One of the most notable trends in recent years was the move towards quality insurance in shipping. Many owners and managers adopted risk management and schemes in the 80's. The ISO 9002 was not really designed for the shipping industry. Therefore, many adaptations of it have been done to overcome this problem. Det Norske Veritas SEP was one of the most successful.

During the 80's too, the International Ship's Managers Association developed what became the ISMA's Code. This Code received a lot of publicity too. But the adoption of the Code for Safe operation of Ships and for Pollution Prevention also called the International Ships Management Code, (the ISM Code hereafter), by means of resolution A 741 of the SOLAS Convention passed on November 4th, 1993 represents a considerable progress in quality in shipping.

The Code actually begins with the "Herald of Free Enterprise" disaster and the acceleration of its elaboration is obviously due to the "Scandinavian Star" accident. They led to the adoption of regulations very similar to the ISM Code regarding the case of passengers vessels.

The ISM Code is also the result of a realisation that the efforts of both classification societies and Governments were too little and too late as far as the security and the pollution are concerned. They adopted that a more deeper and fundamental approach had to be carried out in order to ensure that both human life and the environment could be properly protected.

The Code became mandatory and will apply according to the following calendar:

- July 1st, 1998: Passenger ship (high speed crafts), tankers, chemical tankers, gas carriers and bulk carriers of 500 GRT and above
- July 1st, 2002: General cargo ships of 500 GRT and above and mobile offshore drilling units
- 2004: All ships over 150 GRT

As the 1998’s deadline approaches, a lot of publicity is made as regard to the implementation of the ISM Code. The success or the failure of it is playing now. It can thus be of interest to see what the commitments of the companies will be in achieving this implementation goal and finally, if the shipping industry and the Governments are really prepared for the ISM Code.

* * *

Part 1. The COMMITMENTS of the Implementation in the management of the ship and the company

1.1. Theoretical view

1.1.1. The elaboration of the Safety Management System for the Company and the ships

According to the Code, the Companies have to develop their own Safety Management System. This SMS consists in a structured and high documented system that would permit the personnel of this Company to implement its policy in regard with the objectives of the Code. In other words, the SMS requires a documentation of all policies, procedures and operating instructions in order to ensure that every person in the Company understands how the existing statutory requirements will be met and how it wants to operate.

The SMS has to comply with both general and specific requirements.

Firsts, it has to be developed according to general safety management objectives of article 1.2.2 of the ISM Code like providing safe practices in ships operations and a safe working environment, establishing safeguards against
all identified risks and improving continuously the safety management skills of personnel both ashore and onboard, including preparing for emergencies related both to safety and environmental protection. Moreover, it will have to comply with specific and compulsory rules, regulations, codes and any other requirement regarding safety and pollution prevention and agreed by the IM\textsuperscript{®}O, Administrations, classifications societies and any other maritime industry.

When developing their SMS, the Companies may need to address the following elements of safety mentioned in the Code:

- create a safety and environmental policy for the Company and ensure that it is implemented and maintained;
- define and document the responsibility, authorities and interrelations of key personnels showing the clear lines of interpretation;
- appoint one or more designated person to ensure that the SMS is properly controlled and administered and to provide a link between the Company and those onboard ships;
- define the responsibilities and the authority of the Master as to safety and environmental protection and their implementation onboard the ship;
- ensure adequate resources are available to support the SMS;
- develop plans for shipboard operations concerning the safety of the ship and pollution prevention with particular emphasis on preventive actions for special and critical shipboard operations;
- create procedures to identify, describe and respond to emergency shipboards situations such as hazards, accidents and failures. Contingency plannings will include programmes for drills and exercises to prepare for such situations;
- report and analyse of non conformances, accidents, hazardous occurrences and near misses;
- establish procedures for preventive maintenance of ship and equipment, the sudden failure of which may result in a hazardous situation. These procedures must provide for adequate inspections and tests of standby arrangements and equipments not in continuous use;
- control with regard to development; distribution, amendment and disposal, documentation and data necessary for maintenance of the SMS;
- verify review and evaluate the SMS by means of internal safety audits to monitor its effectiveness.

After the SMS has been elaborated, the Administrations have to verify if its elements comply with the objectives of the ISM Code as defined in its Section 1.2.3. and in the aforesaid various requirements. In addition, when verifying the compliance of the SMS with the ISM Code, the Administrations will have to ensure that the Companies have developed procedures for the implementation of the SMS.

This documentation has to be kept available at all relevant locations (sites of the Company, ships...).

Then, the SMS can be implemented in the Company. After one month or more of implementation, it has to be audited both ashore and onboard the ship to ascertain if the policies or procedures are actually effective. When the qualified auditor (classification societies) is satisfied, a Document of Compliance (DOC hereafter) is issued to the Company and an Safety Management Certificate to the ship.

**1.1.2. Issuance of the certificates**

Before issuing the certificates, the Administrations have to verify the compliance of the SMS, the Company developed, with the requirements of the ISM Code. In achieving this aim, they have to determine the conformity of the Company's SMS with the requirements of the ISM Code and that this system ensures the objectives defined in Section 1.2.3 of the Code. The certification process will be divided in two steps. Firsts, an initial verification will be carried out before the issuance of a certificate. Then, other verifications will be performed during the validity time of the said certificate or before its expiry date.
1.1.2.1. Initial verification

Firsts, the Company that requests a certification has to apply for a verification of its SMS. This initial verification aims at verifying that the Company or its ships comply with the requirements of the ISM Code. During the audit carried out during this verification, the conformity of the Company's Safety Management Certificate (SMC hereafter) with the requirements of the ISM Code will be checked. Furthermore, the administration responsible for this verification will control if the SMS ensures that the objectives of the ISM Code are met.

Then, on satisfactory completion of the assessment, a DOC is issued for the Companies and a SMC for the ships whose Owners' SMC comply with the requirements of the ISM Code.

The ship has to be operated by a Company which is issued with a document relevant to the said ship. This DOC is issued by every Company that complies with the requirements of the Code. This issuance of the DOC implies that the SMS of the Company, implemented by it, complies with the requirements of the Code and that evidence is demonstrated that this SMS has been in operation for at least three months onboard one ship of each type operated by the Company.

This document, once it has been delivered, is valid during five years that are renewable. Its validity is also subject to annual verification within three months before or after the anniversary date the SMS is said to be effective.

For the ships, a SMC is issued to them if the Company that operates them complies with the requirements of the ISM Code. The Administration issues this certificate if the DOC is applicable to that ship, if the SMS, implemented by the Company, complies with the requirements of the ISM Code. Moreover, objective evidence has to be shown that this SMS has been functioning effectively onboard that ship during at least three months. Like the DOC, the SMC is valid during five years renewable.

1.1.2.2. Other verifications

Periodical or intermediate verifications can be carried out during the five years the certificate, DOC or SMC, have been issued.

The periodical verification aims at verifying the effective functioning of the SMS and that its modification complies with the requirements of the ISM Code. It has to be carried out within three months before and after each anniversary date of the DOC.

As far as the intermediate verification is concerned, it is carried out to maintain the validity of the SMC. It aims at verifying that its effective functioning and that its modification comply with the requirements of the ISM Code. The intermediate verification has to take place between the second and the third date of anniversary date of the issuance of the SMC in the case only one verification is carried out.

After both those two verifications, the certificates issued can be withdrawn.

A renewal verification can also be carried out. It has to be performed before the validity of the DOC or the SMS expires. It addresses all the elements of the SMS and all the activities to which the requirements of the ISM Code apply. It can be carried out from six months before the date of the DOC or of the SMC expire and should be completed before their expiry date.

The DOCs can be renewed for a period of five years after assessment of all the elements of the SMS. So it is for the SMCs.

Both the DOCs and SMCs can become void and withdrawn in the four cases they would be declared invalid: if corrective actions are not completed within the agreed schedule, if a periodical verification is not requested, if the amendments to the ISM Code are not taken into accounts and if there is evidence of major non conformity. In addition, the SMCs can be withdrawn if no intermediate verification is requested. Such withdrawals can be proceeded only by the Administration that issued both the DOC and SMC.
1.2. Practical view; study of two specific problems as regard to the implementation

1.2.1. The "designated person"

Two issues of the Code have received particular attention; the Code's mandatory requirements and the designated person responsible for the implementation and maintenance of the SMS as this latter becomes a master piece in the implementation of the ISM Code.

1.2.1.1. The roles and competencies of the designated person

Article 4 of the ISM Code provides that "to ensure the safe operation of each ship and to provide a link between the Company and those on board, every Company, as appropriate, should designate a person or persons ashore having direct access to the highest level of management. The responsibility and the authority of the designated person or persons should include monitoring the safety and pollution prevention aspects of the operation of each ship and ensuring that adequate resources and shore base supports are applied as required."

This provision of the Code indicates clearly that the mission of this person has four components. The designated person has to collect informations concerning the SMS of the Company and publish them for all the parties concerned. He has to monitor the operation of each ship as far as pollution and safety are concerned. In the event a deficiency would occur, the designated person shall not only have direct access to the highest level of management to seek guidance but, by virtue of article 4, he shall also be vested of all the required resources.

The choice of the designated person and his competency are fundamental for the success of the implementation of the Code. This is the reason why some people deem that the Company will have to select a person who shall have experience in command or chief engineer for gaining the respect of the personnel at sea. This designated person should also have a good knowledge of how the Company works and should possess a strong personality. Moreover, since the decisions of the designated person have to be aware of any person on board and ashore, in the case a casualty occurs, it will be very difficult for the Owner to take distance from the designated person in order to limit his responsibility. The choice of the designated person will hence be of first importance in the Companies.

The Company will have to give full support in order to carry out the objectives of the Code.

After the nomination of the designated person, the Company will have to establish shore staffs composed of personnels from all the departments of the Company in order to work with the designated person in documenting the SMS. Sea staffs will have to join this shore staffs for checking the compatibility of the SMS with the ships procedures.

1.2.1.2. The implications of the designated person’s requirements

The importance of the designated person appears clearly in preventing accidents. This role will be more acute if a ship of the Company faces a casualty. Under the 1976 Limitation Convention and the Civil Liability Convention protocols, the damage in question must result from the owner’s " personal act or omission, committed with the intent to cause such damage, or recklessly with the knowledge that such damage would probably result." Any fault of the designated person in the implementation and maintenance of the SMS, could therefore be of hard legal consequences as it could make the owner loose his right to limit his liability. The role of the designated person will hence be studied with a lot of attention in litigations.
1.2.2. The training of the personnel

The realisation of 70 to 90% of the marine accidents is for the most part due to human error and often linked to management failures. Therefore, the focus is now made on the human factor.

Education and training are vital for the organisation and the individual. Some employees will be more affected than others who will require special training. In terms of money, it will be costly to bring in a consultant who could provide the knowledge needed.

It belongs to both designated person and the staff to undertake the trainings in the Company. They will have to do this on the requirements of the ISO 9002 standard, the ISM Code requirements, objectives and policies, procedures and systems, instructions and auditing techniques, motivation skills and appraisal skills and problem solving.

The far bigger task will be the training of seafarers. It will obviously require substantial effort, dedication and expenses. According to some management companies, especially Anglo Eastern Ship Management Ltd of Hong Kong, this is probably the one single factor which is more critical in the success or failure of the implementation of the Code.

Part 2. the worries about the Implementation of the ISM Code

2.1. A not encouraging trend of certifications

Mr Bell, Permanent Secretary of the International Association of Classification Societies warned the Companies about the trend of the ISM certification. He said it was not encouraging as it remained too slow for the required ships to achieve their certification in the time that remains. Only 8% of the vessels have won their certification. 1,500 ships representing 55 companies out of an estimated total of 19,000 ships have so far been certified according to an evaluation from the International Association of Classification Societies establishes.

Three reasons could explain this lateness. They concern the shipping companies themselves, the States and the consultants (mostly classification societies) too.

2.1.1. The opposition of a part of the shipping industry

A part of the shipping industry seems opposed to the ISM Code. Some Owners confess their opposition to the Code as they deem it was not a necessity since ISO 9002 and ISMA Code were sufficient. This is partly false. Lots of shipping companies recognise the value of a high quality standard, uniformly consented. Many are working toward ISO 9002 or its certification. Those that have obtained or are working toward ISO 9002 certification should be in a more advantageous position towards obtaining ISM accreditation than those that have not. However, the ISO 9002 is more related to quality assurance system while the objectives of the ISM are more closely related to safety and environmental protection. Nevertheless, the two standards are obviously intertwined and their combination may afford the best benefits a company may hope. But, having a society ISO 9002 qualified does not mean that it may automatically obtain the ISM certifications.

An OECD study stated that the cost, for the conformance of a bulk carrier of 50,000 tons to safety regulations would amount USD 1 to 2 million per year. Will the companies that have already tied up enormous funds to achieve others volunteer standards (an ISO 9002 certification can cost about USD 25 000 per ship while ISMA Code's may amount about USD 75 000 per ship), afford the extra costs of an ISM certification?. The argument of the cost of an ISM certification may become more acute than ever for the companies that have some delay in their ISM certification. Due to the small number of qualified auditors around the world, those latecomers could well face higher consultancy and certification costs.

They see the Code as a nest of viper because of its lack of precision, and therefore as an unnecessary expense. Actually, they predict a lot of contentions due to the self-interpretation of the Code. The ISM Code is very rich, but also very hazy. It only requires a reflection on the safety and a formal presentation of this reflection.
Companies are free to interpret the Code in different ways because it is very subjective. Actually, the Code recognises that companies can have different organisations, and offers them the freedom to appreciate it more efficiently according to their structure. It's a very flexible mean to increase safety, but it also going to be difficult to enforce legally. According to Timothy Lietzell, president of ABS Marine Services, "ISM promises windfall for lawyers ". The Code is also hazy in the terms it uses. An idea is generally given but not precisely. For example, it says that companies must prepare against "identifiable risks ", but it does not define them. This can create problems, since, when developing its SMS, a Company will may consider that one event is not a risk for it, but the auditor will. Moreover, the Code is silent concerning some fundamental aspects like the implementation of the Code for companies that operate multi flagged fleets.

Owners with multiple flagged fleets face duplicate audits for each of their flag states. The ISM Code provides no guidance as to how companies operating multi flagged fleets are to be treated. The absence of such guidance would lead to confusion and necessary duplication of work if not properly addressed. This is the reason why, the Maritime Safety Committee and the Marine Environment Protection Committee, considering this lack in the IMO Assembly Resolution A.788 (19) - 1995 agreed on some additional guidances for Companies and Administrations that some P&I Clubs published for their members.

Then, they consider the Code as a new method to create jobs or as a result of a coalition of management companies to dominate the market. They think it is going to be an advantage for companies who have not developed another standard yet, because they have to spend money a second time. They are afraid of losing flexibility.

Moreover, some companies are reluctant in implementing the Code because they deem that throughout their SMS, they will have some confidential informations known by anyone.

2.1.2. Governments and maritime Administration's lack of preparation and means

Governments must also make preparations for the implementation of the Code. It is their responsibility to publish guidelines, carry out ISM audits and to issue the appropriate certificates. But, there are few guidelines published by the flag states as regard to the implementation of the ISM Code. Therefore, if they are not ready, some shipowners may move their ships to flags whose administrations have shown more foresight and can guarantee that the ships of the company will be able to operate.

The responsible parties for ISM certification are maritime Administrations. Except in northern Europe where most of them are independant auditors, it is mostly classification societies that benefit from the ISM as they have been authorised to perform the audits. Due to a lack of resources, many flag states delegated them external audits and final certifications commitments. Classification societies are obviously the most important element in the certification process. Some have been more successful regarding the classification. More than a tier of the certification are DNV's, 13% by Class NK, 12 % by Lloyd's Register, 9 % by Rina, 8% by the Korean Register and 7% by the Bureau Veritas. Some like the Lloyd's Register have already adopted for a long time schemes for the implementation of the Code. The importance of the classification societies in the ISM certification can be explained by their preparation to it a long time before it became mandatory. For instance, the Lloyd's Register has its ISM Code certification scheme since January 1994. It provides owners with certification if their SMS are in accordance with the Code. It also helps its clients in preparing to meet the requirements of he ISM Code. But they lack experience to know how human factors are involved in operating a ship. One can also wonder if a hurried training of two weeks course is enough to make a classification society's surveyor, an ISM auditor.

Moreover, few ISM auditors around the world are available. At the end of 1996, only 250 assessors world-wide were trained and qualified to perform compliance audits. Considering this lack of personnel some P&I clubs (like the Britannia) warned their members against any delay in the obtaining of their certifications.
2.2. Repressive measures for ISM defaulters

The deadline of July 1st, 1998 is mandatory. Since few companies have already implemented the Code and that the remaining may not be able to implement it on time, the latter ISM defaulters may face hard lines of compliance the European Commission, the Australian Maritime Safety Administration and the U.S. Coast Guards took..

Yet, owners who do not obtain the necessary certification could become unable to operate their ships because no port will accept them without the documentation showing that the ISM Code has been implemented. ISM Code defaulters could face severe measures that some States decided to adopt. In the United States, the ships that would not comply with the requirements of the Code would be denied entry to the country's ports after the July's deadline. Moreover, ISM Code defaulters could face UK or other states arrest if they would not comply with the Code before the July 1st, 1998 deadline, Robin Bradley, chief executive of the UK Marine Safety Agency (MSA) said. “The UK resolve is firm. If ships do not comply with the Code, they will be detained. We will work strictly in line with the policy articulated by the Port State Control Committee and the European Commission ” he stressed. After their detention, the ISM Code defaulters could not proceed to any other European port until the company that operates such ship could demonstrate that she complies to the ISM Code with the proper certification. This English resolution will also apply in every State of the Memorandum of Understanding and in each State where the SOLAS Convention applies since the ISM Code is introduced in the SOLAS Convention.

As many shipowners will not be able to comply with the requirements of the Code, a risk of port congestion could therefore appear due to arrests of ships.

But the problem of ships arrest and other measures does not concern only the companies that will not be able to obtain their ISM certification before the deadline; it could also concern any other company that already has one. Flag states, who are going to issue ISM certificates, are reluctant to agree on common approaches. Therefore, Documents of Compliance should not be universally accepted if they do not agree to each other certificates. Moreover, there could be different value of DOCs according to where they were issued.

2.3. A need for delay in ISM implementation?

A need for delay in the implementation is now felt due to the above reasons. Those voices calling for the introduction of the ISM Code to be delayed asked the IMO to take necessary measures for this. However, the implementation of the Code cannot be considered any more as a commitment of the IMO and this latter does not have anymore competency to do it. The ISM Code became part of the SOLAS Convention in its chapter IX. It hence belongs to the 131 States who adopted this convention to take necessary measures for postponing the application of the ISM Code.

Like the BIMCO, the IMO agrees that an extension of the deadline is not desirable. However, according to the BIMCO, "there is increasing concern that there are now insufficient resources and time for shipping companies and their vessels to obtain ISM Code compliance before their deadline of 1 July 1998 ". Many organisations also fear that the remaining companies will not obtain the required certificates on time. The practical deadline for having a system up and having it runned is January 1st, 1998. In view of the pressure on the certifying authorities, flag states recommend that applications for certifications should be made 12 months before the final deadline. While this does not seem to be already done, one could expect that many companies will not be ISM certified on time.

As few companies will not be able to obtain their certification before the deadline, port congestion after the July's deadline is possible. A postponement of the application of the ISM Code is therefore desirable and foreseeable. Security requirements are necessary, so is port exploitation. Flag States would never let the ISM Code been implemented in the detriment of port exploitation.
Conclusion

The introduction of the ISM Code is obviously an important step in achieving common standards of safety management. The success or the failure of realising this objective depends on those involved in the implementation of the Code, the shipping companies, the Governments, the classification societies, etc.

For the companies, the task on the way to certification is huge and they have to keep in mind the July 1998’s deadline if they want to be able to operate their ships. The success of the Code is decided now, before the deadline. But, as many companies do not seem able to be ISM certified on time, the risks due to this delay should lead the Governments to postpone the application of the Code. Since they are the only parties that can decide the date a text can become compulsory, they are somehow one of the most important element of the success in achieving the aims of the ISM Code at the moment.

The implementation will have to be nurtured very carefully if it is to succeed. It is also hoped that there will not be any hindrance to it like the recession in shipping of in the eighties because such a storm could ring the knell of the ISM Code.
NOTES

1 - IMO Assembly Resolution A. 788 (19) - 1995, article 2.2.1

2 - Rather than with the conformity of the SMS with other specific and detailed requirements other than those contained in the ISM Code. The Guidelines require this in order to limit the number of assessment criterias and thus facilitate the compliance of the Companies with the Code.

3 -IMO Assembly Resolution A. 788 (19) - 1995, article 2.1.2

4 -The Code aims to ensure safety at sea, prevention of human injury or loss of life and avoidance of damage to the environment, particularly the marine environment and to the property. Section 1.2.3 of the ISM Code.

5 -IMO Assembly Resolution A. 788 (19) - 1995, article 4.2.6

6 - ISM Code, article 13.1< ÜBR>
7 - ISM Code, article 13.2

8 - IMO Assembly Resolution A. 788 (19) - 1995, article 3.1.2

9 -IMO Assembly Resolution A. 788 (19) - 1995, article 3.1.5

10 -ISM Code, article 13.4

11 - IMO Assembly Resolution A. 788 (19) - 1995, article 3.2.1

12 - IMO Assembly Resolution A. 788 (19) - 1995, article 3.2.2

13 - IMO Assembly Resolution A. 788 (19) - 1995, article 4.3.1

14 - IMO Assembly Resolution A. 788 (19) - 1995, article 4.3.2

15 - IMO Assembly Resolution A. 788 (19) - 1995, article 4.4.1

16 - IMO Assembly Resolution A. 788 (19) - 1995, article 4.4.2

17 - IMO Assembly Resolution A. 788 (19) - 1995, article 4.5.1

18 - IMO Assembly Resolution A. 788 (19) - 1995, article 3.1.7

19 - IMO Assembly Resolution A. 788 (19) - 1995, article 3.2.4

20 - As far as the DOCs are concerned, see IMO Assembly Resolution A. 788 (19) - 1995, i.e article 3.1.8 and IACS PG No 9,4.1. Concerning the SMCs, see IMO Assembly Resolution A. 788 (19) - 1995, article 3.2.5 and IACS PG No 9,4.2.7

21 - IMO Assembly Resolution A. 788 (19) - 1995, article 3.1.8 and 3.2.5


29 - Last chance safety Code warning. Lloyd's List, April 30th, 1997, p 1

30 - ISM defaulters face UK arrest. Lloyd's List, June 20th, 1997, p 1


32 -The American Club Currents. No 6, December 1996, p 5


35 - The Swedish Club, No 2, October 1996, p 17

36 - " Guidance for companies operating multi-flagged fleets<BR> 1. To facilitate the auditing and certification process, companies should approach the relevant flag Administrations, proposing a plan of action and requesting agreement by all parties. The plan should clearly state which entity is to conduct which part of the process.
2. This approach by companies should be taken at least 12 months prior to the mandatory application date for the particular ship type or types involved.


38 - Lassoing the cowboys - the ISM Code is coming. IMO News, April 1991, p 13


44 - Lassoing the cowboys - the ISM Code is coming. IMO News, April 1991, p 11

45 - Last chance safety Code warning. Lloyd's List, April 30th, 1997, p 1

46 - See also Detention of vessels due to Port State Control. Nordisk Shipsrederforening, No 549, December 1996, pp 5528 and 5529

48 - Implementation of the ISM Code. BIMCO weekly news, No 22, May 30th, 1996, p 1

49 - More worries about ISM compliance. BIMCO weekly news, No 11, March 13th, 1996, p 1