to carry operations book and have "designated person ashore"; no time for discussion. IMO Guidelines on Safe Ship Management to be developed

October  
1988  
IMO: MSC 56: UK  
proposals for passenger ro-ro ferries considered but not accepted (see MSC 55 above).

December  
1988  
UK Regulations for UK  
passenger ro-ro ferries only. Requirements include "designated person ashore" and carriage of an operations book.

April  
1989  
IMO: MSC 57: UK  
delegation expresses concern at omission of reference to a "designated person ashore" from non-mandatory draft guidelines.

October  
1989

---

IMO: 16th Assembly: IMO  
Guidelines for Safe Ship Management adopted under A647(16). No reference to designated person ashore".

April  
1990  
"Scandinavian Star"  
Disaster

May  
1991  
IMO: MSC 59: Nordic  
proposals, based on ISO 9000, for a mandatory safety management system for passenger ships and other ships over 5000 gt. IMO working group amends Res A647 (16) to include a "designated person ashore". Work commenced on International Safety Management Code (ISM Code).

November  
1991  
IMO: 17th Assembly:  
Adoption of Res A680(17) which includes a "designated person ashore" and cancels Res A 647 (16).

May  
1993  
IMO: MSC 62: Approval  
of draft ISM Code for submission to the Assembly. Work commenced on IMO Guidelines on ISM Code Implementation. Decision to make ISM Code mandatory.

November  
1993  
IMO: 18th Assembly: ISM  
Code adopted under Res A 741 (18). Res A 739 (18) on Standards of Recognized Organizations. ICS/ISF Guidelines for Companies on Application of ISM Code submitted.

May  
1994  
IMO: Conference of  
Contracting Governments to SOLAS: ISM Code made mandatory for passenger ships and all other ships and MODUs over 500 gt on staggered implementation dates. Standards for Recognized Organizations made mandatory under Res A739(18).

February  
1995  
IMO: Flag State  
Implementation Sub-Committee completes "Guidelines on the Implementation of the ISM Code by Administrations" except for the format for the certificates.

The "Scandinavian Star"  
Disaster  
In its submission to  
the 55th session of the Maritime Safety committee (MSC 55) in April 1988, the UK proposed that this system should be applied internationally to ro-ro vessels by the addition of a new Chapter II-3 to the SOLAS Convention. These proposals were considered at MSC 56 in October 1988 when the UK suggested that they could be expanded later to other types of ships. Some countries supported the UK proposals but the majority of countries were opposed. A group of countries having large ferry fleets cautioned that "IMO was entering into an entirely new area of significant complexity which should not be underestimated and that

---

experience on implementation and application of IMO Guidelines was required before specific recommendations to particular solutions are considered". This view had much support. Other opposing views included: the doubtful legality of introducing a new chapter to SOLAS by the tacit Amendment procedure; that it would be premature to introduce measures covering a limited area of management complexity for one ship type; and that such requirements could not be introduced under their national legislation.

The "IMO Guidelines on Management for the Safe Operation of Ships and for Pollution Prevention" referred to above, were developed by a joint MSC/MEPC working group and adopted in October 1989 under Resolution A647(16). The UK delegate at the 57th session of MSC in April 1989 expressed concern at the decision to omit, from this non-mandatory document, any reference to a designated person, persons or department within the Company being given specific responsibility for safety and environmental protection. Some six months later, on the 7th April 1990, a fire on the ferry "Scandinavian Star" claimed the lives of 159 people. The subsequent formal investigation committee stated that "All the evidence indicates that it was ignited by a naked flame". In its conclusions, the committee reported that, in its opinion, "The deficiency on the part of the owner would have been unlikely to have occurred if the priorities and organization of the work had been in accordance with the principles of the IMO Resolution" and recommended "that Resolution A647(16) becomes mandatory for owners of passenger ships in international service".

The investigation committee's recommendations were pursued by the five Nordic countries who submitted papers to MSC's 59th session (May 1991). These papers included proposals for: making a safety management system mandatory; amending Res A647(16) along the lines proposed in their submitted text; draft regulations for a new Chapter II-3 of SOLAS to be applied to passenger ships and other ships over 5000 gt; and a means of monitoring the management system. Their submissions also included references to the ISO 9000 series related to quality systems and "that shipping companies are now introducing modern Quality Assurance principles in their firms".

In fact, their draft revision contained a large number of modified quotations from ISO 9000 and, significantly, that "Management may choose to delegate responsibility for ensuring that these Guidelines are implemented and maintained (ISO 9004 (5.2.2))." The IMO working group, set up at MSC 59, amended Res A647(16), without dissent, to include a reference to a designated person ashore and this resulted in its replacement by Res A680(17) in November 1991.

Several objections were raised to the contemplation by the submitting countries of a company audit based on ISO 9000. It was stated that an external audit was an alien concept to many countries and, to be effective, mandatory standards needed to be uniformly interpreted and implemented and that the submitted proposals would be divisive. As one of the opposition voices, it seemed to me that the proposals were attempting to impose a voluntary Quality Assurance system (in which the Company writes the procedures) in a mandatory context in which externally imposed regulations have to be complied with.

Good progress was made by the group, coordinated by Norway, prior to MSC 60 (April 1992). However, the draft ISM Code was initially written in mandatory language (i.e. "shall" rather than "should" as in other mandatory codes.). Other points raised in submissions, in the working group or in the Plenary at MSC 60, included: whether the code should be mandatory or voluntary; whether sufficient surveyors competent in management systems and IMO Conventions were available; the legal basis for mandatory requirements, tonnage range; range and type of vessels; phasing-in dates. It was agreed that: the reference to

---

"internationally agreed quality assurance principles be deleted from the initial draft Code; and a statement that "the port State may verify that the Company has established a safety management system was also deleted; the draft Code should be re-written in non-mandatory language and should be ready for adoption by the IMO Assembly in Autumn 1993; member governments should consider the working group's report and submit comments to MSC 61."

Following three sessions of the joint MSC/MEPC working group set up at MSC 60, the draft ISM Code was approved by the Maritime Safety Committee at its 62nd Session in May 1993. The MEPC was invited to approve the Code and submit it to the eighteenth IMO Assembly where it was adopted in November 1993 by resolution Res A741 (18).

Although the Code is written in general terms, it will be noted that it is quite specific in some respects. In particular: it refers to a designated person or persons ashore having direct access to the highest level of management; and it requires a clear definition and documentation of the Master's responsibility and authority.

Resolution A741(18) requested the Maritime Safety Committee to develop, as a matter of urgency, "Guidelines on the Implementation of the ISM Code by Administrations" (hereafter the Guidelines) which, to maintain the chronological order of events, as discussed below.

#### Statutory Requirements

Reverting to events at

MSC 62, the Committee decided that the requirement for a safety management system (SMS) should be made mandatory through a new Chapter IX to SOLAS and set up a correspondence group, coordinated by Denmark, to finalize the text of the regulations for adoption at a Conference of Contracting Governments to SOLAS in May 1994. Some modifications were made to the text prior to adoption of the new Chapter IX including: its application to all passenger ships, including high speed craft, irrespective of size; to align it with other SOLAS Chapters by explicitly indicating that a specific request from the Administration is required for another Government to issue a Document of Compliance to a Company operating ships entitled to fly the flag of that Administration; and to make provision for the absence of a valid Safety Management Certificate in case of change of flag State or Company. The Conference decided not to apply the Code to non-propelled MODUs.

The Code was made mandatory by a reference to it within Regulation 1 of Chapter IX and thus it can only be amended under the provisions of Article VIII of SOLAS.

The successful conclusion of the Conference (which was held in conjunction with the 64th Session of the Maritime Safety Committee) left only the Guidelines and the formats for the Certificates to be developed. MSC 64 then re-convened the Joint MSC/MEPC Working Group and included in its terms of reference the task of providing instructions and guidance to facilitate the work of the third session of the Flag State Implementation sub-Committee (FSI 3) in finalizing the "Guidelines for Administrations on the Implementation of the ISM Code" (thereafter the "IMO Guidelines"). This onerous task was completed during FSI 3. The model formats for the Certificates (DOC, SMC and Interim DOC and SMC) were completed at the 65th session of the Maritime Safety Committee meeting and form Annex 2 of the IMO Guidelines.

---

The hierarchy of the instruments relating to the ISM Code with brief explanatory notes are shown in table 2 and some relatively brief general comments are now made on the regulations, the Code and the IMO Guidelines.

Table 2 - Hierarchy of ISM Code Instruments

SOLAS CHAPTER IX REGULATIONS

MAKE ISM CODE  
MANDATORY, GIVE APPLICATION DATES FOR SHIP TYPES ETC.

REFER TO IMO  
GUIDELINES FOR TRANSITIONAL ARRANGEMENTS

ISM CODE DEFINES  
THE SAFETY MANAGEMENT SYSTEM AND RESPONSIBILITIES

IMO GUIDELINES FOR ADMINISTRATIONS ON  
IMPLEMENTATION



---

ICS/ISF GUIDELINES FOR COMPANIES ON  
IMPLEMENTATION OF THE ISM CODE

Chapter

IX

(Regulations)

Under the regulations

of the new Chapter IX of SOLAS, Administrations are responsible for ensuring that, on the prescribed dates, each new or existing ship flying its flag holds a Safety Management Certificate (SMC) and the operating Company holds a Document of Compliance (DOC) for that type of ship.

The Administration may request another Contracting Government or a Recognized organization to issue such certificates and periodically verify the proper functioning of the Safety Management System (SMS). Recognized organizations must meet the IMO mandatory standards of Resolution A739(18).

The prescribed implementation dates and types of ship are given in table 3. A ship required to hold a SMC is subject to port State Control.

TABLE 3 - Implementation of ISM Code According to Type of Vessel

Implementation

Date

Type of

Ship

(New and Existing)

Lower Limit

(Gross Tons)

1st July 1998

Passenger

Ships

Passenger High Speed Craft

None

1st July 1998

Oil

Tankers

Chemical Tankers

Gas Carriers

Bulk Carriers

Cargo High Speed

Craft

500 gt

---

1st July 2001  
Other Cargo  
Ships  
Mobile Offshore Drilling Units  
500 gt

## The ISM Code

The Code requires that the safety management system (SMS) should ensure:

- compliance with mandatory rules and regulations; and
- that applicable codes, guidelines and standards recommended by the Organization, Administrations, classification societies and maritime industry organizations are taken into account.

It might well be argued that the Conventions already require compliance with mandatory rules and regulations (point 1) and with regard to point 2, during its development, it was acknowledged that the Code would not be a back door means of making IMO resolutions mandatory. In the author's view, the Code's value is that by requiring every company to develop, implement and maintain a safety management system (SMS) and setting objectives, it both provides a tool for ensuring compliance with the Conventions and covers risks not identified in the Conventions. Nevertheless, it would be a sad situation if a ship which met all Convention requirements were prevented from sailing from SMS considerations.

The prescribed safety objectives which may include matters outside the precise provisions of the Conventions "should, inter alia:

- provide for safe practices in ship operation and safe working environment;
- establish safeguards against all identified risks; and
- continuously improve safety management skills of personnel ashore and aboard ships, including preparing for emergencies related both to safety and environmental protection. "

The IMO Guidelines state that "These objectives provide clear guidance to Companies in developing SMS elements in compliance with the ISM Code" but, significantly, they also state that "They should not form the basis for establishing detailed interpretations to be used for determining conformity or non-conformity with the requirements of the ISM Code".

Particular attention is drawn to the requirement for "designated person(s) ashore". In the author's opinion, nothing concentrates the mind more than the assumption of personal responsibility and this addition to the previous non-mandatory resolution A680(17) is a major step forward.

---

The  
Guidelines on the Implementation of the ISM Code by Administrations  
(IMO  
Guidelines)

The IMO Guidelines,  
which apply to Administrations, establish basic principles:

- for verifying that a Safety Management System (SMS), for a Company responsible for the operation of ships or a SMS for a ship, complies with the ISM Code; and
- for the issue and periodical verification of the Documents of Compliance and Safety Management Certificates.

They provide: a useful list of definitions including those relating to audits; advice on documented procedures and instructions and documentation of verifications relevant to ensure compliance with mandatory requirements which may not be subject to statutory or classification survey; details of certificates to be issued and the certification process. In addition, an Annex 1 to the Guidelines defines the Standards which must be met by the audit team and management of organizations recognized by Administrations to deal with ISM Code certification.

It is noteworthy that Administrations are recommended to limit the development of assessment criteria in the form of prescriptive requirements as this may lead to companies implementing solutions prepared by others and "It may then be difficult for a company to develop the solutions which best suit that particular Company, that particular operation or that specific ship". There is a further recommendation that "assessments be based.....on specific objectives rather than on conformity with detailed requirements.....".

The Guidelines stress that verification of compliance with mandatory rules and regulations neither duplicates nor substitutes surveys for other maritime certificates. However, it points out that some mandatory requirements may not be subject to statutory or classification surveys (e.g. maintaining the condition of the ship between surveys and certain operational requirements) and that specific arrangements may be required for providing objective evidence for verification such as documented procedures and instructions.

Issuance and Validity of  
DOC and SMC

The Document of

Compliance (DOC) is issued for a period of five years following verification that the ISM Code requirements are being met and that the Company's SMS has been in operation for at least three months and at least for three months on each type of ship operated by the Company. The objective evidence should, inter alia, include records from the internal annual audit performed by the Company both ashore and on board. The validity of the DOC is subject to annual verifications within three months before or after the anniversary date. The verification should include examination of the statutory and classification records for at least one ship of each type to which the DOC applies.

The Safety Management Certificate (SMC) is issued, for a period of five years, after the verification of the DOC for that particular type

---

of ship, after verification that the ISM Code requirements are being met and, inter alia, have been in operation on the ship for at least three months. There was considerable discussion at IMO on the intermediate verification requirements. Some delegations preferred annual verifications but the majority favored one verification during the period of validity of the SMC. In view of this decision it was agreed that such verifications should be complemented by the annual audits by Companies and ICS agreed to include a recommendation on the conduct of annual audits when revising the ICS/ISF Application Guidelines.

The need (based on experience with ISO 9000 systems) for special transitional arrangements in the case of change of flag State or Company was raised at the Conference and the concept of Interim DOCs and SMCs was subsequently introduced. In particular, to meet the needs of a newly established Company or where new ship types are added to an existing DOC, an Interim DOC may be issued. Interim DOCs are valid for no more than 12 months on demonstration that the Company has a SMS which, inter alia, ensures compliance with mandatory rules and regulations.

An Interim SMC, valid for not more than six months, may be issued to new ships on delivery, and when a Company takes on the responsibility for the management of a ship which is new to the Company. The Guidelines lay down criteria to be satisfied before an Interim SMC is issued.

The  
Certification  
Process

The certification  
process for both DOC and SMC will normally involve:

- Initial Verification
- Periodical Verification
- Renewal Verification

On completion of the initial verification, a DOC will be issued to the Company, copies of which should be forwarded to each shore-side location and each vessel in the Company's fleet. As each vessel is assessed, a copy of it should be forwarded to the Company's head office. In cases where the certificates are issued by a recognized organization, copies of all certificates should be sent to the Administration.

Periodical Safety Management Audits, to verify effective functioning of the ISM Code and maintain the validity of the DOC, are to be carried out. The periodical verification is to be carried out within three months. A schedule, not exceeding three months, is to be agreed for completion of any necessary corrective actions. Where the Company has more than one shore-side location, each of which may not have been visited at the initial assessment, the periodical assessments should endeavor to ensure that all sites are visited during the validity of the DOC.

Similarly, audits to maintain the validity of SMCs are required.

If only one intermediate verification is to be carried out,

---

it should take place between the second and third anniversary date of the issue of the SMC.

Renewal Verifications are to be performed before the validity of the DOC or the SMC expires. The renewal verification will address all the elements of the SMS and the activities to which the requirements of the ISM Code apply. Renewal verification may be carried out from six months before the expiry date of the DOC or the SMS and should be completed before their expiry date. Figure 1 shows the schedules for verification of the DOC and SMC.

#### FIGURE 1 - VERIFICATION FOR DOCUMENTATION OF COMPLIANCE AND SAFETY MANAGEMENT CERTIFICATE

(click to view diagrams)

The procedure for Safety Management Audits is similar to that described in "Quality systems auditing" (BS 7229: Part 1: 1991, ISO 10011-1 1991) and prescribes the formal procedures for: application for audit; preliminary review; preparing and executing the audit; audit report; corrective action; Company responsibilities; and the responsibilities of the recognized organization and the verification team.

#### Annex

1:  
Standards on ISM Code Certification Arrangements  
As previously mentioned, organizations recognized for issuing DOCs and SMCs must meet the mandatory standards prescribed in IMO Assembly resolution A739(18). Annex 1 superimposes requirements relating to knowledge of ISM Code Certification Schemes; formal education in relevant science or engineering fields or nautical experience and qualifications; knowledge and understanding of the ISM Code and mandatory rules and regulations; assessment techniques, Safety Management; knowledge of shipping and shipboard operations; participation in at least one marine related safety audit. Such competence should be demonstrated through written or oral examinations or other acceptable means.

The competence required for those involved in each type of verification and assessors in charge are specified.

Organizations performing ISM Code certification should have implemented a documented system for qualification and continuous updating of the knowledge and competence of personnel who are to perform verification of compliance with the ISM Code. This system should comprise theoretical training courses covering all the competence requirements and the appropriate procedures connected to the certification process, as well as practical tutored training, and it should provide documented evidence of satisfactory completion of the training. In addition, such organizations should have implemented a documented

---

system to ensure that the certification process is performed in accordance with this standard. This system should, inter alia, include procedures and instructions for the following:

- contract agreements with companies;
- planning, scheduling and performing verification;
- reporting results from verification;
- issuance of DOC, SMC and Interim Certificates;
- corrective action and follow-up of verifications, including actions to be taken in cases of major non-conformity.

The requirements are formidable and it must be observed that in no other area of survey and certification are the qualifications of the personnel involved so tightly prescribed.

## ICS/ISF

### Guidelines on the Application of the ISM Code

The ISM Code requires that each Company should establish a safety and environmental protection policy which includes the objectives of the ISM Code. The above ICS/ISF Guidelines complement the IMO Guidelines for Administrations by providing useful guidance on important individual elements of a SMS and its development by Companies. This important booklet, presented at the eighteenth session of the IMO Assembly should encourage a common approach to the preparation for certification and uniformity in the application of the Code. The ICS/ISF Guidelines contain a reproduction of sections of the Code, boxed and shaded, followed by relevant guidance notes on, inter alia, how account might be taken of its requirements. In addition, Appendices provide a number of suggested key questions and procedures for the consideration of Companies developing a SMS; methods of familiarizing seafarers with their responsibilities under the Code; major conventions and recommendations; subject matter for operations documentation; a list of publications providing assistance in preparing shipboard operation and emergency plans; and a possible structure for SMS documentation.

## Concluding Comments

### The change in attitude

by member countries at IMO over the past seven years is remarkable. In 1987, following the "Herald of Free Enterprise" disaster, the UK proposals for the carriage of an operations book on ro-ro passenger ferries was not accepted. As late as October 1989, the majority of countries could not accept the inclusion of a designated person ashore responsible for safe operation within the non-mandatory resolution A647(16) dealing with Management for the Safe Operation of Ships.

However, attitudes changed following the fire on board the "Scandinavian Star" in April 1990 and the investigation committee's comments about management shortcomings, and its limited recommendation that Resolution A647(16) be made mandatory for owners of passenger ships. The scope and application of the mandatory requirements has widened from the initial proposal which involved passenger ships and other ships over 5000 gt to include all other ships and mobile offshore drilling units over 500 gt.

---

The nature of the mandatory code has changed from the initial proposal based on ISO 9000 quality assurance principles to that of a true safety management code. The distinction is important as it is not intended that non-conformance will be given because goods are purchased from non-approved suppliers and instances of similar nature. Successful implementation will depend both on the commitment of the Companies and the attitude of the auditors. Implementation must not impose an undue burden on the ship's personnel but there is always the possibility that more will be read into the wording of the Code than was intended by those who developed the documentation and that the Code is seen as an end in itself. It is written that "verification of compliance neither duplicates nor substitutes surveys for other certificates" but this will require a good measure of self-discipline particularly in respect of examination of records and log books otherwise another tier of inspectors will be imposed on ship's personnel.

The Code is a good document and much conscientious and sustained effort has been put into its development. If the same spirit of cooperation is present in its implementation, the Code will make a significant contribution to maritime safety and pollution prevention.

It is hoped that the outline of the events leading to the development of the ISM Code, related legislation and Guidelines will be helpful to those who may be involved with it.

The views expressed in this Bulletin are those of the author and not necessarily those of any other person or organization.

#### Author's Biography

Dr. Cowley was Surveyor

General in the Department of Transport from August 1981 to May 1988 when he retired from Government Service. He is currently Chairman of Maersk Co (IOM) Ltd. where he has been involved with the company's quality assurance certification for several years. Following a traditional engineering apprenticeship, he served as an Engineer Officer in the Merchant Navy, obtained an Extra First Class Certificate of Competency and joined the Marine Survey Service as an Engineer and Ship Surveyor in 1952. He served in various positions including those of Chief Examiner of Engineers and Engineer Surveyor-in-Chief.

At the International Maritime Organization, Dr. Cowley served as the Department of Trade Chief Adviser at the 1978 Conference on Tanker Safety and Pollution Prevention and has led the UK delegation at the Fire Protection Subcommittee meetings. From 1981, he led the delegation at the Maritime Safety Committee and the Marine Environment Protection Committee until he was elected Chairman (1984-1989).

Dr. Cowley now represents the Republic of Vanuatu at IMO where he has been involved with the development of the ISM Code. Dr. Cowley was awarded the IMO International Maritime Prize in 1988.