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ISM CODE

A Practical Guide to the Legal and Insurance Implications

Third Edition

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1 Introduction and underlying principles

1.1 Introduction to the third edition

This book is not, and is not intended to be, a legal text book for lawyers. The primary purpose of this book is to provide a wide range of lay individuals engaged in the shipping and marine insurance industries as well as flag Administrations, Recognised Organisations (ROs), Port State Control Inspectors (PSCIs) and others involved in International Safety Management (ISM) Code implementation or monitoring with practical guidance on the potential legal implications and consequences of ISM Code compliance. However, it is hoped that the legal professional will also derive useful insight into some of the practical application of the Code and the potential legal consequences of non-compliance. The book should also provide a useful reference to the numerous, but potentially relevant, Conventions, resolutions, rules, regulations, guidelines and other documents which may need to be considered within the context of the legal implications of compliance with the requirements of the ISM Code.

Any party involved in a dispute, claim or prosecution must obtain professional legal advice from a suitably qualified legal adviser.

Whilst the author has endeavoured to identify many of the more relevant reference documents, he does not claim that this is in any way a complete or exhaustive list. Also, whilst the author has endeavoured to ensure that the various documents referred to are the latest editions, this is not guaranteed and, in any event, new and updated editions of documents are being published on a regular basis. It is crucial, therefore, that anyone requiring up-to-date advice makes reference to original sources whenever necessary to ensure that the latest editions are being consulted. A detailed Bibliography is included towards the end of this book in which the title of each document is listed as well as the edition consulted during the author's writing process.

1.2 Background to the ISM Code

What must be understood when considering the historical development of the ISM Code and its possible impact on the safe management of ships and the

2 *ISM Code: A practical guide*

protection of the marine environment is that it does not, and never has, existed within a vacuum or in isolation. There were many other requirements and initiatives being developed simultaneously within the maritime sector alongside ISM during the relevant period.

The ISM Code exists as part of the International Convention for the Safety of Life at Sea, 1974, as amended (SOLAS), which is itself under a constant state of change and improvement. During the time of ISM Code development other International Maritime Organization (IMO) Conventions, such as the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978, relating thereto (MARPOL) and the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers 1978, as amended, including the 1995 and 2010 Manila Amendments (STCW), were also the subject of major changes and improvements; although it is correct to say that the ISM Code may be thought of as an umbrella under which all the other Conventions and Rules and Regulations operate – and a practical management tool which will assist ship operators with the safe operation of their ships. There have also been other significant developments, such as the International Ship and Port Facility Security Code (ISPS Code) in 2004 and, more recently, the Maritime Labour Convention 2006 (MLC).

In addition to the developments with mandatory rules and regulations, there were also many initiatives and activities being taken by various stakeholders in the shipping industry, including charterers, marine insurers, and specifically the Protection/Protecting and Indemnity Association (P&I Clubs), as well as Port State Control (PSC), for example, all of which were encouraging the safer operation of ships and protection of the marine environment. Pressure from the oil majors led to the introduction of vetting inspections – the Oil Companies International Marine Forum (OCIMF) Ship Inspection Report Programme (SIRE) – and the introduction of the Tanker Management Self Assessment (TMSA). P&I Clubs were becoming increasingly involved in conducting their own ‘condition surveys’ and imposing restrictions on cover where deficiencies were identified – or even refusing to provide insurance cover. Clubs were actively developing loss prevention/accident prevention initiatives to assist their members with the management of their operational risks and generally to reduce accidents and claims. Industry bodies such as the International Chamber of Shipping (ICS) and the International Shipping Federation (ISF), the Baltic and International Maritime Council (BIMCO), the International Association of Independent Tanker Owners (INTER TANKO), the International Association of Dry Cargo Shipowners (INTERCARGO), the International Association of Shipmanagers (INTERMANAGER) and others were developing initiatives to encourage risk reduction and safer operation of ships. The International Association of Classification Societies (IACS) continued to develop numerous initiatives and projects – particularly on technical subjects which would assist in making ships safer. PSC was becoming increasingly more sophisticated with its inspection of foreign ships visiting its ports, identifying deficiencies and

assisting with the enforcement of compliance with international conventions. Other governmental and inter-governmental organisations – such as the US Coast Guard and the European Union (EU) through the work at the European Maritime Safety Agency (EMSA) – were actively involved in developing a wide range of maritime safety initiatives.

The ISM Code was never seriously perceived to be a panacea which would solve all the shipping industry's accident and claim problems. However, in conjunction with all the many other safety and risk management-related activities which were also taking place around the world, there should have been a very good chance that the ISM Code would contribute to significant progress in making ships safer and protecting the marine environment. To what extent that may have been achieved is not an easy question to answer, but will be explored and considered later in this book.

Within the context of this book, another very important issue – which must never be forgotten and which should be kept clearly in mind when reading, or otherwise referring to this book – is that the ISM Code was never intended to create new interparty liabilities. The Code was formulated with the clear purpose of improving and extending standards of maritime safety.¹ Although there are some who appear to insist that, through its Safety Management System (SMS), a ship operator is required to 'guarantee' the safe operation of its ships and protection of the marine environment. The author does not share such idealistic and academic counsels of perfection. In his 20 or so years' involvement with the ISM Code, the author has not yet encountered a perfect SMS; he has come across some excellent systems, many which are adequate but, sadly, some which are simply not fit for purpose.

1.2.1 Historical reasons

Most writers on the subject attribute the origins of the ISM Code to the Formal Investigation carried out by Sheen J into the capsizing of the cross-channel ferry *MV Herald of Free Enterprise* in March 1987, when 193 passengers and crew members lost their lives.² Whilst the author does not altogether disagree with that observation, he would suggest that that tragic incident was simply one of the better-known disasters of the late 1980s and into the 1990s which had shaken not only the shipping industry and marine insurance providers to their very foundations, but the size and extent of the problem was finally reaching the attention of the world media and pressure started to mount on politicians and national governments to act.

- 1 This most helpful observation is attributed to Mr Simon Kverndal QC, 'The ISM and ISPS Codes: Influence on the evolution of liabilities': paper presented at the Second International Colloquium, organised by the Institute of International Shipping and Trade Law, Swansea University, held at Swansea on 14–15 September 2006. Published in Thomas, D. Rhidian (ed.), *Liability Regimes in Contemporary Maritime Law* (Informa Law, 2007), Ch.9.
- 2 Department of Transport (UK), *MV Herald of Free Enterprise. Report of Court No. 8074 – Formal Investigation* (Hon. Mr Justice Sheen, Wreck Commissioner), 29 July 1987 (Her Majesty's Stationery Office, 1987), ISBN 0 11 5508287.

4 ISM Code: A practical guide

However, it is important to be reminded of the scathing words of Sheen J, in his report of the *MV Herald of Free Enterprise* Formal Investigation, on his findings with regard to the shore-based management and the way in which safety was, or rather was not, being managed, because they sum up the problem in stark and uncompromising terms:

*At first sight the faults which led to this disaster were the aforesaid errors of omission on the part of the Master, the Chief Officer and the assistant bosun, and also the failure by Captain . . . to issue and enforce clear orders. But a full investigation into the circumstances of the disaster leads inexorably to the conclusion that the underlying or cardinal faults lay higher up in the Company. The Board of Directors did not appreciate their responsibility for the safe management of their ships. They did not apply their minds to the question: What orders should be given for the safety of our ships? The directors did not have any proper comprehension of what their duties were. There appears to have been a lack of thought about the way in which the HERALD ought to have been organised for the Dover/Zeebrugge run. All concerned in management, from the members of the Board of Directors down to the junior superintendents, were guilty of fault in that all must be regarded as sharing responsibility for the failure of management. From top to bottom the body corporate was infected with the disease of sloppiness. This became particularly apparent from the evidence of . . . , who was the Operations Director and . . . , who was Technical Director. As will become apparent from later passages in this Report, the Court was singularly unimpressed by both these gentlemen. The failure on the part of the shore management to give proper and clear directions was a contributory cause of the disaster. This is a serious finding which must be explained in some detail . . .*³

There is certainly evidence that the problems with regard to the failure by some ship operators to manage their ships safely pre-dated the *Herald* disaster. For example, in July 1986, following publication of the report into the loss of the *MV Grainville*, the UK Government issued M Notice 1188 (this was subsequently updated and superseded in August 1990 by M Notice 1424) entitled 'Good Ship Management'. This commended a publication titled *Code of Good Management Practice in Safe Ship Operations*, which had been produced jointly by the ICS and the ISF.

A brief extract from M Notice 1188 'Good Ship Management' of 1986 provides a glimpse of some ideas which were, in due course, to evolve into the ISM Code:

The efficient and safe operation of ships requires the exercise of good management both at sea and ashore . . . The overall responsibility of the shipping company requires the need for close involvement by management ashore. To this end it is recommended that every company operating ships should designate a person ashore with responsibility for monitoring the technical and safety aspects of the operation

3 *Herald of Free Enterprise* – Formal Investigation, paragraph 14.1.

of its ships and for providing appropriate shore based back-up . . . Stress is placed upon the importance of providing the Master with clear instructions to him and his officers. The instructions should include adequate Standing Orders. There: should be close co-operation and regular and effective communication in both directions between ship and shore.

In the UK, the tragic loss of the *MV Herald of Free Enterprise* in March 1987 resulted in the introduction of the Merchant Shipping (Operations Book) Regulations 1988, which were laid before Parliament and came into force in December of that year as Statutory Instrument 1988 No. 1716. These Regulations are applicable to all UK passenger ships on short sea trade (Class II and IIA) and were developed around the two central tenets of:

- all such ships shall carry an ‘operations book’ containing instructions and information for safe and efficient operation; and
- owners are required to nominate a person (known as the Designated Person) to oversee the operation of their ships and to ensure that proper provisions are made so that the requirements of the operations book are complied with.

M Notice 1353 was issued in October 1988 giving detailed guidance on how compliance with these regulations could be achieved. Attention was also drawn to M Notice 1188 (superseded by M Notice 1424), the ICS/ISF publication *Code of Good Management Practice in Safe Ship Operations*.

In the UK, Statutory Instrument 1988 No. 1716, the Merchant Shipping (Operations Book) Regulations 1988 was subsequently superseded by Statutory Instrument 1997 No. 3022, the Merchant Shipping (ISM Code) (Ro-Ro Passenger Ferries) Regulations 1997 and Statutory Instrument 1998 No. 1561, the Merchant Shipping (International Safety Management (ISM) Code) Regulations 1998.

Following a request by the UK delegation on 19 November 1987, the IMO Assembly adopted Resolution A.596(15) – Safety of Passenger Ro-Ro Ferries, which called upon the Maritime Safety Committee (MSC) to develop guidelines concerning shipboard and shore-based management to ensure safe operations of roll-on/roll-off (Ro-Ro) passenger ferries. Resolution A.596(15) was, eventually, to evolve into the development of the ISM Code, which will be discussed in more detail below in section 1.2.2.

Before considering that evolutionary development at IMO, it is important to recognise another important issue which was instrumental in the way in which the ISM Code developed – that is the recognition that most of the accidents which had been occurring appeared to be attributable to ‘human error’.

Whilst the revelation from the *MV Herald of Free Enterprise* Formal Inquiry – that one of the major causal factors which resulted in the disaster was the poor standards of shore management – was being absorbed by the shipping industry, amongst marine insurance providers and others involved in the

commercial operation of ships there was growing concern about the sheer scale of the maritime accident and claim problem which was becoming apparent during the mid- to late 1980s.

During the period 1987 to 1990, protection and indemnity (P&I) insurance claims, and consequently the cost of P&I insurance, rose on average by more than 200 per cent. It is understood that a similar phenomenon was also experienced with Hull and Machinery (H&M) claims and premiums. Various reports were commissioned by government agencies and by industry to try to provide an explanation of what might be behind this problem: could it all really be simply down to poor management standards?

In 1988 the UK Department of Transport funded research which was carried out by the Tavistock Institute and which led to the report *The Human Element in Shipping Casualties*.⁴ The conclusions of that report were taken to the IMO by the then Surveyor General's Organisation, the role of which was later taken over by the Marine Safety Agency.

In 1991 what was at that time the world's largest P&I Club, the United Kingdom Mutual Steamship Assurance Association (Bermuda) Limited, through its managers, Thomas Miller P&I, who provided P&I insurance to approximately 25 per cent of the world fleet, issued its first 'Analysis of Major Claims'. In 1992 the House of Lords Select Committee on Science and Technology, under the then chairmanship of Lord Carver, issued its report, *Safety Aspects of Ship Design and Technology*.

A common factor was appearing to emerge in the findings and conclusions of each report, which was basically that these accidents and incidents were arising primarily as a result of human failings. For example, in the *Human Element in Shipping Casualties* report, it was stated that the human element was found to be causative in over 90 per cent of collisions and groundings and over 75 per cent of contacts and fires/explosions. The UK P&I Club report concluded that human error accounted for 58 per cent of all claims and the House of Lords/Carver Report concluded at section 4.2 that '*it is received wisdom that four out of five ship casualties – 80% – are due to human error . . .*'.

On reflection these conclusions should not have come as any great surprise. Whilst statistical data are probably not available, it is suggested that 'human error' or 'human factors', or whatever other title one wishes to give the phenomenon, have been responsible for most maritime accidents throughout history, and that the figure is probably much closer to 100 per cent. Just how close you come to 100 per cent would depend where the investigator/researcher stopped in tracing the particular causal chain for any particular accident. The problem really boils down to the fact that there were, in numerical terms, many more accidents and claims which were costing more in terms of lives, environmental damage and money than ever before, and the situation seemed to be getting worse. It appeared, therefore, that a major problem which also needed to be tackled was a human element problem.

4 Tavistock Institute (on behalf of the UK DOT), *The Human Element in Shipping Casualties*. (HMSO, 1988), ISBN 0 11 551004 4.

However, in the opinion of the author the two things leading to accidents – i.e. the falling standards of shore-based management and the increase of on-board human errors – were much more closely connected than is generally recognised.

To understand the connection it is necessary to understand not only what had been happening in the shipping industry during the 1980s, but also to understand the world economic situation at that time.

Since the late 1970s, world economies had been suffering badly – partly as a result of increasing oil prices – and many countries had been plunged into deep recession. This had a direct effect on the shipping industry in at least two significant ways: firstly, the cost of fuel oil, which was a major part of the daily operating costs of any ship, were escalating steeply and, secondly, world trade slowed down, which meant fewer cargoes to be carried, which in turn, as a result of the most basic law of economics – the law of supply and demand – forced down freight and charter rates. For most ship operators at that time it simply was not possible to operate their ships at a profit or even at a break-even cost.

Many ship operators were faced with a stark choice: if they were to survive the recession they would either have to sell their ships and get out of shipping, which some did, or find ways of cutting costs. For those who remained in ship operations the methods adopted to reduce operating costs were often drastic, short-term and, in the opinion of the author, short-sighted.

Clearly the ship operators had no control over the cost of fuel, although it was possible to achieve efficiencies in fuel costs by operating their ships at reduced speeds. Fuel consumption in a diesel engine tends to drop almost exponentially with reductions in speed. A ship operator also had limited control over insurance costs, although premium could usually be reduced by increasing the deductible, i.e. that amount of any insurance claim which the insured was prepared to cover themselves before making a claim under their hull and machinery (H&M) or P&I cover.

However, costs over which the ship operator may have more control were those relating to personnel and those relating to maintenance. To achieve savings in those areas, for many ship operators, it was necessary first of all to change the registration of the ships and leave their traditional Flag – which was usually the country where the ship operators were based and from which they operated their business. Accordingly, many operators ‘flagged out’ and registered their ships under ‘flags of convenience’ (FOCs) or with ‘open registers’ (ORs). An immediate consequence of this was that they were no longer compelled to employ nationals of the country from which they operated – as had been previously been the case, to varying degrees, with traditional national Flags. The salary and employment benefits expected of European and Scandinavian seafarers were significantly higher than the expectations of a labour force recruited in a ‘developing country’.

Accordingly, many ship operators dismissed their European and Scandinavian seafarers, particularly below the rank of Master and Chief Engineer and

recruited from areas where salary expectations were low – particularly in South East Asia. Not only were major changes made to the nationality of the seafarers being employed but the numbers of crew members being employed on-board were, at the same time, reduced considerably. One major underlying problem was that, at that time, very little investment had been made in the training of the seafarers who were now being employed – in large numbers. Within a very short period of time ships which had been manned by well-educated, highly skilled and very experienced seafarers were now being operated by, perhaps, a well-qualified and experienced Master and Chief Engineer, but with a crew who had received little by way of basic education and training, particularly in maritime-related subjects, had few skills and very little experience. Further, the crew size had typically been reduced by over one-third.

Shore-based office staff did not escape the drastic cost-cutting exercise. All but essential managers and staff were dismissed – including Marine Superintendents and personnel involved with safety and training-related roles.

All but absolutely essential maintenance – i.e. maintenance which was necessary to get the ship, and cargo, to its destination – was cut. Periods between dry-docking were extended and any other related areas where costs could be cut and savings made were affected.

Those decisions may have achieved a short-term cost saving but, very quickly, were to have significant financial consequences. The author is in no doubt at all that it was no coincidence that the significant increases in the number of accidents and value of claims which ultimately led to the development of the ISM Code – as previously discussed – occurred a relatively short time after the industry started making the drastic cost-cutting exercises.

The problems which resulted in the significant maritime accidents of the mid- to late 1980s were indeed linked to reducing standards of shore-based management and ‘human errors’ – but the report into the *MV Herald of Free Enterprise* disaster and the investigations into ‘human element’ issues may not have gone deep enough to truly understand the full scope of the underlying problems.

However, continuing with the overview of the historical development of the ISM Code, it would be appropriate to consider what had been taking place at IMO, where steps were being taken to introduce something which was going to be ground-breaking and radically different from anything IMO had produced previously.

1.2.2 Developments at IMO

The ISM Code evolved at IMO during the late 1980s and into the early 1990s and continues to evolve up to this present day and will, no doubt, continue to evolve further in the future.

Following on from the successful proposal submitted by the UK delegation, in the aftermath of the *MV Herald of Free Enterprise* disaster in 1987, to the IMO Assembly and the adoption, on 19 November 1987, of Resolution A.596(15)

which had called upon MSC to develop guidelines concerning shipboard and shore-based management to ensure safe operations of Ro-Ro passenger ferries, work commenced.

At the 57th session of the IMO MSC in May 1989, the UK delegation pressed, unsuccessfully at that time, for the draft guidelines contained in MSC 56/WP.4 (this working paper was ultimately adopted at the 16th Assembly, in October 1989, as Resolution A.647(16) and is the forerunner to the ISM Code) to include the two principles upon which Statutory Instrument 1998 No. 1716 the Merchant Shipping (Operations Book) Regulations 1988 were founded.

Further impetus was given to the need for these amendments to SOLAS when fire swept through the Norwegian passenger/car ferry *MV Scandinavian Star* in April 1990, with the loss of 158 lives. That tragedy initiated action within the IMO that resulted in the inclusion of paragraphs '4.7 Designated person ashore' and '4.8 Operations documentation in Resolution A680(17)' which were adopted on 6 November 1991, revoking Resolution A.647(16).

At the 18th session of the IMO Assembly on 4 November 1993, Resolution A.741(18) was formally adopted. This revoked Resolution A.680(17) and constitutes verbatim the International Management Code for the Safe Operation of Ships and for Pollution Prevention (International Safety Management (ISM) Code). This was incorporated on 19 May 1994 into SOLAS as Chapter IX, entitled 'Management for the Safe Operation of Ships'.

To introduce the ISM Code as a new Convention in its own right would have taken a considerable length of time to achieve and would have involved much bureaucracy. The decision to incorporate it as a new chapter of an existing Convention – SOLAS – was to use a process known as tacit acceptance. Tacit acceptance basically facilitates the quick and simple modification of Conventions to keep pace with the rapidly evolving technology in the shipping world.

There is a very interesting article contained in a paper on the IMO website describing the history of the tacit acceptance concept and the problems which had previously been experienced in introducing new Conventions – or changing existing Conventions at IMO. However, for the purpose of this present consideration, let it be sufficient to explain that:

The remedy for this, which has proved workable in practice, in relation to a number of conventions, is what is known as the "tacit" or "passive" acceptance procedure. This means that a body which adopts the amendment at the same time fixes a time period within which contracting parties will have the opportunity to notify either their acceptance or their rejection of the amendment. Or to remain silent on the subject. In case of silence, the amendment is considered to have been accepted by the party⁵

With the entry into force, on 1 July 1998, of the 1994 amendments to SOLAS, which introduced a new Chapter IX into the Convention, the ISM Code was made mandatory.

5 'Adopting a Convention, Entry into force, Accession, Amendment, Enforcement, Tacit acceptance procedure': IMO website, www.imo.org.

SOLAS – Chapter IX**Regulation 3***Safety management requirements*

1. The company and the ship shall comply with the requirements of the International Safety Management Code. For the purpose of this regulation, the requirements of the Code shall be treated as mandatory.

The mandatory compliance with the requirements of the Code was actually split into two phases, determined by the perceived risk levels of ship types:

- Phase 1 – not later than 1 July 1998:
 - passenger ships, including passenger high-speed craft;
 - oil tankers;
 - chemical tankers;
 - gas carriers;
 - bulk carriers;
 - cargo high-speed craft;
 - ... of 500 gross tonnage and upwards.
- Phase 2 – not later than 1 July 2002:
 - other cargo ships;
 - mobile offshore drilling units (MODUs);
 - ... of 500 gross tonnage and upwards.

The application of the Code was to be mandatory for all such vessels involved in international voyages. It was not mandatorily applicable to government-operated ships used for non-commercial purposes. However, some Administrations, Governments and ship operating companies who did not have to comply mandatorily, for whatever reason, did decide to comply voluntarily.

It should also be noted that, following the loss of a further Ro-Ro passenger ferry, the *Estonia*, in 1994, with the tragic loss of 852 lives, the Council of the European Union adopted Council Regulation (EC) No. 3051/95 of 8 December 1995 on the safety management of Ro-Ro passenger ferries. From 1 July 1996, i.e. two years before the IMO/SOLAS Chapter IX compliance deadline, this regulation made compliance with the ISM Code mandatory for seagoing Ro-Ro passenger ferries operating a regular service to or from a port of an EU Member State. Statutory Instrument 1997 No. 3022, the Merchant Shipping (ISM Code) (Ro-Ro Passenger Ferries) Regulations 1997 provide for the enforcement of that Council Regulation in the UK.

The following list provides a chronology of the most significant events during the evolution of the ISM Code up to the present time:

- 1987 – Resolution A.596(15): Safety of Passenger Ro-Ro Ferries;
- 1989 – Resolution A.647(16): Guidelines on management for the safe operations of ships and for pollution prevention;
- 1991 – Resolution A.680(17): Revised Guidelines on management for the safe operations of ships and for pollution prevention;
- 1993 – Resolution A.741(18): International Management Code for the Safe Operation of Ships and for Pollution Prevention (International Safety Management (ISM) Code);
- 2000 December – amended by Resolution MSC.104(73) – entered into force 1 July 2002;
- 2004 December – amended by Resolution MSC.179(79) – entered into force 1 July 2006;
- 2005 May – amended by Resolution MSC.195(80) – entered into force 1 January 2009;
- 2008 December – amended by Resolution MSC.273(85) – adopted on 1 January 2010 – entered into force 1 July 2010;
- 2013 June – amended by Resolution MSC.353(92) – entered into force 1 January 2015.

The significance of some of the more important amendments which have been made to the Code – including the latest amendments contained in Resolution MSC.353(92) – will be discussed as they become relevant in the following chapters of this book.

Chapter IX of the annex to SOLAS, which had been adopted by the 1994 SOLAS Conference, was accepted on 1 January 1998 and entered into force on 1 July 1998. The text was amended by Resolution MSC.99(73) in December 2000 and these amendments entered into force on 1 July 2002. It was also amended by Resolution MSC.194(80) in May 2005, and these amendments entered into force on 1 January 2009.

Within the context of this book, and recalling a point made earlier – i.e. that the ISM Code was never intended to create new interparty liabilities; rather the Code was formulated with the clear purpose of improving and extending standards of maritime safety – there is a further very important point which must be understood. The text of the ISM Code was not written with the idea that each word might be scrutinised in fine detail by a court of law. Without wishing disrespect to the original drafting committee and authors of the Code, it would have to be accepted that the drafting, in parts, is not always clear and, in parts, is inconsistent. For example in Section 10 of the Code, at 10.2.2, there is mention of ‘non-conformities’, but these would appear to be quite different in nature from the non-conformity defined in Section 1.1.9 and the Non-conformities dealt with in Section 9.1 of the Code. Part of the explanation for these inconsistencies and poor drafting is, apparently, the result of the original

drafting committee having to agree to compromise on a whole range of issues to maintain momentum and to ensure that certain fundamental concepts were kept in the Code.

Whilst most ship operators and their staff, as well as Administrations/ROs, PSCIs and the like, tend to understand the intentions behind the different sections of the Code, it does mean that lawyers and academics struggle sometimes to decipher the precise meaning and intention and become embroiled in linguistic gymnastics arriving at meanings and conclusions which were almost certainly never intended.

The courts have still had very few opportunities to interpret the legal requirements of the ISM Code and to consider, from a legal point of view, what is actually required with regard to satisfying the compliance requirements. The occasions when direct non-compliance with the requirements of the ISM Code and Chapter IX of SOLAS, which affect the mutual obligations or liabilities of maritime users, may be rare. However, there are many ways, or potential ways, in which the requirements to comply with the Code may have considerable indirect impact on the development of liabilities and enforcement of contractual obligations. It is those indirect consequences of the introduction of the ISM Code, to the reshaping rather than the creation of liabilities, that will become most significant.

A few of the cases which have been before the courts include:

- The criminal prosecution of the operators and Master of the offshore support vessel *Viking Islay*, following the tragic loss of three lives on-board, in 2009 included an alleged breach of Regulation 4 of Statutory Instrument 1998, No. 1561, the Merchant Shipping (International Safety Management (ISM) Code) Regulations 1998 – i.e. a failure of the duty to comply with the ISM Code.⁶
- In 2013, in the Commercial Division of the High Court in London, a dispute involving the vessel *MV Nancy* under a marine insurance contract which included an express warranty that ‘Vessels ISM (International Safety Management Code) Compliant’.⁷
- In the United States, following an incident on 7 November 2007 in San Francisco Bay when the container vessel *Cosco Busan* contacted the supports of a harbour bridge, resulting in serious pollution of the Bay, the ship managers faced a criminal prosecution. On 13 August, 2009 the managers pleaded guilty to felony obstruction of justice and false statement charges for creating false and forged documents after the crash at the direction of shore-based supervisors with an intent to deceive the US Coast Guard and were fined US\$10 million. During the prosecution various allegations were made, and were accepted, that there had been failures to adequately train and familiarise the Master and crew in various aspects of

6 *R. v. Vroon Offshore Services Ltd. & MV ‘Viking Islay’* (2009).

7 *Sea Glory Maritime Co. and Another v. Al Sagr National Insurance Co. (The MV Nancy)* [2013] EWHC 2116 (Comm); [2014] 1 Lloyd’s Rep 14.

shipboard operations relevant to navigation, passage planning, master-pilot exchanges etc., most of which were indirectly relevant to the Company SMS.

- A further US case which centred around certain alleged unsafe working and operational practices – and thus involved consideration of the Company SMS – is the tragic case of the *Deepwater Horizon* – in which a number of crew members were killed and serious pollution followed a blow-out of an oil pipe-line. On 4 September 2014 the Federal Judge overseeing the multidistrict litigation issued a long-awaited ruling as to liability. The trial judge concluded that the *Deepwater Horizon* spill was caused by BP’s gross negligence and wilful misconduct. According to an article circulated by US attorneys, ‘Blank Rome Maritime: “. . . BP could face liability for as much as \$18 billion in Clean Water Acts penalties . . .”’,⁸ the human injury and fatality compensation claims would be separate.

There were two older cases in the High Court in London in 2002, which discussed some ISM-related issues:

- *Papera Traders Co. Ltd. and Others v. Hyundai Merchant Marine Co. Ltd. and Another (The Eurasian Dream)*,⁹ and
- *The Torepo*.¹⁰

However, whilst these two cases are often referred to when discussing the legal implications of the ISM Code – and they will be in this book – neither of them actually set any helpful legal precedents, although Cresswell J, in *The Eurasian Dream* and the Admiralty judge, as he then was, Steel J, in *The Torepo*, have provided some useful guidance. In *The Eurasian Dream*, for example, although Cresswell J did not hold that the inadequacy of the ISM type documentation alone amounted to causative unseaworthiness, he identified a number of deficiencies, which he grouped together when concluding that the ship was unseaworthy. He held:

The Eurasian Dream [2002] – Cresswell J

150. The *Eurasian Dream* was not in a suitable condition and suitably manned and equipped. Although it is convenient to categorise the findings of unseaworthiness under three headings (The Vessel’s Equipment; Competence/Efficiency of the Master and the Crew; and Adequacy of the Documentation Supplied to the Vessel) I emphasise that these findings overlap and should be seen as one cumulative set of deficiencies.

⁸ Circulated email from Blank Rome Maritime, dated 8 September 2014: ‘Trial Judge Concludes the *Deepwater Horizon* Spill Caused by BP’s Gross Negligence and Wilful Misconduct’.

⁹ [2002] 1 Lloyd’s Rep. 719.

¹⁰ [2002] 2 Lloyd’s Rep. 535.

Clearly, a question which arises, and it is not an unreasonable question, is why there have been so few occasions for the courts to consider the legal implications of the ISM Code?

Although perhaps not realising it at the time, or fully anticipating the consequences, Lord Donaldson, in his 1998 Cadwallader Lecture ‘The ISM Code: the road to discovery?’,¹¹ made the following prophetic statement:

. . . while the Woolf reforms will rightly limit the scope of general discovery and, in particular, will put paid to the tactics of presenting your opponent with a haystack and inviting him to look for the needle, it will again, rightly, open the door to more specific tightly focussed orders. The ISM Code, although primarily not so intended, will I believe prove to be the lens which produces that accurate focusing . . .

Whilst the author has been involved as ISM Consultant or expert witness in well over one hundred legal cases around the world, often involving very similar issues, very few of these cases have ever reached the courts – almost all settled amicably out of court, usually following the exchange of Experts’ Reports. This is, invariably, directly linked to the limited and more focused discovery which Lord Donaldson anticipated.

With a sense of irony, one consequence of this, however, is that the courts have had very few opportunities to interpret the Code, either with regard to its requirements or linguistically. This is actually of great concern, not only because the law has become almost stagnated in this area but also because the same issues, often involving the concerns and interpretation of the same words and phrases within the Code, are regularly appearing in the disputes which are being settled. A purpose of this book will be to share and discuss some of those issues and concerns from a legal perspective.

GUIDELINES TO ADMINISTRATIONS: HISTORICAL DEVELOPMENT AND CURRENT STATUS

Ahead of the mandatory compliance deadlines for the implementation of the requirements of the ISM Code, it had been recognised that steps may need to be taken to try to ensure, as far as possible, a level of standardisation of interpretation, application and verification of the requirements of the Code by the various Administrations. In 1995, the IMO Assembly, recognising the need for uniform implementation of the ISM Code and that there might be a need for Administrations to enter into agreements in respect of the issuance of certificates by other Administrations in accordance with SOLAS Chapter IX and the ISM Code, developed ‘Guidelines for Administrations’. Whilst this was an excellent, well-intentioned, initiative by IMO, in practice, in the experience of the author, it has only partially achieved its original objectives.

¹¹ Published at [1998] LMCLQ 526.

This view is supported by the significant range of compliance levels achieved by the spectrum of Flag Administrations as reflected in their respective rankings in the Paris Memorandum of Understanding (MoU) so-called White – Grey – Black List, which is discussed in detail in Chapter 2, section 2.3.1.

However, from a historical perspective, the Guidelines to Administrations have continued to be updated to keep in line with changes and amendments to the ISM Code and Chapter IX to SOLAS. The following chronology summarises the most significant amendments up to the present time:

- 1995 – Resolution A.788(19) – Guidelines on implementation of the International Safety Management (ISM) Code by Administrations;
- 2001 November – Resolution A.913(22) – Standards on ICM Code certification arrangements;
- 2009 December – Resolution A.1022(26): Guidelines on implementation of the International Safety Management (ISM) Code by Administrations;
- 2013 December – Resolution A.1071(28) – Revised Guidelines on the implementation of the International Safety Management (ISM) Code by Administrations – took effect from 1 July 2014.

It should be noted at this point that, whilst Flag Administrations are the parties with the responsibilities to verify, certify and monitor compliance with the requirements of the Code on-board ships which fly their Flag and in Companies operating those ships, those tasks are frequently delegated by the Administrations to so-called ROs.¹² ROs would, of course, also be expected to be guided by the IMO Guidelines to Administrations.

Most Administrations restrict their ROs to Classification Societies who are full members of IACS. In 1996, IACS expanded upon the IMO Guidance to Administrations and produced a detailed ‘Guidance to IACS Auditors to the ISM Code’, IACS Recommendation No 41. This publication went through four revisions, the last being Rev. 4, December 2005. This version appears to be still valid and in force, although of course there have been numerous amendments to both the Code and the Guidance to Administrations since that time.

The potential relevance and significance of these Guidelines to Administrations and the IACS Guidelines to Auditors will be discussed in detail in Chapter 2, section 2.3.2 below and at the appropriate sections throughout this book.

1.2.3 Effectiveness of implementation

A number of related questions are frequently put to the author, usually along the lines of: is the ISM Code working? has the ISM Code achieved its

¹² The role of both Administrations and ROs will be discussed in detail in the next chapter of this book.

objectives? has the ISM Code reduced accidents? Even though the Code has been mandatory for nearly 20 years for some categories of ships, and over 12 years for all ship types, the author still finds it impossible to provide an unqualified Yes or No answer to these questions.

There are two main issues which make it very difficult to provide an unambiguous answer:

- Firstly, as was discussed in the first paragraphs of section 1.2 above, the ISM Code does not exist in a vacuum or in isolation – there were numerous other rules, regulations, guidelines and initiatives relating to safety and the management of safety and risk which were being developed simultaneously with the ISM Code. Hence, any success, or otherwise, in reducing accidents is likely to have been influenced by a number of different factors, although the ISM Code would, almost certainly, have been one of them.
- Secondly, it has proved extremely difficult to obtain any meaningful and reliable empirical, quantitative or qualitative data which would be adequately robust to draw any firm conclusions.

However, it will be appropriate to consider some sources of information which may provide an insight.

Research

There has been a limited amount of research carried out into these and other related issues.

The author conducted the first major piece of research into ISM Code implementation during 2001 as part of his post-graduate work leading towards a Doctorate of Professional Studies with the Middlesex University. This was three years after the mandatory compliance deadline for Phase 1 vessels and in the run-up towards the compliance deadline for Phase 2 vessels.

Approximately 70,000 questionnaires were distributed for completion by a wide range of identifiable stakeholders from different sectors of the industry: seafarers, governmental and intergovernmental bodies, Classification Societies/ROs and many others. Three thousand completed responses were returned for analysis. The responses tended to be more subjective than objective; they were, on the whole, quite negative about the ISM Code and were inconclusive.¹³

In May 2002, MSC, at IMO, agreed that an analysis should be undertaken to assess the impact of the ISM Code on the safety of ships to ascertain its contribution to the enhancement of safety in the shipping industry. The

13 An analysis of that research is included in: *Cracking the Code – The relevance of the ISM Code and its impact on shipping practices* (The Nautical Institute, 2003 ISBN 1 8700 77 63 6).

Secretariat was instructed to collect from regional PSC MoUs/Agreements, IACS and industry organisations their information on the impact of the ISM Code on ISM Code-certificated ships vis-à-vis detentions, serious deficiencies, casualties, etc., as well as any assessment of the impact of the ISM Code and its effectiveness on ships.

In an attempt to make a meaningful assessment, the Secretary General established a Group of Independent Experts (GIE) – which included the author – comprising experts from governments, organisations, universities and the shipping industry and the Secretariat to collect and analyse data to study the impact of the ISM Code and its effectiveness. The inaugural meeting of the GIE was on 12 November 2004. The data/information collection methodology was very similar to that used by the author in 2001, i.e. self-completing questionnaires.

The GIE, on conclusion of its study in late 2005, submitted its report to the Secretary General on its findings and recommendations. This was subsequently made available by IMO as: MSC 81/17/1 – Role of the Human Element – Assessment of the impact and effectiveness of implementation of the ISM Code.¹⁴ A summary of the findings and recommendations are given below:

GIE

Conclusions and recommendations

1. The group had recognised that the so called ‘hard data’ to be collected, for example from PSC detention records, would have had serious limitations in indicating any effects of the ISM Code implementation. Therefore, the group had recognised the need to rely on the experts’ judgment on the impact of the ISM Code based on collectively gathered subjective opinions from various levels of the shipping industry.
2. The group had developed four questionnaires for shipboard personnel, shore-based personnel, shipping companies and Administrations. All data received in response to the questionnaires was collated by the World Maritime University (WMU) and submitted to the IMO Secretariat for preliminary analysis. The group was then invited to scrutinise and validate the data and preliminary analysis.
3. The group had found that the overwhelming majority of responses were supportive of the ISM Code. The consensus among the group was that interest shown in the study was highest among those who had generally enjoyed some benefit from the implementation of the ISM Code. It was the group’s considered opinion that, whilst the

14 The GIE Report can be accessed on the IMO website: www.imo.org.

results could not be claimed to be a representative sample from across the industry, they nevertheless represented a model of collective experience from amongst those that support the Code. The group had also agreed that this was a limitation in the methodology of the data-gathering exercise and believed that it could only be addressed by investing in a study employing researchers in the field to ensure that the views of non-supporters could be specifically captured.

4. Based on the data collected, the group *concluded* that:
 - a. where the ISM Code had been embraced as a positive step toward efficiency through a safety culture, tangible positive benefits were evident;
 - b. ISM Code compliance could be made easier through a reduction in the administrative process by:
 - i. streamlining and reducing the paperwork that supported ISM Code compliance, particularly the SMS;
 - ii. greater use of technology and information technology (IT) to reduce paperwork;
 - iii. identifying common areas in the ISM Code and, for example, the ISPS Code and integrating documentary requirements;
 - iv. motivating seafarers to use the reporting and monitoring systems towards the improvement of SMSs;
 - v. involving the seafarers in the development and continuous improvement of ISM manuals;
 - vi. increased integrated training for all concerned;
 - vii. exploring measures to reduce the cost of compliance; and
 - viii. improving ISM Code compliance monitoring and developing performance indicators; and
 - ix. the impact of PSC in this area had not been explored but certainly appeared to merit further study;
5. The group *recommended* that:
 - a. a further study should be undertaken, at a later date, specifically to examine:
 - i. cause and effect between ISM Code implementation and flag State safety records;
 - ii. the relationship between PSC and ISM Code compliance; and
 - iii. whether textual changes in the requirements of the Code could make compliance easier and lead to an improved safety culture;
 - b. in response to data produced for this study:
 - i. methods to streamline the implementation of the Code through technology and increased use of IT should be explored;

- ii. the alignment of ISM and ISPS Codes in shipboard documentation should be considered;
 - iii. a reduction in paperwork should be encouraged;
 - iv. guidelines for Administrations should be revised to make them more user friendly; and
 - v. new guidelines to assist companies to implement the Code should be developed;
- c. the results of the study be given widespread publicity across the industry in order to show how positive attitudes to ISM Code could yield tangible operational, financial and safety benefits.

Bearing in mind that this research was being carried out by/on behalf of the IMO, there was, generally, a rather disappointing response. Thankfully, 2,959 seafarers completed questionnaires. However, only 39 ship operating Companies and 89 shore-based personnel out of the entire international shipping industry responded and only 32 out of about 170 flag Administrations responded – although the 32 Administrations which responded represented nearly half the world’s Convention fleet subject to the provisions of SOLAS Chapter IX by gross tonnage. It is not known whether such a poor level of participation by shore-based staff, Companies and Administrations was as a result of apathy, disinterest or some other reason – but it is surely cause for concern.

Whilst these reports included some interesting subjective comments, the reports of both the author (2001) and IMO (2005) are of limited value since they cannot claim to represent a good cross section of the key stakeholders and contain little by way of measurable data. At this time a further, more robust study on an international basis has not yet taken place.

Accident statistics

It continues to be very difficult to obtain meaningful statistical data which might provide some indication as to whether or not the ISM Code, and the other safety management initiatives which have been actively working alongside ISM, as mentioned above, have had any measurable impact on accidents and claims internationally. However, some information, although limited, is available from which trends can possibly be detected. For example, the insurer Allianz¹⁵ and the International Union of Marine Insurance (IUMI)¹⁶ publish some very interesting statistics which appear to show possible certain trends.

15 A copy of ‘Allianz Global Corporate & Speciality – Safety and Shipping Review 2013’ can be accessed on www.agcs.allianz.com/assets/PDFs/Reports/AGCS%20Safety%20and%20Shipping%20Review%202013%20WIDE.pdf.

16 The PowerPoint slides from the IUMI Annual Conferences can be accessed on their website at www.iumi.com.

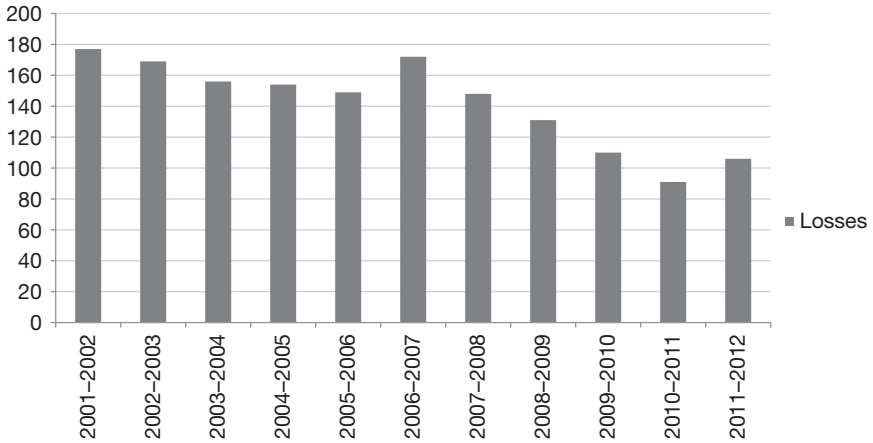


Figure 1(a) Trend – total losses all ships 2001–2012 (based on Allianz Global Corporate & Speciality/Lloyd’s List Intelligence Casualty Statistics)

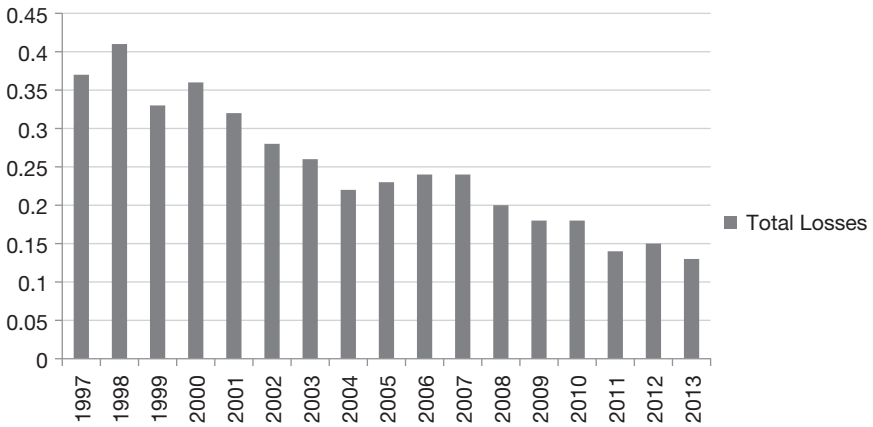


Figure 1(b) Trend – total losses, all ships, 1997–2013 (based on IUMI/Clarksons)

Figure 1(a) shows a slow but general downward trend of ship losses by number of ships lost between 2001 and 2012. The graph is based on tabulated information which appeared in Allianz Global Corporate & Speciality – Safety and Shipping Review, page 9. Allianz attributes the original source of its table to Lloyd’s List Intelligence Casualty Statistics, Analysis AGCS.

The IUMI statistics are not based on numbers of vessels in absolute terms but, rather, are based on a percentage by number of vessels compared with the world fleet – which has been growing during the relevant period – and thus represent a more realistic figure. However, the trend for total losses 1997–2013 as percentage by number of vessels compared with world fleet – vessels over 500 gross tonnage – is very similar to the downward trend in the Allianz

statistics. Figure 1(b), using approximate figures based on data from graphs as appear in slides of a PowerPoint presentation from the IUMI Annual Conferences, shows this downward trend but over a longer time period.

Clearly, this general downward trend of total losses during a 15-year period is very encouraging. However, it is only one measure – at the extreme end of the accident scale. It has not been possible to obtain accident and claims statistics covering this period with regard to liability type claims as covered by the P&I Clubs – which would be extremely interesting and useful – but in the IUMI PowerPoint presentation from its 2013 Annual Conference there are some details of what they refer to as ‘serious incidents’. The term is not defined but is clearly distinguished from ‘total losses’. Based on data derived from the IUMI PowerPoint it is possible to discern a very different trend. Figure 2 shows this trend when serious losses and total losses are combined for the period 1997–2013 by number of vessels over 500 gross tonnage.¹⁷

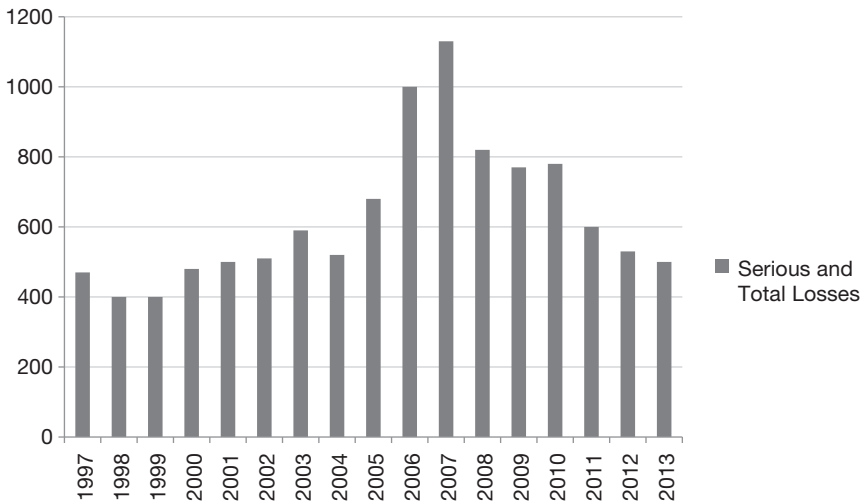


Figure 2 Trend – serious and total losses – all ships 1997–2013
(based on IUMI/Lloyds List)

What is interesting in these statistics is that the trend of serious incidents, including total losses, rose steadily from 1998 – i.e. Phase 1 ISM Code implementation – peaking in 2007 and dropping back to a figure which was still higher than the 1998 figure in 2013. Clearly it is of considerable concern that during the period under consideration – i.e. since the implementation of the ISM Code – the number of ‘serious losses’ actually increased almost threefold by 2006/2007. During this same period, in terms of the number of total losses,

¹⁷ The figures are approximate and are based on data from graphs which appear in slides of a PowerPoint Presentation from the IUMI Annual Conferences, which can be accessed on their website at www.iumi.com – IUMI original data attributed to *Lloyds List*.

there would seem to have been a slow but steady improvement, as indicated in Figure 1(b).

Whilst it has not been possible to obtain meaningful statistics from the P&I Clubs, it was the case that the P&I insurance premiums continued to increase significantly during the mid-2000s and only during the last few years has there been a stabilisation with regard to annual calls. This would appear to coincide with the accident and claims experience indicated in the IUMI statistics for 'serious losses'.

Without more robust statistics it is not possible to draw any clear conclusions, although the indications are that there is still some considerable 'room for improvement' in the field of reducing accidents and claims.

Concentrated inspection campaigns

The Paris and Tokyo MoUs have conducted three Concentrated Inspection Campaigns (CICs) on ISM Compliance since the Code became mandatory. The first two CICs were conducted to coincide with the Phase One and Phase Two implementation deadlines of July 1998 and July 2002 and were mainly carried out to verify whether a SMS had been effectively implemented on-board. The most recent CIC was carried out from 1 September to 30 November 2007.

The Paris MoU distributed a Press Release on 29 January 2008 with some preliminary details. It reported that 5,427 inspections were carried out within the Paris MoU on 5,120 ships, although several of the ships were inspected more than once. It further reported a matter of serious concern, that one out of five inspections apparently showed ISM deficiencies (non-conformities) corresponding with 1,031 inspections. In total 1,868 ISM non-conformities were recorded during the inspections and 176 inspections resulted in a detention where one or more major non-conformities (MNCs) were found. Apparently, three prominent MNC categories became apparent:

- effective maintenance of ship and equipment;
- emergency preparedness;
- reports of non-conformities and accident occurrences.

The performance of the flag States were measured by reference to detentions rates with an average during the CIC of 5.4 per cent. The Press Release identified the worst and best detention rates, with the worst running at 16.2 per cent and the best at 0 per cent (see Table 1).

Apparently, during the CIC, almost every PSC inspection within the Paris MoU region, subjected the SMS to verification in more detail for compliance with the international standards. PSC Officers verified that the SMS on-board was not a 'paper exercise' but that the master was 'fully conversant' with the SMS and ship's personnel were able to 'communicate effectively' in the execution of their duties related to the SMS.

Table 1 Paris MoU – CIC results 2007

<i>Worst performing</i>	<i>Best performing</i>
Albania	Azerbaijan
Comoros	Belgium
Cook Island	Bermuda
DRP Korea	China
Sierra Leone	Denmark
Slovakia	Faroe Islands
St Vincent Grenadines	Finland
Syrian Arab Republic	France
	India
	Ireland
	Latvia
	Luxembourg
	Isle of Man
	Philippines
	Spain
	Thailand
	United States

The Paris MoU concludes by suggesting:

Although some serious problems were encountered in general it can be said that the CIC shows that the ISM system is starting to work onboard ships. Both ship-owners and crews on board understand the system and implement it. The Paris MoU will keep monitoring the implementation of the management systems to ensure the ISM requirements are complied with.

The Tokyo MoU secretariat issued a Press Release on 20 February 2008 when, with cautious optimism, it concluded: *'It does appear that the inspection campaign was successful and indicated that for most ships and ISM operators, the safety management system is functioning and understood on board.'* The statement explained that, unlike previous ISM CICs, this CIC was aimed at determining whether the SMS on board the inspected ships was not only effectively implemented but also whether it was being effectively maintained. According to the report, Tokyo MoU member authorities inspected 4,094 vessels, detaining 108 (2.6 per cent) as a direct result. The overall PSC detention rate during the campaign period was 5 per cent. This compares with an average regional detention rate in January–August 2007 of 5.9 per cent. With regard to detention performance, the lowest performing ship type was general cargo/multi-purpose ships. These accounted for 29 per cent of all inspections and 61 per cent of the detentions. That gave these ships the highest detention rate, of 5.5 per cent. The next highest detention rate was offshore service vessels, with a detention rate of 5.3 per cent. But this figure may be misleading, as only 19 ships of this type were inspected, of which one was detained. Interestingly, 70 gas carriers were inspected, with three being detained. This resulted in a detention rate of 4.3 per cent, which gave gas carriers the third-highest detention rate.

Other detention rates for ship types, in order, were:

- other types of ship 4 per cent (25 inspections);
- NLS tankers 3.4 per cent (29 inspections);
- oil tankers 2.3 per cent;
- bulk carriers 1.7 per cent;
- refrigerated cargo vessels 1.5 per cent;
- container ships 1.1 per cent;
- chemical tankers 1.05 per cent.

The Secretariat drew specific attention to the pleasing performance of bulk carriers, having been subject to 1,093, or 27 per cent of all inspections with only 1.7 per cent detentions.

With regard to the performance of individual flag States subject to more than 10 inspections, the five states with lowest performance were as shown in Table 2.

Table 2 Tokyo MoU – CIC results 2007

Lowest performance

Korea, DPR	4 detentions	(18.2%)
Georgia	2 detentions	(14.3%)
Thailand	6 detentions	(12.2%)
Indonesia	2 detentions	(11.1%)
Mongolia	3 detentions	(10.3%)

The statement reported that, if the total number of detentions is considered, Panama had 28 detentions out of 1,440 inspections (1.9 per cent) and Cambodia had 26 detentions from 254 inspections (10.2 per cent)

Whilst there was some cause to be cautiously optimistic, it was quite apparent from both the Paris MoU and the Tokyo MoU – which is also reflected in the statistics related to normal inspections – that there appear to be significant and serious differences between flag Administrations in the way they verify and monitor compliance with the requirements of the ISM Code on-board ships which fly their flag and in Companies which operate those ships.

1.2.4 Further developments

The ISM Code, and the management of safety generally, are kept under regular review within the IMO as well as within industry bodies and governmental organisations around the world. As has been stated a number of times already, and will be repeated again throughout this book, the ISM Code does not exist

within a vacuum, nor can it be ‘pigeon-holed’ and kept separate from other safety, operational risk and pollution control activities. The Code is an umbrella under which all the safety-related, training and pollution Conventions and rules and regulations operate.

Accordingly, when ‘developments’ with the Code are considered, it is also important to remember that other developments within SOLAS, STCW and the addition of new MARPOL Annexes are highly relevant. It will be neither feasible nor appropriate to attempt to review all of them here. However, mention will be made of some of the more significant changes which have occurred since the publication of the second edition of this book and which will be discussed in more detail in the relevant sections of his book dealing with those specific topics.

A comprehensive review of STCW commenced in January 2006 and culminated in a Conference of Parties to the STCW Convention, held in Manila, Philippines, from 21 to 25 June 2010, that adopted a significant number of amendments to STCW and the STCW Code. The relevance and potential implications of some of the amendments will be discussed elsewhere in this book – specifically in Chapter 3, section 3.3.2 below, dealing with resources and personnel.

Also of special note is the development and implementation of the MLC 2006. It is designed to become a global legal instrument that will be the ‘fourth pillar’ of the international regulatory regime for quality shipping, complementing the key Conventions of the IMO such as SOLAS, STCW, and MARPOL.

The MLC 2006 contains a comprehensive set of global standards, based on those that are already found in the maritime labour instruments (Conventions and Recommendations) adopted by the International Labour Organization (ILO) between 1920 and 1996. It brings all except four of the previously existing maritime labour instruments (International Labour Standards (ILS)) together in a single Convention that uses a new format, with some updating, where necessary, to reflect modern conditions and language. The Convention consolidates and revises the existing international law on all these matters.

Developments following the GIE research and report

It will be recalled from that part of section 1.2.3. above – Effectiveness of implementation – dealing with research, that the IMO had established a GIE to work with the Secretariat and conduct research into the effectiveness of the ISM Code. The GIE submitted their findings and conclusions to the IMO, along with recommendations for further action to take to complete the task they had set out to achieve. The IMO made the report available as MSC 81/17/1. These recommendations are set out in section 1.2.3 above.

Some, but not all, of the recommendations have been actioned. The following recommendations have been actioned, to varying degrees:

- Some textural changes in the requirements of the Code have been made (these will be discussed below).
- Guidelines for Administrations have been revised. The Guidelines were replaced by Resolution A.1022(26) in December 2009 and Revised Guidelines on the implementation of the International Safety Management (ISM) Code by Administrations were adopted by Resolution A.1071(28) in December 2013. This resolution revoked Resolution A.1022(26) with effect from 1 July 2014. These amendments will be discussed in more detail in Chapter 2, section 2.3.1 below.
- New guidelines to assist companies to implement the Code have been developed. Three particular IMO Circulars can be identified:
 - MSC-MEPC.7/Circ.5 – Guidelines for the Operational Implementation of the International Safety Management (ISM) Code by Companies, adopted 19 October 2007. This Circular was revised as a consequence of the adoption of Resolution MSC.353(92) – revisions to the ISM Code – at the 92nd session of the MSC (12–21 June 2013) and the revised version is now MSC-MEPC.7/Circ.8 – Revised Guidelines for the Operational Implementation of the International Safety Management (ISM) Code by Companies. This Circular will be discussed in more detail in Chapter 2, section 2.4 below.
 - MSC-MEPC.7/Circ.6 – Guidance on the Qualifications, Training and Experience necessary for undertaking the role of the Designated Person under the provisions of the International Safety Management (ISM) Code, adopted on 19 October 2007. This Circular will be discussed in more detail in Chapter 2, section 2.4, and specifically section 2.4.3 below.
 - MSC-MEPC.7/Circ.7 – Guidance on Near-miss Reporting, adopted on 10 October 2008. This Circular will be discussed in more detail in Chapter 3, section 3.4.1 below.

Amendments to the ISM Code

It will be recalled that the ISM Code had been adopted in 1993 as Resolution A.741(18). The Code was amended in December 2000 by Resolution MSC.104(73), which entered into force on 1 July 2002. It was further amended in December 2004 by Resolution MSC.179(79), which entered into force on 1 July 2006. It was further amended in May 2005 by Resolution MSC.195(80), which entered into force on 1 January 2009. However, the two amendments made following the GIE Report of 2005 contained more significant amendments: an amendment in December 2008 – Resolution MSC.273(85), which was adopted on 1 January 2010 and which entered into force on 1 July 2010, and amendments in June 2013 by Resolution MSC.353(92), which entered into force on 1 January 2015.

Some of the more significant revisions made in Resolution MSC.273(85) and Resolution MSC.353(92) will be discussed here and will be expanded upon in the relevant sections elsewhere in this book.

MSC.273(85) – ADOPTED 1 JANUARY 2010, ENTERED INTO FORCE
1 JULY 2010

To some extent this was a tidying-up exercise in which a number of requirements were rephrased, or otherwise corrected, to clarify the actual intentions of the Code. There was also some important expansion of certain issues, particularly with regard to the relevance of risk assessment/risk management to the ISM Code.

Although these are now historical developments, it is believed that it will still be a worthwhile exercise to comment on the amendments since they may have a significant bearing not only on what is required by the Code in practice, but also on the potential legal implications.

The first amendment was to clarify the definition of an MNC, which appears at 1.1.10 of the Code. Up until this amendment the definition was as follows:

1.1.10 'Major non-conformity' means an identifiable deviation that poses a serious threat to the safety of personnel or the ship or a serious risk to the environment that requires immediate corrective action and includes the lack of effective and systematic implementation of a requirement of this Code.

Some had interpreted this definition, incorrectly, to mean that there must be two components of a non-conformity to render it an MNC, i.e. it must pose a serious threat to safety or a serious risk to the environment *and includes* the lack of effective and systematic implementation of a requirement of the Code. That was not the intention. The intention had been that either of those components would constitute an MNC. Hence the amendment:

MSC.273(85)

Section 1.1 Definitions

1 In paragraph 1.1.10, the words 'and includes' are replaced by the word 'or'

The new definition now reads:

ISM Code

1.1.10 *Major non-conformity* means an identifiable deviation that poses a serious threat to the safety of personnel or the ship or a serious risk to the environment that requires immediate corrective action or the lack of effective and systematic implementation of a requirement of this Code.

The next amendment was, in the opinion of the author, perhaps the most important of all the amendments and represented a significant move forward for the ISM Code.

It had been a widely held opinion since the Code was first developed, including the opinion of the author, that the ISM Code anticipated a ‘risk-based’ approach to the management of safety. However, the author understands that there had been opposition during the original drafting stage, from certain Administrations/shipowners, to the idea of introducing a clear risk-based approach, apparently arising from a fear that this would increase the cost of development and implementation and would increase the extent of the paperwork involved. If this is correct, then they were misconceived ideas. This resulted in the original version of the Code containing a far from clear reference to identifying risks in the Objectives, which had stated:

1.2.2 Safety management objectives of the Company should, inter alia: . . .

.2 establish safeguards against all identified risks; . . .

This would appear to be an incorrect use of the word ‘risk’, since it is ‘hazards’ which are identified during risk assessment and a risk level is then calculated. In any event, there was a lack of clarity as to what was actually required of a Company in order to satisfy this objective. It certainly did not appear to go so far as to suggest that a Company was required to conduct risk assessments.

Interestingly, the IACS Guidance to their ISM Auditors¹⁸ correctly understands what was intended but does not actually extend their understanding to make it a requirement. When discussing the Objectives, at p. 8, they say:

18 IACS Rec. No. 41 – Guidance for IACS Auditors to the ISM Code (Rev. 4 Dec 2005).

IACS Rec. No 41, Rev. 4 Dec 2005

Although it is not often referred to as such, the development and implementation of a documented safety management system is an exercise in risk management. The drafting or amendment of written procedures involves looking at the company's activities and operations, identifying what could go wrong, and deciding what should be done to try to prevent it. The documented procedures are the means by which the controls are applied. To help all the companies in establishing safeguards against all identified risks the IACS had developed 'A GUIDE TO RISK ASSESSMENT IN SHIP OPERATIONS'.

In the experience of the author, few SMSs, at that time, had been developed along the line suggested by IACS, although they had been verified and approved even though there was no obvious evidence that safeguards had been established against all identifiable risks (hazards).

However, the amendment contained in MSC.273(85) was to provide some clarification:

MSC.273(85)

Section 1.2 Objectives

2 The existing subparagraph .2 of paragraph 1.2.2 is replaced by the following:

‘. . . 2 assess all identified risks to its ships, personnel and the environment and establish appropriate safeguards; and . . .’

The significance of this amendment will be discussed in more detail in Chapter 3, section 3.2 below.

The next amendment clarified, to a limited extent, the frequency with which a Master was required to review the SMS on-board. The original requirement, as set out in Section 5.1.5 of the Code, had been far from clear. It simply stated:

5.1 The Company should clearly define and document the master's responsibility with regard to: . . .

. . .

.5 reviewing the safety management system and reporting its deficiencies to the shore-based management.

Whilst some Companies had set clear and specific requirements – e.g. once per year or once per tour of duty of each Master – others had been far from clear. The amendment which was made through MSC.273(85) did not define a minimum frequency and left that decision to each Company. It stated:

MSC.273(85)

5 Master's Responsibility and Authority

3 The word 'periodically' is added at the beginning of paragraph 5.1.5.

Interestingly, IACS, in Rec. No. 41 – Guidance for IACS Auditors to the ISM Code, Rev. 4 2005, at pages 18–19, states that it expects a frequency of 'not more than a year'.

The next series of amendments all involved the same basic issue, which highlighted an anomaly in the language that had been used at various places in the original version of the Code. Whilst the intention had, apparently, been correctly understood, the original language of the Code was at least potentially misleading. For example, the original wording of section 7 of the Code had been:

7 DEVELOPMENT OF PLANS FOR SHIPBOARD OPERATIONS

The Company should establish procedures for the preparation of plans and instructions, including checklists as appropriate, for key shipboard operations concerning the safety of the ship and the prevention of pollution. The various tasks involved should be defined and assigned to qualified personnel.

What this original requirement appears to have required of the Company was that it must establish 'procedures *for the preparation of plans and instructions etc. . . . for key shipboard operations*' (emphasis added) – whereas what was clearly intended, and required, was for the Company to establish procedures, plans and instructions etc. . . . for key shipboard operations . . .'. Accordingly, a new version of section 7 was provided:

MSC.273(85)

7 Development of Plans for Shipboard Operations

4 The existing section 7 is replaced by the following:

'7 Shipboard Operations

The Company should establish procedures, plans and instructions, including checklists as appropriate, for key shipboard operations concern-

ing the safety of the personnel, ship and protection of the environment. The various tasks should be defined and assigned to qualified personnel.’

A similar anomaly had existed with the introduction to Section 8.1 of the Code dealing with Emergency Preparedness, which had originally required:

8.1 The Company should establish procedures to identify, describe and respond to potential emergency shipboard situations.

Whilst the original intention had, apparently, been correctly understood, the phraseology was amended to ensure the requirement was clear:

MSC.273(85)

8 Emergency Preparedness

5 The existing paragraph 8.1 is replaced by the following:

‘8.1 The Company should identify potential emergency shipboard situations, and establish procedures to respond to them.’

Although taken out of sequence, as it appears in MSC.273(85), a similar anomaly as had appeared in Section 7 also appeared in the original version of Section 10.3, which had read:

10.3 The Company should establish procedures in its safety management system to identify equipment and technical systems the sudden operational failure of which may result in hazardous situations. The safety management system should provide for specific measures aimed at promoting the reliability of such equipment or systems. These measures should include the regular testing of stand-by arrangements and equipment or technical systems that are not in continuous use.

The requirements with regard to establishing procedures was amended as follows:

MSC.273(85)

10 Maintenance of the Ship and Equipment

7 In paragraph 10.3, the words ‘establish procedures in its safety management system to’ are deleted.

The new version of Section 10.3 now reads:

ISM Code

10.3 The Company should identify equipment and technical systems the sudden operational failure of which may result in hazardous situations. The safety management system should provide for specific measures aimed at promoting the reliability of such equipment or systems. These measures should include the regular testing of stand-by arrangements and equipment or technical systems that are not in continuous use.

The amendment to the requirements of Section 9.2 of the Code was intended to clarify and make explicit the reason why the implementation of corrective action was required. The original version simply required:

9.2 The Company should establish procedures for the implementation of corrective action.

The amendment made it clear what should be achieved through such corrective action:

MSC.273(85)

9 Reports and Analysis of Non-conformities, Accidents and Hazardous Occurrences

6 The existing paragraph 9.2 is replaced by the following:

‘9.2 The Company should establish procedures for the implementation of corrective action, including measures intended to prevent recurrence.’

The original version of the Code had made a clear requirement on the Company to carry out internal safety audits, but it did not prescribe the minimum frequency at which such audits should be conducted. It simply stated:

12.1 The Company should carry out internal safety audits to verify whether safety and pollution-prevention activities comply with the safety management system.

It had become industry standard practice, and was stated as the minimum frequency in the IACS Rec. No. 41 – Guidance for IACS Auditors to the ISM Code, Rev. 4, 2005, as stated at page 39, that a Company would conduct such an internal audit at least once every 12 months. The amendment made this the mandatory minimum frequency for conducting such internal safety audits:

MSC.273(85)

12 Company Verification, Review and Evaluation

8 Paragraph 12.1 is replaced by the following:

‘12.1 The Company should carry out internal safety audits on board and ashore at intervals not exceeding twelve months to verify whether safety and pollution-prevention activities comply with the safety management system. In exceptional circumstances, this interval may be exceeded by not more than three months.’

The amendment to Section 12.2 was to use a more appropriate word when describing the need to evaluate the SMS:

MSC.273(85)

9 In paragraph 12.2, the words ‘efficiency of and, when needed, review’ are replaced by the words ‘effectiveness of’.

The amended version of 12.2 then read:

ISM Code

12.2 The Company should periodically evaluate the effectiveness of the safety management system in accordance with procedures established by the Company.

The amendments in MSC.273(85) also included additional requirements with regard to SMS verification and certification by way of new paragraphs to be inserted at the end of Section 13:

MSC.273(85)

13 Certification and Periodical Verification

10 The following new paragraphs 13.12, 13.13 and 13.14 are added after the existing paragraph 13.11:

‘13.12 When the renewal verification is completed after the expiry date of the existing Safety Management Certificate, the new Safety

Management Certificate should be valid from the date of completion of the renewal verification to a date not exceeding five years from the date of expiry of the existing Safety Management Certificate.

13.13 If a renewal verification has been completed and a new Safety Management Certificate cannot be issued or placed on board the ship before the expiry date of the existing certificate, the Administration or organization recognized by the Administration may endorse the existing certificate and such a certificate should be accepted as valid for a further period which should not exceed five months from the expiry date.

13.14 If a ship at the time when a Safety Management Certificate expires is not in a port in which it is to be verified, the Administration may extend the period of validity of the Safety Management Certificate but this extension should be granted only for the purpose of allowing the ship to complete its voyage to the port in which it is to be verified, and then only in cases where it appears proper and reasonable to do so. No Safety Management Certificate should be extended for a period of longer than three months, and the ship to which an extension is granted should not, on its arrival in the port in which it is to be verified, be entitled by virtue of such extension to leave that port without having a new Safety Management Certificate. When the renewal verification is completed, the new Safety Management Certificate should be valid to a date not exceeding five years from the expiry date of the existing Safety Management Certificate before the extension was granted.'

These additional requirements will be discussed in detail in Chapter 3, section 3.1 below.

An amendment was made to Section 14.4.3 of the Code simply to clarify that the 'audit' which was mentioned in the original version was indeed the 'internal audit':

MSC.273(85)

14 Interim Certification

11 In paragraph 14.4.3, the word 'internal' is inserted after the words 'planned the'.

A new specimen form was also included with MSC.273(85) titled 'Endorsement where the Renewal Verification has been Completed and Part B 13.13 of the ISM Code Applies'.

MSC.353(92) – WHICH ENTERED INTO FORCE ON 1 JANUARY 2015

Resolution MSC.353(92) makes two significant amendments to the ISM Code and introduces seven new footnotes, plus an explanatory paragraph explaining the status of the footnotes. The first significant amendment is a new paragraph to be inserted into Section 6 of the Code which deals with Resources and Personnel:

MSC.353(92)

6 Resources and Personnel

1 The existing text of paragraph 6.2 is replaced with the following:

‘6.2 The Company should ensure that each ship is:

- .1 manned with qualified, certificated and medically fit seafarers in accordance with national and international requirements; and
- .2 appropriately manned in order to encompass all aspects of maintaining safe operations on board*.

* Refer to the *Principles of minimum safe manning*, adopted by the Organization by resolution A.1047(27).’

This is an interesting and important addition to the Code and will be discussed in detail in Chapter 3, section 3.3.2 below. Briefly it reinforces the requirements of SOLAS, Regulation V/14 and Resolution A.1047(27) – Principles of Minimum Safe Manning, which requires a ship operator to make an assessment of the minimum safe manning requirements for each of its ships, based upon criteria and guidance set out in Resolution A.1047(27) and to submit this for approval to the relevant Administration(s), which will then issue a Minimum Safe Manning Document/Certificate.

The second important amendment relates to Section 12 of the Code, which is involved with Company Verification, Review and Evaluation and makes a specific requirement on the Company to positively verify that everyone involved in ISM-related tasks is actually doing what is required of them:

MSC.353(92)

12 Company Verification, Review and Evaluation

2 The following new paragraph 12.2 is inserted after existing paragraph 12.1 and the existing paragraphs 12.2 to 12.6 are renumbered as 12.3 to 12.7:

‘12.2 The Company should periodically verify whether all those undertaking delegated ISM-related tasks are acting in conformity with the Company’s responsibilities under the Code.’

It should be noted that there is no distinction between sea-going staff and shore-based staff. Hence the verification would apply to members of the highest levels of management, line managers, Designated Person Ashore (DPAs), etc., as well as ship’s Masters, Chief Engineers and all other members of the ship staff. Auditable records of such verifications will need to be maintained. These issues will be discussed in greater detail in Chapter 3, section 3.3.6 below.

A number of footnotes providing cross-references to various IMO Circulars and Guidance documents have been included through MSC.353(92):

MSC.353(92)

Footnotes and paragraph for foreword of the publication of the Code

1 In paragraph 1.1.10, the following footnote is added after the words ‘Major non-conformity’:

‘Refer to the *Procedures concerning observed ISM Code major non-conformities* (MSC/Circ.1059-MEPC/Circ.401).’

2 In paragraph 1.2.3.2, the following footnote is added after the word ‘account’:

‘Refer to the *List of codes, recommendations, guidelines and other safety and security-related non-mandatory instruments* (MSC.1/Circ.1371).’

3 The following footnote is added at the end of the title of section 3:

‘Refer to the *Guidelines for the operational implementation of the International Safety Management (ISM) Code by Companies* (MSC-MEPC.7/Circ.5).’

4 The following footnote is added at the end of the title of section 4:

‘Refer to the *Guidance on the qualifications, training and experience necessary for undertaking the role of the Designated Person under the provisions of the International Safety Management (ISM) Code* (MSC-MEPC.7/Circ.6).’

5 The following footnote is added at the end of the title of section 8:

‘Refer to the *Guidelines for a structure of an integrated system of contingency planning for shipboard emergencies*, adopted by the Organization by resolution A.852(20), as amended.’

6 The following footnote is added at the end of the title of section 9:

‘Refer to the *Guidance on near-miss reporting* (MSC-MEPC.7/Circ.7).’

7 The following footnote is added at the end of the title of section 11:

‘Refer to the *Revised list of certificates and documents required to be carried on board ships* (FAL.2/Circ.127, MEPC.1/Circ.817 and MSC.1/Circ.1462).’

8 The following new paragraph is added to the foreword of the publication of the Code:

‘The footnotes given in this Code are inserted for reference and guidance purposes and do not constitute requirements under the Code. However, in accordance with paragraph 1.2.3.2, all relevant guidelines, recommendations, etc. should be taken into account. In all cases the reader must make use of the latest versions of the referenced texts of the document specified in a footnote, bearing in mind that such texts may have been revised or superseded by updated material.’

Whilst these cross-references are useful and relevant, what is of particular interest is the new paragraph to be added to the Foreword and, specifically, the reference to Section 1.2.3.2. of the ISM Code because it provides some excellent examples of the types of ‘Guidance’ which must be taken into account by a Company when developing its SMS.

1.3. Underlying principles

In this section some of the main underlying principles behind the philosophy of the ISM Code will be explored briefly. Many of these underlying principles will be discussed in more detail in context in the next three chapters, when attention is turned to ‘key players’ and ‘compliance requirements’. Some of the most important underlying principles are not to be found in the Code itself but, rather, in a Preamble to the Code. Many of the ideas included in the Preamble are prerequisite requirements which must be understood and correctly applied before any SMS can stand any chance of functioning effectively.

1.3.1. Purpose and key objectives

International standard

Paragraph 1 of the Preamble to the Code describes, in a single sentence, the purpose of the Code:

ISM Code**Preamble**

1 The purpose of this Code is to provide an international standard for the safe management and operation of ships and for pollution prevention.

The use of the term ‘standard’ in Preamble paragraph 1 is not strictly correct. The ISM Code was developed along the lines of other Management Systems – particularly Quality Management Systems, which will be discussed in more detail below. Those Management Systems are supported by quite a strict compliance document – referred to as a Standard – e.g. Quality Management Systems have ISO:9001. Anyone wishing to be accredited to that Standard must be able to demonstrate that they have complied with each of the Standard’s specific requirements. The ISM Code, on the other hand, whilst setting out general compliance requirements, is based upon an idea of ‘self-regulation’ and allows a ship operator considerable latitude with regard to how it achieves compliance with the objectives/goals of the Code.

In practice, this should not be a particular problem, since the intention is quite clear, i.e. that the Code requires all ship operators: however big or small, whatever type of ship they operate and wherever they be located, to have a management system which will ensure that they all achieve at least the same minimum standard of compliance with the requirements of international Conventions relevant to the management of safety and protection of the marine environment. The key objective of the Code is set out in Section 1.2.1:

ISM Code

1.2.1 The objectives of the Code are to ensure safety at sea, prevention of human injury or loss of life, and avoidance of damage to the environment, in particular to the marine environment and to property.

The concepts of ensuring safety at sea, prevention of human injury or loss of life and avoidance of damage to the environment are clearly within the ambit and remit of IMO and are clearly understandable. However, it is important to notice that, almost as an after-thought, the objective has been extended to include ‘*damage . . . to property*’. Property damage is not something IMO would traditionally be involved with.

Property could include, for example, the ship itself and the machinery and equipment on-board, other ships, fixed objects such as piers, jetties and bridges, floating objects such as navigation buoys, underwater objects such as pipelines and cables, and cargo carried in the ship. What is important to understand,

therefore, is that the requirements of the Code – e.g. to establish procedures, plans and instructions, for key shipboard operations – as required under Section 7 of the Code – will include such things as loading, carrying and discharging cargoes. Hence, if there is damage to cargo, then a cargo claimant will expect there to be relevant SMS procedures in place and audit trails to confirm that the relevant procedures were followed.

The requirements of the ISM Code are indeed very wide-ranging and most activities on-board ship will be subject to ISM compliance and SMS procedures.

Leadership and management

However well written and produced the Manuals and Checklists of an SMS may be, if there is not commitment and good leadership from the management – specifically the highest levels of management – of a Company, then the chances of the SMS being effective are very small indeed. This idea is stated very clearly in paragraph 6 of the Preamble to the Code:

ISM Code

Preamble

6 The cornerstone of good safety management is commitment from the top. In matters of safety and pollution prevention it is the commitment, competence, attitudes and motivation of individuals at all levels that determines the end result.

The demonstration of the commitment of the highest levels of management to safety must go far beyond signatures appearing at the bottom of a ‘Safety and environmental protection policy’, as required by Section 2 of the Code, however well written such policy document may be. The demonstration of commitment of the highest levels of management to safety must be clearly visible, apparent and must be believed by all other managers and staff throughout the Company, both shore-based and on-board each ship. It must also be believed by sub-contractors such as manning agents. Clearly, if there is commitment and leadership from the highest levels of management, then Department Heads, Line Managers, Superintendents, Masters, Chief Engineers and Chief Officers (C/Os) will all be inspired to follow the example of their leader and make their own commitment to safety management and, in turn, lead their teams. The more junior managers and staff ashore, and the other officers and crew on-board will then be motivated to make that commitment to safety management and the SMS – it will have a cascade effect. Such personal commitment, from top to bottom in a Company, will, as a natural process, lead to the development of a so-called ‘safety-culture’, which will be a further key to preventing accidents and controlling operational risk – which will be discussed in more detail below.

A personalised system

It is to the great credit of IMO and the original drafting committee that they did not attempt to set out a single set of prescriptive rules and regulations which would have to be complied with by all ship operators. They went down a road of ‘self-regulation’ – and for good reason. Clearly, the way in which a large Ship Manager, with a diversified fleet of nearly 1,000 ships trading worldwide is, almost certainly, going to have a very different structure and management approach to, say, the operator of two small bulk carriers trading around the Mediterranean. Such differences have been recognised and the issue is set out in paragraph 4 of the Preamble to the Code:

ISM Code

Preamble

4 Recognizing that no two shipping companies or shipowners are the same, and that ships operate under a wide range of different conditions, the Code is based on general principles and objectives.

However, whilst the operational organisation and resources might be very different from one ship operating company to another, every Company, however big or small and whatever types and size of ships they operate, and every ship operator must comply with the requirements of the same ISM Code.

The way in which they achieve compliance is likely to vary considerably. Some operational procedures may actually be very similar, irrespective of the type or size of ship – e.g. navigation and bridge watchkeeping – whereas other operational activities may be very different dependent on ship type – e.g. cargo-handling will be very different on-board a crude oil tanker from, say, a container ship or a passenger cruise ship.

The author has seen documented SMSs comprising more than 30 large and very full arch-lever files and also extremely complex electronic systems attempting to cover every conceivable situation imaginable. He has also seen an approved SMS contained within a single folder, with almost no detail at all. Based upon experience of having reviewed in detail a considerable number of documented SMSs, it is the opinion of the author that the most useful and workable SMSs will be contained within two to four arch-lever files. This topic will be discussed in more detail in Chapter 3, section 3.3 below.

Safe practices

Although quite general, a core objective relevant to safe working practices is set out at Section 1.2.2.1 of the ISM Code:

ISM Code

1.2.2 Safety management objectives of the Company should, *inter alia*:

- .1 provide for safe practices in ship operation and a safe working environment;

However, this is not only a key feature of the IMS Code but also of the ILO MLC 2006, which will be considered in some detail in Chapter 3, section 3.3.2 below.

Risk management

It is the opinion of the author that the development and implementation of the ISM Code is an exercise in risk management. This has already been discussed briefly at section 1.2.4 above when reviewing the amendments introduced by Resolution MSC.273(85). This topic will be discussed in more detail in Chapter 3, section 3.2 below.

A compliance umbrella

The ISM Code contains very little by way of detail – the entire Code is set out in 14 pages of A5 size paper: see Appendix 2 to this book. Most of the detail with regard to what ship operators and their staff – and indeed administrations – need to comply with is contained in other Conventions, Rules, Regulations etc. What the ISM Code requires is for the Company to develop an SMS which will ensure that all the requirements and obligations set out in those Conventions etc. will be complied with. Most non-compliances which occur will actually be a non-compliance with a requirement of one of those Conventions. However, the fact that such a non-compliance has arisen is likely to be indicative of a weakness or a failing of the management system which will be a non-conformity with the Company SMS.

1.3.2. Application

Section 1.3 of the ISM Code simply states, with regard to ‘Application’ that ‘*The requirements of this Code may be applied to all ships*’.

It is certainly correct that the Code can apply to *all* ships, but it is mandatory only with regard to the following categories of vessels, in accordance with SOLAS, Chapter IX, Regulation 2:

SOLAS – Chapter IX**Regulation 2***Application*

1. This chapter applies to ships, regardless of the date of construction, as follows:
 - .1 passenger ships including passenger high-speed craft, not later than 1 July 1998;
 - .2 oil tankers, chemical tankers, gas carriers, bulk carriers and cargo high-speed craft of 500 gross tonnage and upwards, not later than 1 July 1998; and
 - .3 other cargo ships and mobile offshore drilling units of 500 gross tonnage and upwards, not later than 1 July 2002.
2. This chapter does not apply to government-operated ships used for non-commercial purposes.

It should also be noted that the ISM Code applies to ‘SOLAS’ ships, i.e. ‘ships engaged on international voyages . . .’.¹⁹ *International voyage* means a voyage from a country to which the present Convention applies to a port outside such country, or conversely.²⁰

A State can, if it so wishes, extend the categories of ships to which the ISM Code applies as well as making the Code applicable to ships engaged on domestic voyages – e.g. in the EU, requirements were put in place through EC Regulation 336/2006 relating to certain domestic cargo and passenger ships to comply with the ISM Code from 24 March 2008. In conjunction with that EC Regulation, the UK Maritime and Coastguard Agency (MCA) Marine Information Note – MIN 342(M) dealt with ‘International Safety Management (ISM) Code Implementation on Domestic Vessels’. In the United States the US Department of Homeland Security/US Coast Guard have worked with the ‘brown water’ towing vessel industry and have developed a set of safety regulations governing the inspection, standards and SMSs for towing vessels – generally referred to as ‘46 CFR Subchapter ‘M’. Although this has been in the development stages since initial authority was granted in section 415 of the Coast Guard and Maritime Transportation Act of 2004, it is believed that the consultation process is now in its final stages and once enacted will require all domestic towing vessels to comply with requirements which are almost identical to the ISM Code.

19 SOLAS, Part A, Regulation 1.

20 SOLAS, Part A, Regulation 2.

Ship operators involved in operating ‘domestic’ vessels may voluntarily agree to adopt the requirements of the ISM Code and develop an equivalent SMS.

1.3.3 Management systems

Systems approach to management

Management can be considered to be the process of planning, organising, leading and controlling the efforts of organisation members, and of using all other organisational resources to achieve stated organisational goals.

Most management systems are based upon the Plan > Do > Check > Act model. This model has been usefully tabulated by the UK Health and Safety Executive (HSE):

Table 3 The read-across between Plan, Do, Check, Act and other management systems²¹

<i>Plan, Do, Check, Act</i>	<i>Conventional health and safety management</i>	<i>Process safety</i>
Plan	Determine your policy Plan for implementation	Define and communicate acceptable performance and resources needed Identify and assess risks Identify controls
Do	Profile risks Organise for health and safety Implement your plan	Record and maintain process safety knowledge Implement and manage control measures
Check	Measure performance (monitor before events, investigate after events)	Measure and review performance Learn from measurements and findings of investigations
Act	Review performance Act on lessons learned	

This model may also be shown in a simplified diagram (see Figure 3).

The way in which this model can be applied to an SMS as anticipated by the IMS Code will be discussed in detail in Chapter 3, section 3.3 below.

²¹ *Managing for Health and Safety* (UK Health and Safety Executive, 3rd edn, 2013), ISBN 978-0-7176-64566, accessible at www.hse.gov.uk/managing.

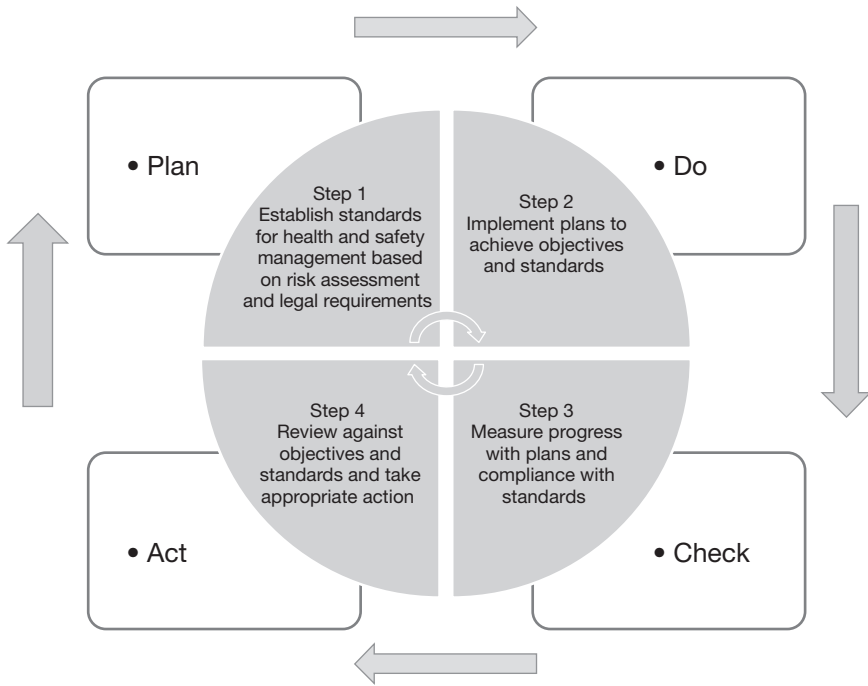


Figure 3 Plan > Do > Check > Act model

The threefold mantra

A very simple but useful way of understanding what is required of a Company with regard to compliance with the ISM Code is the so-called ‘threefold mantra’, which says:

- say what you do;
- do what you say that you do; and
- show that you do what you say that you do.

A Company says what it does through its SMS Manual(s), which will include instructions and standard operating procedures, as well as checklists and reporting forms, and guidelines such as fleet circulars. These standard operating procedures and supporting checklists, etc. must then be brought alive through implementation of the systems and the Company must do what it says that does, in a consistent and standardised way. Objective evidence should be produced in the form of checklists, completed forms and other similar records which will confirm that the Company is doing what it said it does. The primary purpose of producing this objective evidence is to allow the Company, as part of the monitoring process, to check and measure how effective, or otherwise,

its SMS is in practice, such that any weaknesses can be identified and dealt with by way of corrective action. The use of this objective evidence to defend a Company's position in a court case is secondary.

Auditable systems

A key feature of a management system is being able to monitor how well the system is performing – which is of course a major feature of the third step in the threefold mantra discussed above. In its most simple terms, an audit trail will need to be created which can be followed by an auditor to verify that the SMS is working or to identify any weaknesses which may require corrective actions. The audit trail will basically follow the threefold mantra. It will start by looking at what the Company says that it does – e.g. in its SMS manuals – and will then look for objective evidence to confirm that the Company, through its staff on-board ship and ashore, has been doing what it was supposed to be doing.

However, a very important point to understand – and to keep in mind – is that whilst a Company will no doubt strive to ensure that its documented procedures are complied with exactly as intended, by all personnel at all times, such an idealistic situation is unlikely to be achieved in practice.

What must be understood is that within any SMS, and particularly with regard to its implementation, there are many variables, and people are the greatest variable of all. People are also prone, on occasions, to make mistakes or behave in an irrational way. An SMS may not work 100 per cent as intended but that, in itself, is not a major problem. The problem arises when the SMS is not working as intended and no one is aware of that fact. In that case, problems and mistakes go uncorrected.

Accordingly, the monitoring of the SMS is paramount. Unfortunately, however, an unhealthy misconception appears to have developed in the very early days of ISM implementation – probably even ahead of the mandatory compliance deadline dates. That was to view observations and non-conformities as being negative things and perceived as 'black marks' against the ship and/or the Company. As a consequence they tended to be, and still tend to be in some Companies and on-board some ships, 'hidden away' and not admitted. This is not only a very serious misunderstanding but also very dangerous and, almost certainly, committing the SMS to failure.

Contrary to what may appear, on first sight, to be a problem – and as perceived by some in the industry and some related sectors – there is nothing wrong with an auditor identifying a number of non-conformities or observations. Indeed the opposite is true, since this will now allow weaknesses in the system to be identified and corrective action taken to deal with the weakness and, effectively, strengthen and improve the system before an accident occurs. This will also be the case with regard to even an MNC, since by identifying the MNC it will allow important corrective action to be taken before the major accident happens.

Things can start going wrong for a number of reasons: it may be something simple, such as a change of a member of staff, and the new member of staff requires some additional training or familiarisation. It maybe that the non-conformities are occurring because the operational conditions on-board have changed such that the existing procedure is no longer entirely suitable or relevant or applicable and thus the procedure itself may need to be re-written. It may be that there has been a change in a regulation and the ship staff are complying with the new regulation – again, the procedure itself may need updating.

Some time ago, the author encountered a situation during a post-casualty investigation which highlighted a serious related problem which was based on perceptions by the shore-based management, including the DPA, that non-conformities and deficiencies which existed on-board would be viewed negatively by charterers and Class/ROs, and so deliberate attempts were made to conceal the extent of the on-board problems. The following ‘anonymous’ case study explains what was found:

CASE STUDY

The vessel had been involved in a serious navigational incident involving poor chartwork and bridge management/watchkeeping practices. A full annual internal safety audit had taken place only weeks before the incident when the DPA spent nearly 10 days on-board sailing with the vessel during an ocean passage.

The Audit Report recorded four observations and two non-conformities – for which Non-conformity Reports (NCRs) were raised and appropriate Corrective Action Plans (CAP) developed.

None of the observations or non-conformities recorded involved navigation or watchkeeping-related procedures or activities.

However, during a review of some general paperwork, a document was discovered which clearly was not intended to be included. The document also related to the internal audit which had taken place on-board just prior to the incident but was an ‘unofficial’ record of a further 75 observations, non-conformities and deficiencies which had been identified by the DPA during the audit. Many of these included problems with regard to bridge records and navigational practices.

When challenged with this ‘unofficial list’ the DPA explained that, if he had recorded all the deficiencies and non-conformities as official NCRs and prepared an official CAP, then this could have produced serious problems with PSC as well as with charterers and would have made him look bad. He went on to explain that he told the Master and officers what they were doing wrong and that they must be more careful and also provided some more specific on-board instruction.

Collectively, the unofficial list of observations, non-conformities and deficiencies indicated a potentially serious problem with the competence and ability of the Master and Deck Officer, in particular, and should have been treated as an MNC. If it had been, and if appropriate corrective action had been taken to deal with the situation as a MNC, then the risk level which existed would have been reduced to acceptable levels and there is a very good chance that the incident would have been prevented.

No management system will be perfect – on occasions things can, and will, go wrong. This should be expected, and if things are starting to go wrong with the implementation of the SMS then it is crucial that they are identified quickly, which will then allow appropriate corrective action to be taken. Through the audit process, observations and non-conformities, along with reports of hazardous occurrences and near misses, are the means by which a Company can identify things starting to go not according to plan, and thus do something to correct the situation. If non-conformities are not acknowledged and dealt with then non-conformities, and more so MNCs, will increase the probability of accidents happening to very high levels.

The systems will be audited from at least two perspectives:

- internal safety audit by the Company;
- external audit by the flag Administration/RO acting on behalf of the Administration.

The Company internal audit will be primarily concerned with whether the SMS is being effectively implemented.

The flag Administration/RO audit will be primarily concerned with whether the implementation of the SMS is compliant with the requirements of the ISM Code, and particularly with Section 1.2.3 of the Code.

Auditing, and monitoring of the SMS generally, will be considered in more detail in Chapter 3, sections 3.1.1 and 3.3.6 below.

An SMS

A much more detailed exposition of the requirements of an SMS will be provided in Chapter 3, section 3.3 below. For the purposes of this introductory section and consideration of some basic principles, we will consider only one requirement by way of a fundamental ‘objective’ of the Code.

Although it is only a very small section within the ISM Code, the requirements and expectations of Section 1.2.3 are enormous. As an ‘Objective’, the Section requires:

ISM Code

1.2.3 The safety management system should ensure:

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

The ISM Code actually contains very little by way of detail with regard to what must be achieved – or, indeed, how to achieve it – the detail of what must be done is contained in other places. The thrust of Section 1.2.3 is to the effect that an SMS developed by the Company should ensure that compliance will be achieved with all relevant rules and regulations – i.e. laws – of the flag of the vessel and will, in theory, also include the rules and regulations of ports/countries visited which apply to foreign ships visiting its ports. Further, that a whole raft of unspecified ‘guidelines’ are to be ‘taken into account’. On the face of it, that is an enormous requirement by any standard.

It should be a relatively easy task to identify all the relevant ‘rules and regulations’ of the flag Administration which must be complied with and to ensure that the SMS includes sufficient detail to comply with those requirements. However, from a practical point of view, it may become much more problematic to ensure compliance with all ‘local’ laws, rules and regulations of ports/countries which each of the Company’s ships might visit during its anticipated trading operations, although this potential problem should not be over stressed since most ‘local’ rules and regulations will be based on the same IMO and ILO Conventions as the flag Administration rules and regulations. However, there are a number of countries which have developed a number of additional rules and regulations – e.g. the United States – and if an incident did occur in its jurisdiction, then its court may well find the SMS was deficient if it did not ‘ensure compliance with’ a specific rule or regulation which had perhaps been breached and which had contributed to the incident.

Even more problematic, potentially, is to identify exactly which ‘applicable codes, guidelines and standards’ should be ‘taken into account’. Also, from a practical as well as a legal point of view, what is actually meant, or intended, by the expression ‘taken into account’?

These issues will be explored in more detail in Chapter 3, section 3.3.1 below.

1.3.4 Tailor-made SMS

An important underlying principle behind the ISM Code is that the Code does not prescribe how a ship operator should develop its SMS or what material should be included – indeed, on the face of it, the ISM Code provides

considerable latitude to ship operators to develop their own SMS which will best suit the purposes of the individual Company, provided the end result satisfies the Objective of the Code, as per Section 1.2, as well as the functional requirements, as per Section 1.4, and the more specific requirements as set out in the main body of the Code. Paragraphs 4 and 5 of the Preamble state:

ISM Code

Preamble

4 Recognizing that no two shipping companies or shipowners are the same, and that ships operate under a wide range of different conditions, the Code is based on general principles and objectives.

5 The Code is expressed in broad terms so that it can have a widespread application. Clearly, different levels of management, whether shore-based or at sea, will require varying levels of knowledge and awareness of the items outlined.

Also of note is Section 11.3 of the Code, which reads:

ISM Code

11.3 The documents used to describe and implement the safety management system may be referred to as the Safety Management Manual. *Documentation should be kept in a form that the Company considers most effective.* Each ship should carry on board all documentation relevant to that ship.

(emphasis added)

This represented a significant shift by IMO away from issuing detailed prescriptive rules and regulations which had to be strictly complied with and, on the face of it, this was a novel and brave initiative by IMO to expect the industry to be self-regulating. However, such freedom does, inevitably, bring with it potential problems, some of which could be very serious.

Firstly, because there is no 'blueprint' to work from, those tasked with the job of verifying compliance – i.e. the flag Administration/their ROs – will, if they are to perform their task effectively, need to study very carefully thousands of different SMSs to verify that each one ensures compliance with all the mandatory rules and regulations and takes into account a myriad of codes and guidance, as well as ensuring compliance with the Functional Requirements

of Section 1.4 of the Code and the other requirements from the body of the Code. This is certainly no easy task and, as is discussed in some detail in Chapter 3, section 3.1.1 below, in the author's experience, often inadequate time is allocated to such verifications and some SMSs are approved which demonstrably do not comply with all the requirements of the ISM Code.

Secondly, whilst an increasing number of ship operating companies understand the importance of continuity of employment with regard to its sea-staff, there are still many Masters, officers and crew members who are not in regular employment with one company and frequently move around between different ship operating companies. One effect of Masters and officers moving between different ship operating companies for employment is that each time they move they will, almost certainly, be confronted with a new SMS – with new/different procedures and instructions – as well as forms and checklists which they must learn and become familiar with. In the case of a Master, he/she must become 'fully conversant' with the company SMS prior to taking command.²²

Some ship operating companies made little or no attempt to produce their own SMS manuals – rather, they bought ready-made, off-the-shelf, manuals from so-called ISM Consultants. It was a mandatory requirement to have an SMS and so those companies bought a ready-made SMS which appears to have satisfied some flag Administrations, which issued a Document of Compliance (DOC) to the company and an SMC to each vessel on the back of these off-the-shelf manuals. This was a classic example of the 'compliance culture' which existed, and still exists, in some sectors of the ship operating industry and which will be discussed below.

Some Companies did, however, make some efforts to customise the 'off-the-shelf' manuals they had bought to fit in more closely with their own operation but, inevitably, the manuals referred to someone else's SMS and not theirs – hence, lack of 'ownership'.

In the event of an accident or incident, the content of the SMS manuals will, almost certainly, be studied and scrutinised very closely and are likely to be the subject of criticism, irrespective of whether or not they have been 'approved' by the flag Administration.

1.3.5 Transparency

During the 1970s and 1980s it became increasingly common, in some sectors of the industry, for the true or beneficial owner(s) of a ship to hide behind a so-called 'corporate veil'. Each ship appeared to be owned by a 'one ship company', i.e. the ship was the only asset of that company, and the company registered in a far-away place where it was extremely difficult, if not impossible, to establish who the actual owner(s) was. One important, and deliberate,

²² See ISM Code, Section 6.1.2.

consequence of such an arrangement was that, if the ship was involved in a major accident or incident and subject to large potential claims or prosecution, or otherwise had incurred significant debts, then the ‘one-ship-company’ could get rid of its only asset – go out of business and basically walk away from its responsibilities, obligations and liabilities.

One important aspect of the ISM Code is that it attempts to introduce a whole new level of transparency into the operation of ships, or at least those aspects relevant to safety, protection of the environment and operational risk. The ISM Code includes the concept of the ‘Company’ which will have the responsibility for ensuring compliance with the requirements of the Code. The Company is defined at Section 1.1.2:

ISM Code

1.1.2 *Company* means the owner of the ship or any other organization or person such as the manager, or the bareboat charterer, who has assumed the responsibility for operation of the ship from the shipowner and who, on assuming such responsibility, has agreed to take over all duties and responsibility imposed by the Code.

Connected with this definition and in the section of the Code which deals with Company responsibilities and authority, Section 3.1 of the Code requires:

ISM Code

3.1 If the entity who is responsible for the operation of the ship is other than the owner, the owner must report the full name and details of such entity to the Administration.

In such circumstances the shipowner must identify the individual or organisation who has agreed to take over all duties and responsibility imposed by the Code. It is the name and address of that individual/organisation which will appear on the DOC and Safety Management Certificate (SMC).

Something which should be understood, however, from a legal perspective, is that whilst a shipowner might be able to delegate the tasks with regard to ‘. . . all duties and responsibility imposed by the Code . . .’ to the Company, the legal responsibilities cannot be delegated. This may become significant, for example, if a member of the ship’s crew is injured because of an ineffective/inadequate SMS – the seafarer’s legal action will usually be against the shipowner; if cargo is damaged on-board because of badly maintained hatch cover, as a consequence of an inadequate maintenance management system, the cargo owner/subrogated underwriter will look to the shipowner for compensation

under the contract of carriage, not the Company whose SMS would have included the maintenance management/planned maintenance system. Further, it is very unlikely that a shipowner would be able to argue successfully, in defence or in mitigation, that it had employed a first class Company to manage safety and operational risk and that it was the Company which had failed to do what it was supposed to do and which resulted in the loss or damage.

A shipowner may have a legal recovery action against the Company, although, assuming the management agreement is on, say, a BIMCO Shipman 98 form, the maximum compensation will usually be limited to 10 times the annual management fee.

1.3.6 Commitment from the top

However, much time and effort has gone into producing the SMS manuals, or however much money may have been paid to so-called ISM consultants to purchase ready-made Manuals, if an SMS is to be effective, ensuring that the Objective as stated in section 1.2.1 are achieved – i.e. *‘to ensure safety at sea, prevention of human injury or loss of life, and avoidance of damage to the environment, in particular to the marine environment and to property’* – then those involved at the sharp end with the implementation of the SMS must be motivated and enthused. That motivation will be as a result of good and effective leadership and that leadership must come from the very top of the organisation. Paragraph 6 of the Preamble to the Code makes an extremely important and relevant point in this regard:

ISM Code

6 The cornerstone of good safety management is commitment from the top. In matters of safety and pollution prevention it is the commitment, competence, attitudes and motivation of individuals at all levels that determines the end result.

That commitment from the top must be a genuine commitment, it must be very apparent and must be believed by all members of the team, both in the office ashore and on-board each ship.

The author has encountered many situations, and has discussed this matter with many individuals, when it has become apparent that whilst the highest levels of management may have stated their commitment to safety and protection of the environment – e.g. by signing a Company ‘Safety and Environmental Protection Policy’, which says all the right sort of stuff – the people in the office ashore and on-board the ships simply do not believe them – their perception is that this is nothing more than ‘lip-service’. The following case study records an incident which was reported to the author by the actual Master involved:

CASE STUDY

It was the Master's first trip with this particular ship operator, which was a medium-sized ship management company. During his interview he was shown a copy of the Company 'Safety and Environmental Protection Policy' and it was emphasised that it was Company policy that safety always comes first.

The ship had discharged and then loaded a full cargo at the same North European port. Whilst in port, many ships stores had arrived and had to be taken on-board, a full stem of bunkers was taken, some statutory and Class surveys were undertaken, as well as a PSC inspection.

Assessing the on-board situation, the Master realised that not only he, but also all deck officers and crew and most engineer officers, had been working almost constantly for nearly 72 hours and were showing clear signs of fatigue. Accordingly, the Master phoned the Operations Manager and explained the situation and he advised the Operations Manager that he intended delaying sailing, which would have involved a night-time passage through the very busy Dover Strait and English Channel with fog forecasted, and allowing his officers and crew, as well as himself, to catch up with some sleep. The Operations Manager attempted to persuade the Master to sail, since the vessel was on time charter and the ship would be put off-hire. However, the Master maintained his position, the ship remained alongside overnight, and he and the crew rested.

At about 08:30 hours the next day a Superintendent arrived on-board from the Company accompanied by a relief Master. The original Master was told to pack his cases, hand over to the relief Master and return home.

On arriving home, the Master contacted the Company and was advised that he should consider himself suspended without pay. He did not receive any more work or pay from that Company and experienced considerable difficulty obtaining employment from other companies, since potential new employers would contact the previous employer for a reference and the previous employer did not appear to have forgiven the Master for putting safety first.

If there is genuine commitment from the top towards safety and protection of the environment – and if that commitment is believed – then the potential is there to develop and implement an SMS which will reduce the probability of accidents happening to very low levels. But it requires a considerable amount of hard work on the part of all involved.

The author has encountered a number of SMSs which were working extremely well and where success could be measured both quantitatively and qualitatively. On all occasions the commitment from the top – which included active involvement by senior management in safety management – was very apparent. There was also a strong commitment to the idea of continuity of

employment where people of the right calibre had been recruited and were retained within the Company on a permanent basis. The author has never encountered an SMS which is working extremely well where at least these two components were not present.

1.3.7 Not a substitute for employing competent staff

Although it should not need to be said, even the very best SMSs should never be considered a substitute for employing competent staff. Unfortunately there were, and still are, some ship operators who appear to be of a view that an SMS can be developed which will engineer out human errors – or at least totally compensate for human inadequacies. On that basis they appear to have resigned themselves to what they see as an inevitability of employing seafarers who do not have an acceptable level of education, either at basic level or professional level, and who do not have the requisite skills to effectively perform their duties. This resignation appears to be founded in the perceived recognition that young people with a good education and leadership skills simply do not want to embark upon a seagoing career. The way these Companies attempt to overcome these inadequacies is by developing very detailed SMS manuals, either hard copy or electronic with powerful search engines, such that the answer to every conceivable question the designers could think of can be found in the manual as standard operating procedures. Effectively, the individuals are trained to find the answers to problems they may encounter during their day-to-day activities, and during emergency situations, in the manuals. This approach is usually accompanied by micro-management from the office ashore. Such ideas as these are not only mistaken but fundamentally wrong and, potentially, highly dangerous.

It is very unlikely that anyone will ever read voluminous manuals; keeping them under review and up to date becomes increasingly difficult and the more procedures which exist, the more opportunities there will be for non-conformities to occur. However, the real danger of trying to develop and provide manuals which purportedly contain the answer and solution to every conceivable question and problem which arises – combined with a perception that Masters and the rest of the ship staff are expected to use the manuals in this way – is that, inevitably, the Masters and the rest of the ship staff will actually stop thinking for themselves. They will waste valuable time searching for the correct answer to everything in the manuals.

Because of the almost infinite number of permutations and combinations of facts which may come together in day-to-day and emergency situations on-board a working ship, it will simply be impossible to design a documented management system – even one backed up by a micro-management system from the office ashore – which will cover every eventuality. Any such approach would clearly be non-compliant with the requirements of Section 6 of the ISM Code as well as the requirements of safe manning, STCW and the STCW Code and the MLC 2006 – all of which will be discussed in some detail in Chapter 3, section 3.3.2 below.

It is true that shortages in seafarer labour have been predicted for a number of years now, although predictions made in 2005 were perhaps overly pessimistic. Possibly the most authoritative source of information on this subject is the 'Manpower 2010 Update' research studies commissioned by BIMCO²³ and the ISF²⁴ using the Warwick Institute for Employment Research at the University of Warwick, with assistance from the International Maritime Conventions Research Centre at Dalian Maritime University, Peoples Republic of China.²⁵ The study is conducted every five years and was last completed in 2010.

In the 2010 update it was estimated that the worldwide supply of seafarers stood at about 624,000 officers and 747,000 ratings, i.e. a total workforce of nearly 1.4 million. The 2010 update estimated demand for seafarers in 2010 was 637,000 officers and 747,000 ratings. This would suggest that the situation in 2010 was one of approximate balance between demand and supply for ratings with a modest overall shortfall of officers (about 2 per cent). However, this does not necessarily mean that individual shipping companies are not experiencing serious recruitment problems. A closer examination of the data also suggests that there are problems with the supply of particular grades of seafarer, particularly senior officers and engineers in some labour markets, and concerns about over future availability of senior management-level officers. There was also evidence of continuing recruitment and retention problems in some sectors of the industry. In the conclusion to the 2010 Update 'Highlights' a very important observation is made:

It is important to stress that the industry requires well qualified and high calibre seafarers capable of adapting to change and handling the wide range of tasks now required of them. Any training programme provided must ensure quality is not compromised in the quest for increasing quality . . .

From a legal perspective, clearly any Company which decides to compromise the full compliance requirements of Section 6 of the ISM Code on the basis that its SMS will compensate for possible shortcomings in the knowledge or skills of seafarers it employs, needs to rethink its ideas as a matter of urgency. It would, almost certainly, render the SMS seriously defective and deficient, such that an MNC would need to be raised and the Administration would need to withdraw the DOC and SMCs.

The employment of properly qualified, certificated and experienced seafarers, who are adequately motivated through good and effective leadership, is a prerequisite to establishing an ISM Code-compliant SMS which stands any chance of achieving its objectives.

IMO, in conjunction with industry and seafarer's organisations, has been involved the 'Go to Sea!' campaign, which was launched in November 2008

23 BIMCO: www.bimco.org.

24 ISF: www.marisec.org.

25 www.imcrc.dlmu.edu.cn.

in association with the ILO, the ‘round table’ of shipping non-governmental organisations (NGOs) – BIMCO, ICS/ISF, INTERCARGO and INTERTANKO – and the International Transport Workers Federation. The specific aim of the ‘Go to Sea!’ campaign is to promote seafaring as an attractive option for young people of the right calibre, one which can provide them with rewarding, stimulating and long-term prospects, not only at sea but also in the broader maritime industry.

On the occasion of the Seafarers Day (25 June 2012), the IMO Secretary General, Mr Koji Sekimizu, included the following message in his address:

My message is to all young persons on the verge of choosing a future career to seriously consider seafaring, as even today it provides the chance to see the world and get paid for doing so! It also provides for a fulfilling and rewarding professional career either as a lifelong seafarer or as a springboard for related professional jobs in the maritime industries ashore.

1.3.8 Buy-in by Company personnel

If an SMS is to be effectively implemented and work in practice, then those directly involved in the implementation process must believe in the SMS and be adequately motivated to want to make it work. In other words, there must be ‘buy-in’ by those individuals, both on-board ship and in the office ashore, into the SMS and the management of safety within that Company.

The people who probably know best of all how specific tasks should be performed, what hazards may be anticipated, how best to manage those hazards and reduce the associated risk, i.e. how the various tasks should be performed safely, will be those individuals involved at the ‘sharp end’ of the implementation process: the Master, Officers and crew on-board ship. The availability of such knowledge and experience within a Company should be fully utilised during the development stage of producing standard operating procedures, checklists, guidelines, etc., which will form the core of the Company SMS.

One of the conclusions reached by the IMO GIE research in 2005, and as reported in MSC 81/17/1, was the following:

MSC 81/17/1

10.7 The following conclusions are drawn: . . .

- ISM Code compliance could be made easier through a reduction in the administrative process by: . . .
 - involving the seafarers in the development and continuous improvement of ISM manuals; . . .

Involving the seafarers in the development and on-going improvement process of the SMS will result in ‘buy-in’ by those seafarers who will then be proud to consider the SMS ‘their’ SMS and not something imposed upon them by the Company management and/or external consultants. The resulting sense of ‘ownership’ of the SMS by the seafarers will be a great motivating factor to ensuring effective compliance.

1.3.9 A question of culture

Any discussion about the ISM Code and SMSs will, almost inevitably, include discussions about a number of different ‘cultures’, such as ‘compliance culture’, ‘safety culture’, ‘company culture’, ‘no-blame culture’, ‘just culture’, and no doubt a number of other related ‘cultures’. An understanding of some of these conceptual ideas is crucial to understanding what is required to successfully implement an ISM Code-compliant SMS. Accordingly, this first chapter will conclude with an exploration of some of the issues involved. The discussion will continue in the final, concluding, chapter when the so-called ‘Swiss cheese’ model of Professor James Reason will be considered in light of a maritime-related SMS.

There are a number of different ways in which the word ‘culture’ can be used in the English language, either as a noun or as a verb. Most of these concern nationalities or bacterial growths and have little or no relevance to the way it is being used in this discussion, which is about organisations.

Firstly then, let us be clear about what is actually meant, or intended, when the word ‘culture’ is used within the organisational context of the conceptual ideas under consideration here. Two brief, but useful, definitions are included in the online *Merriam-Webster Dictionary*²⁶ which should help to explain what is intended:

Merriam-Webster Dictionary

... a way of thinking, behaving, or working that exists in a place or organization (such as a business) ...

... the set of shared attitudes, values, goals, and practices that characterizes an institution or organization ...

26 www.merriam-webster.com/dictionary/culture.

A further, helpful definition, has been offered by Professor James Reason,²⁷ although he was quoting from a another source:²⁸

Shared values (what is important) and beliefs (how things work) that interact with an organisation's structures and control systems to produce behavioural norms (the way we do things around here).

There are negative cultures, which have the propensity to have an adverse effect on the Company and the implementation of its SMS; and positive cultures, which will enhance the SMS and have the potential to produce beneficial results for the Company.

An example of a negative culture, at least so far as ISM Code compliance and successful and effective implementation of an SMS are concerned, is a compliance culture. However, it is important to understand that, to quite a significant degree, prior to the introduction of the ISM Code and the introduction into the shipping industry of ideas of the systems approach to managing safety, compliance culture was the normal accepted and expected behaviour of those working on-board a commercial ship. We were provided with detailed sets of rules and regulations and we were expected to comply with those prescriptive rules and regulations – i.e. we were told what we had to do and we did it. By doing so, we could be sure we were doing what was required and expected of us and we would be granted our Statutory and Class Certificates. However, such a compliance culture can stifle initiative and the drive for continual improvement in the way we manage safety. The ISM Code introduced new ideas, going beyond a compliance culture. It identifies goals which must be achieved but it allows the individual ship operator to devise its own methods of achieving those goals, through the development and implementation of a tailor-made SMS. Unfortunately, the ideas within a compliance culture appear to be so deeply entrenched within some sectors of the ship operating industry that some individuals – and some Companies – appear to be experiencing considerable difficulty letting go and adopting new ideas, such as the development of a safety culture. Sometimes the correct words are used but the conceptual ideas have clearly not been understood.

A typical example of this phenomenon is the Company which talks about 'safety culture' when referring to the inclination of their employees to comply with rules and regulations and to act safely, whereas this does not describe a 'safety culture'; rather, it describes a 'compliance culture'. Sometimes the culture and style of management is such that the natural, unconscious bias is for production – or maintaining sailing schedule – over safety; or a tendency to focus on the short term, or being highly reactive as opposed to proactive.

27 Reason, J., *Managing the Risks of Organisational Accidents* (Ashgate Publishing, 1997), p.192.

28 Uttal, B., 'The Corporate culture culture', *Fortune*, 17 October 1983.

The UK HSE suggests that symptoms of poor cultural factors can include:

- *Widespread, routine procedural violations;*
- *Failure to comply with the company's own SMS (although either of these can also be due to poor procedural design);*
- *Management decisions that appear consistently to put production or cost before safety.*²⁹

The author continues to encounter regularly examples of compliance culture, where Companies are paying little more than lip service to their SMS. These typically take the form of the Company buying ready-made, 'off-the-shelf' SMS manuals from so-called ISM Consultants; ensuring that checklist forms are completed with all boxes ticked, even though the relevant checks have not actually been carried out; and superficial verification audits of such systems by certain Administrations/ROs which then issue a DOC to the Company and an SMC to each ship, apparently confirming compliance.

Indeed, certainly during the early days of implementation, the focus of many had been on the need for Companies to comply with the ISM Code within specified deadlines and to be issued with DOCs and SMCs. However, the underlying purpose of the ISM Code is to move shipping away from a culture of 'unthinking' compliance with external rules towards a culture of 'thinking' self-regulation of safety.

The irony is that a Company which chooses to adopt such a compliance culture and do just enough to get its DOC and SMCs will still have to incur costs and commit other resources to obtain its DOC and SMC – which are required to allow the Company to operate and for the ships to trade – but with no other tangible benefits. The cost and resources required to develop and implement an SMS as intended by the ISM Code would not be significantly more and would have the potential for delivering significant returns on a Company's investment.

Whilst there are a number of 'positive' cultures which are regularly discussed in connection with the development and implementation of an ISM Code-compliant SMS, most of these are actually sub-cultures linking in to the concept of the 'safety culture'. However, having said that, it is the author's opinion that safety culture is actually a sub-culture of a 'company culture'. These possible interrelations emanate from ideas developed by Professor James Reason³⁰ and will be discussed below.

We shall return to discuss the idea of a 'company culture' later, and will focus initially on the concept of the 'safety culture'. The development of the idea of safety culture should be thought of as part of an evolutionary process to reduce accidents which has been taking place since the end of the Second World War. During the period from the mid-1940s through into the 1960s,

29 UK HSE – Common topic 4 – Safety culture: www.hse.gov.uk/humanfactors/topics/common4.

30 Reason, J. *Managing the Risks of Organisational Accidents* (Ashgate Publishing, 1997).

attempts were made to reduce accident rates by improving ‘hardware’, i.e. protective and effective guards, safer and more reliable equipment, etc. From the 1960s into the 1980s the emphasis shifted towards improving employee performance through more careful selection, recruitment and training, as well as such things as incentives and reward schemes. From the late 1980s to the present time, when the emphasis changed again towards the way ship operators managed and organised their operations – especially with the introduction of SMSs, which arrived in the shipping industry in the mid- to late 1990s.

Although the idea of safety culture is almost synonymous with the idea of developing and implementing an effective ISM Code-compliant SMS, there is no mention of safety culture – or any other type of culture – anywhere in the ISM Code or in Chapter IX of SOLAS. To that extent it cannot be said that the development of a safety culture is a mandatory requirement. It is, however, clearly implied. Further, IMO Resolution A.1071(28) makes a very clear reference to the importance of safety culture in paragraph 1.1.4:

Resolution A.1071(28)

1.1.4 The application of the ISM Code should support and encourage the development of a safety culture in shipping. Success factors for the development of a culture that promotes safety and environmental protection are, *inter alia*, commitment, values, beliefs and clarity of the safety management system.

An almost identical reference appears in MSC-MEPC.7/Circ.5:

MSC-MEPC.7/Circ.5

1.1.4 The application of the ISM Code should *support and encourage* the development of a safety culture in shipping. Success factors for the development of a safety culture are, *inter alia*, commitment, values and beliefs.

The concept of safety culture exists in most high-risk industries and became established in some of those industries a long time before it became common practice in the shipping industry. Hence it should come as no surprise that we look to those other industries for some guidance on the subject. A classic definition of safety culture, for example, is that promoted by the Advisory Committee on the Safety of Nuclear Installations (ACSNI) which states:

*The safety culture of an organisation is the product of individual and group values, attitudes, perceptions, competencies, and patterns of behaviour that determine the commitment to, and the style and proficiency of, an organisation's health and safety management. Organisations with a positive safety culture are characterised by communications founded on mutual trust, by shared perceptions of the importance of safety and by confidence in the efficacy of preventive measures.*³¹

Much of our thinking and understanding of safety culture, and indeed of the theory of accident causation and the prevention, as illustrated in the so-called 'Swiss cheese' model discussed in the final chapter of this book, is attributable to the pioneering work of James Reason, Professor of Psychology at Manchester University, in other high-risk industries during the 1990s. In his influential work *Managing the Risks of Organisational Accidents*³² Reason identified a number of components, or sub-cultures, of a safety culture:

- informed culture;
- reporting culture;
- just culture;
- flexible culture; and
- learning culture.

The concept of the 'informed culture' would probably equate to what is generally meant by the idea of safety culture, in which case there would be four sub-cultures. The relationship between these sub-cultures can perhaps be understood from Figure 4.

In the following we consider each component in turn, and utilise Reason's own definitions.

Informed culture

This is the core, and in most important respects an informed culture is a safety culture. According to Reason, it requires the creation of a safety information system that collects, analyses and disseminates information from incidents and near-misses as well as from regular proactive checks on the system's vital signs. All of the activities can be said to make up an *informed culture* – one in which those who manage and operate the system have current knowledge about the human, technical, organisational and environmental factors that determine the safety of the system as a whole.

31 ACSNI Human Factors Study Group: Third report, 'Organising for safety' (HSE Books, 1993).

32 Reason, J. *Managing the Risks of Organisational Accidents* (Ashgate Publishing, 1997).

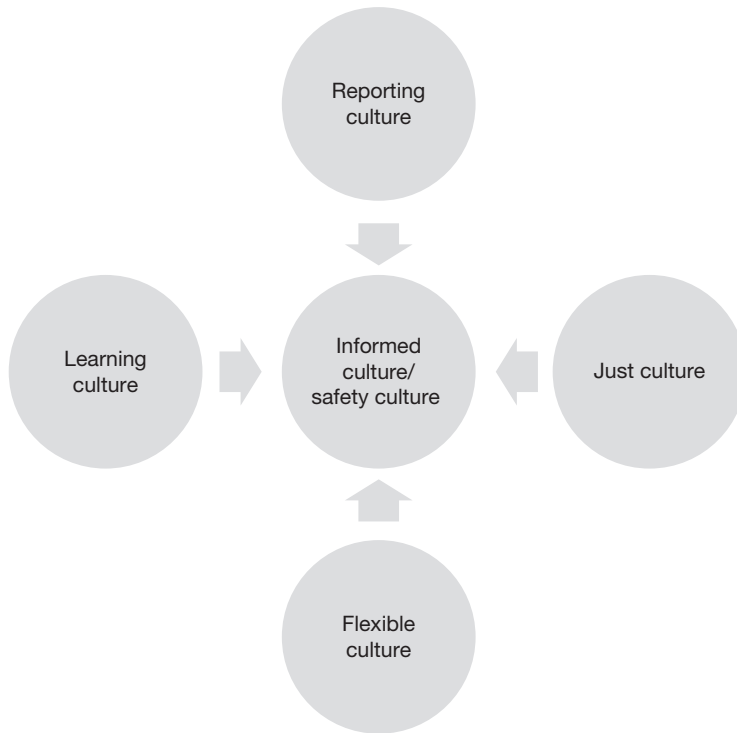


Figure 4 The components of a safety culture, based on Reason 1997

Reporting culture

Any safety information system depends crucially on the willing participation of the workforce, the people in direct contact with the hazards. To achieve this, according to Reason, it is necessary to engineer a *reporting culture* – an organisational climate in which people are prepared to report their errors and near-misses.

Just culture

An effective reporting culture depends, in turn, on how the organisation handles blame and punishment. In the early days of SMS development in the shipping industry, which had been carried over from other high risk industries, attempts were made to introduce what was known as a ‘no-blame culture’. In practice, such an idea is neither feasible nor desirable. Some intentional actions by personnel cannot be tolerated – e.g. alcohol or drug abuse, reckless

non-compliance, arson, etc. As Reason says, a blanket amnesty on all unsafe acts would lack credibility in the eyes of the workforce. More importantly, it would be seen to oppose natural justice. Accordingly, there developed the idea of a 'just culture' – in which there is an atmosphere of trust where people are encouraged, even rewarded, for providing essential safety-related information, but in which they are also clear about where the line must be drawn between acceptable and unacceptable behaviour.

Flexible culture

According to Reason, a flexible culture takes a number of forms, but in many cases it involves shifting from the conventional hierarchical mode to a flatter professional structure, where control passes to task experts on the spot, and then reverts to the traditional bureaucratic mode once the emergency has passed. Such adaptability is an essential feature of the crisis-prepared organisation and depends crucially on respect – in this case, respect for the skills, experience and abilities of the workforce and, most particularly, the first-line supervisors.

Learning culture

Finally, an organisation must possess a learning culture – the willingness and the competence to draw the right conclusions from its safety information system, and the will to implement major reforms when their need is indicated.

The ultimate objective of a safety culture is to prevent human injury or loss of life, avoid damage to the environment and to property. Whilst some sectors of the shipping industry have recognised and understood the nature of a safety culture and how it can help achieve this key objective of the ISM Code, other sectors of the industry appear still to have some way to go along the road of understanding.

Experts typically describe safety culture in terms of values, beliefs and practices that the Company management and the staff, on-board and ashore, share, to ensure that risks are minimised and mitigated to the greatest possible degree. In other words, they raise safety to the highest priority, over everything else, including commercial pressures.

Within a true safety culture every member of the Company team, whether managing director or operations assistant, Master or able bodied seaman (AB), thinks about safety, thinks about ways of improving safety and then taking appropriate action, and this is done as a matter of normal routine daily practice, almost subconsciously.

In the author's experience there are very few accidents, incidents or unsafe acts which, with the benefit of hindsight, could not have been prevented. Almost all could be traced to some form of human or organisational error. If people had been thinking constantly about safety, as occurs in a safety culture, many of those accidents and incident would simply not have occurred.

The IMO suggests that the key to achieving a safety culture is in:

- recognising that accidents are preventable through following correct procedures and established best practice;
- constantly thinking safety; and
- seeking continuous improvement.

In words reminiscent of Professor Reason the IMO goes on to suggest:

It is relatively unusual for new types of accidents to occur on board and many of those that continue to occur are due to unsafe acts by seafarers. These errors, or more often violations of good practice or established rules, can be readily avoided. Those who make them are often well aware of the errors of their ways. They may have taken short-cuts they should not have taken. Most will have received training aimed at preventing them but, through a culture that is tolerant to the 'calculated risk', they still occur.³³

The development of a safety culture does not lend itself to prescriptive rules and regulations, or to a culture of blind compliance; it requires people at all levels within a Company to look afresh at the way they behave and to take personal responsibility for managing and improving safety and operational risk.

In the experience of the author, an effectively developed and established safety culture is always supported by a well-established company culture. Probably the strongest evidence of a company culture existing is in the language used by the employees, both on-board ship and in the office ashore. When discussing the way work is carried out, or attitudes towards such things as health and safety within the Company, if the staff use language along the lines of '*... we do this, or we do that ...*', then there is a good indication that a company culture exists. There is an indication of a sense of belonging. On the other hand, if the language used is along the lines of '*... they do this, or they do that ...*', then that provides a good indication that a company culture does not exist or has not been effectively established. There is alienation between the management and staff.

Once a company culture is well established then the development of a safety culture would occur quite naturally, provided there was good leadership and motivation from the highest levels of management which cascaded down through the organisation.

Interestingly, the UK HSE also appears to have identified the same relationship between company culture and a safety culture when it says:

An organisation's culture can have as big an influence on safety outcomes as the safety management system. 'Safety culture' is a subset of the overall company culture ...³⁴

33 A short pamphlet titled 'Safety Culture', posted on the IMO website: www.imo.org.

34 UK HSE – Common topic 4 – Safety culture: www.hse.gov.uk/humanfactors/topics/common4.

From a legal point of view, it is probably correct to say that there is no mandatory requirement in the ISM Code, or elsewhere, to develop and implement a safety culture. However, the development of a safety culture is clearly implied throughout, and an effectively developed and implemented SMS which is not fully supported by a safety culture being practiced by those involved in the SMS implementation process is almost inconceivable.

The existence of a well-developed safety culture will provide a strong indication that the SMS is probably also well-developed and effectively implemented such that, if an accident does occur, then other causes, not attributable to an inadequate SMS, are most likely to be at issue. On the other hand, the absence of a safety culture within a Company – including on-board its ships – is almost certainly indicative of an inadequate and ineffective SMS.

Before leaving this topic, it is perhaps worth reflecting on further benefits which should flow from an established safety culture, for example that it can save a Company money – i.e. it is actually good investment. ISF produced a pamphlet,³⁵ accessible through the IMO, which makes the following claim:

How Can A Safety Culture Save Money?

The following benefits have been derived by shipping companies from the conscious attempt to practise a safety culture:

- *reduction in lost employee hours*
- *reduction in hospital costs*
- *reduction in sick leave*
- *reduction in pollution costs*
- *reduction in cargo damage*
- *reduction in insurance premiums*

In the same pamphlet the ISF includes the following challenge:

How can companies check if they are losing money?

A simple check on whether or not a shipping company may be losing money unnecessarily is to see if the company's operational managers can provide senior managers with the following information:

- *How many 'Lost Time Accidents' did the company's crew members have last year and was this better or worse than the year before?*
- *What proportion of the company's personal accidents were caused by a simple failure to follow established procedures, i.e. were totally avoidable and should never be repeated?*

35 Courtesy of International Chamber of Shipping, 'Safety Culture', undated pamphlet produced by the ICS, may be accessed through the IMO website: www.imo.org.

- *How does the accident record of the company compare with that of its competitors? Is the company capable of finding out?*
- *What proportion of last year's costs resulting from accidents were not repaid by insurance and were in fact covered by the company directly?*

If operations managers appear unable to answer any of these questions satisfactorily, it is possible that the company may be losing money unnecessarily and that there is more that might be done to encourage the practice of a safety culture.

Introducing radical improvements to a company's safety culture cannot be achieved overnight, but the first stage, and the key to success, is commitment from the most senior level of management including managing directors, finance directors and everyone else at boardroom level.

The full benefits of a commitment to implement a total safety culture may take four or five years to materialise, but experience has shown that real results can be achieved within as little as one or two years.

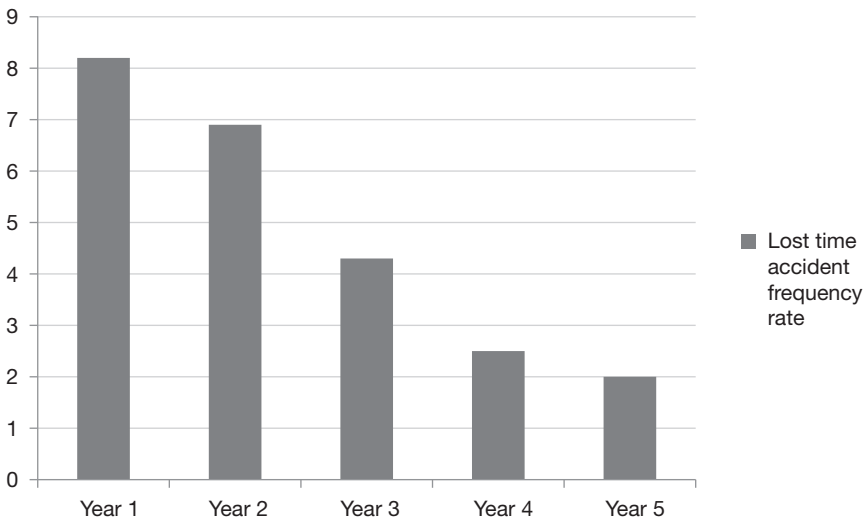


Figure 5 ISF – Implementing a safety culture: the experience of a multinational shipping company

Reproduced with kind permission of ICS.

A well-established safety culture, where there is commitment from the highest levels of management and 'buy-in' by all employees, both in the office ashore and on-board ship, should assist considerably with ensuring compliance with the requirements of the ISM Code, and this in turn should reduce considerably the probability of accidents, the risk of the Company being found legally liable following an accident, and could save the shipowner money.

1.4 Conclusion to the introduction and underlying principles

In this introductory section we have considered some of the reasons why the ISM Code became necessary, what it is trying to achieve and how it is trying to achieve it.

Many of the underlying principles and philosophy behind the Code will now be explored in more detail in the next chapters as we examine the role and responsibilities of the key players in the development, implementation and monitoring of the ISM Code requirements. We shall then look in detail at how those requirements should be put into practice during the daily working of a Company and its ships, consider what might go wrong and what the legal consequences might be.

The ISM Code has been mandatory for almost every commercial vessel in the world for more than a decade, and yet there is very little case law in this area. Consequently, there remains a great deal of confusion about the potential legal and insurance implications of the Code.

This third edition represents a major re-write and addresses significant amendments that were made to the ISM Code on 1st July 2010 and 1st January 2015.

This book provides practitioners with a practical overview of, and much needed guidance on, the potential implications of failing to implement the requirements code. It will be hugely valuable to DPAs, managers of ship operating companies, ship masters, maritime lawyers and insurance claims staff.

Professor Phil Anderson is widely recognised as one of the world's leading authorities on the ISM Code and marine safety management, and he combines extensive experience as a Master Mariner, a P&I insurance practitioner, an Expert Witness and consultant, and as a distinguished academic. He is currently Professor in Practice and Head of the Maritime Studies Faculty at the University of Trinidad and Tobago.

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