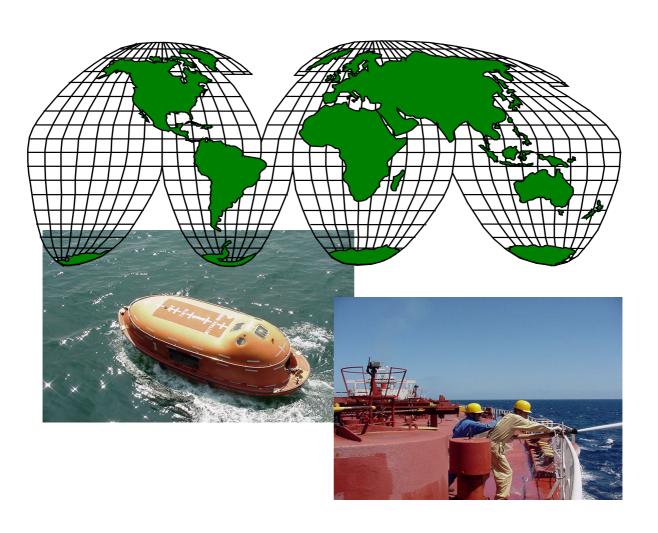
ClassNK

Annual Report on Port State Control regarding the ISM Code 2002



August 2003

NIPPON KAIJI KYOKAI

CONTENTS

n	•	rn	~		cti	$\boldsymbol{\wedge}$	n
	ш	··	u	u	UП	u	

Chapter 1	ISM Non-compliant Ships							
1.1	General	2						
1.2	Changes made after Mandatory Application of the ISM Code to All Ships	3						
1.3	ISM non-compliant ships sorted by Flag State	4						
1.4	ISM non-compliant ships sorted by Type of Ship	7						
1.5	SM non-compliant ships sorted by Age of Ship							
1.6	SM non-compliant ships sorted by Gross Tonnage							
1.7	Port State of non-compliant ship	10						
Chapter 2	Analysis of deficiencies related to ISM Code							
2.1	ISM deficiencies sorted by dominant causes	13						
2.2	Number of ISM deficiencies sorted by section of ISM Code for the past 4 years	14						
2.3	Number of ISM deficiencies sorted by the States of PSC	15						
2.4	Particulars of ISM deficiencies sorted by PSC	17						
2.4.1	Japan	18						
2.4.2	Hong Kong	19						
2.4.3	Australia	21						
2.4.4	Netherlands	22						
2.4.5	U.S.A.	23						
2.4.6	Portugal	25						
2.4.7	China	26						
2.4.8	Germany	27						
Chapter 3	ISM deficiencies and Action Code							
3.1	ISM deficiencies and Action Code	28						
3.2	Action Code sorted by sections of ISM Code	29						
Chapter 4	Companies managing the ISM non-compliant ships							
4.1	Management companies and number of ships	32						
4.2	Management companies and years of ISM system operation	33						
4.3	Nationalities of companies managing ISM non-compliant ships	34						
Chapter 5	Analysis of ISM Non-compliant Ships based on Open Information							
5.1	General	35						
5.2	ISM non-compliant ships sorted by Flag State	36						
5.3	ISM non-compliant ships sorted by PSC	37						
5.4	ISM deficiencies classified by ISM Code section	38						
Conclusions		41						

Introduction

This Annual Report shows you the summaries of reports which were collected by the Head Office of ClassNK from its Branch and Overseas Offices, Flag States and various ship management companies on current activities of the PSC all over the world, during a year of 2002, from January to December, as well as information revealed on web sites by the PSC about the ships against which actions had been taken by PSC, especially for the ISM Code related deficiencies. ClassNK has compiled this Annual Report in the hope that such information should be helpful to all personnel concerned to deepen their recognition of PSC's attitude addressing to the ISM Code and for the further improvement of their safety management systems.

Chapter 1 presents various tables and figures that show the number of ships against which action had been taken by PSC for the ISM Code related deficiencies (hereunder referred to as "ISM non-compliant ship") among the ships classed with NK or ships for which the SMC was issued by NK (hereunder referred to as "NKSMC ship"). The analyses were made for five types of breakdowns, namely under Flag States, Type of Ships, Age of Ships, Gross Tonnage and Port States, each showing the comparative data of the past three or four years.

Chapter 2 presents the results of analyses for ISM deficiencies pointed out by PSC. The breakdowns of deficiencies have been analyzed for number of ISM deficiencies per ship, for the requirements referring to each section of the ISM Code, and for those examples that resulted in the detention of ships.

Chapter 3 presents the results of analyses over the actions taken by PSC for ISM deficiencies and their relations to each section of the ISM Code.

Chapter 4 presents the actual situation of companies that are managing ships pointed out with ISM deficiencies including the size of company; and the relation between years of system operation experience and number of ISM non-compliant ships.

Chapter 5 presents the results of various analyses of ISM non-compliant ships based on information gained from the web sites of Tokyo MOU, Paris MOU and USCG.

Note: Definition of key words used in this Report:

PSCO: Port State Control Officer

ISM deficiency:
 a deficiency related to the requirements of the ISM Code
ISM non-compliant ship: a ship taken action by PSC due to the ISM Code related
deficiencies, i.e. due to non-compliance with the ISM Code.

taken action by PSC: directives given by PSCO to a ship to take corrective action to

rectify an ISM deficiency(non-compliance with the ISM Code)

pointed out by PSCO

NKSMC: a ship holding a Safety Management Certificate issued by NK

NKDOC: a company holding a Document of Compliance issued

by NK

RO: (Recognized Organization) an organization recognized by a Flag State to conduct audits and issue certificates on its behalf

Chapter 1 ISM Non-compliant Ships

Total

1.1 General

During one year period from January to December 2002, NK Head Office received reports from its Branch and Overseas Offices, ship management companies, Flag States and other parties, on a total of 204 ISM non-compliant ships, which was an increase of 2.4 times over the 86 ships of 2001. Of the total of 204 ISM non-compliant ships, 151 ships were NKSMC ships; of which 135 ships were classed with NK and 16 ships were classed with other societies. The total number includes 53 ships classed with NK but in possession of SMCs issued by other ROs. The number of ISM non-compliant ships during the past four years sorted by SMC issuing organizations are shown on Table 1.1.1 and Fig. 1.1.1.

Table 1:1:1 15W Hon-compliant ships sorted to	Table 1.1.1 15th non-compliant ships solved by Swi Clistung Organization										
ISM non-compliant ships	1999	2000	2001	2002							
NK classed ships with SMC issued by other RO	8	9	11	53							
NKSMC ships classed with other society	14	14	5	16							
NKSMC ships classed with NK	46	45	70	135							

68

68

86

204

Table 1.1.1 ISM non-compliant ships sorted by SMC issuing organization

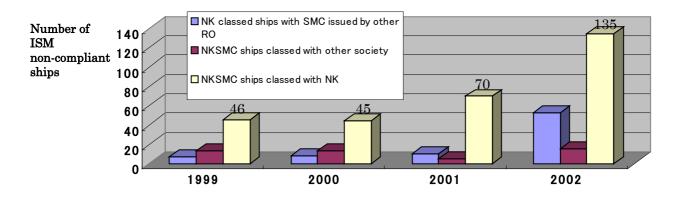


Fig.1.1.1 ISM non-compliant ships sorted by SMC issuing organization

The total number of ISM deficiencies for all 204 ISM non-compliant ships were 350 items, which was a steep increase by 2.5 times of 132 items of 2001.

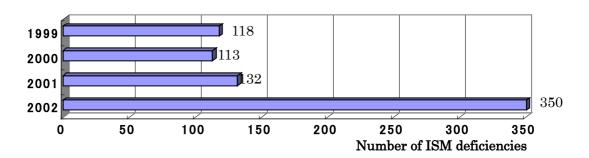


Fig.1.1.2 Total number of ISM deficiencies for the past four years

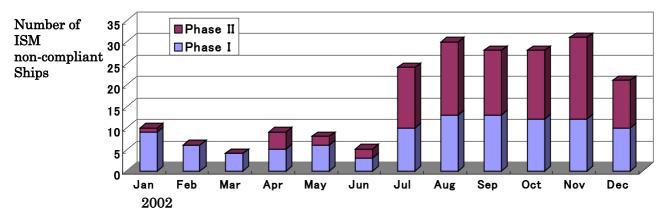
1.2 Changes made after Mandatory Application of the ISM Code to All Ships

The mandatory application of the ISM Code had come into effect in two steps for different types of ships. Phase I application (for oil tanker, chemical tanker, gas carrier, bulk carrier, passenger ship and high speed craft) came into effect on 1 July 1998, and Phase II application (for other cargo ships and MODU) came into effect on 1 July 2002, then the requirements of the ISM Code became to cover all types of ships of 500 G/T and more engaged on international voyages. As a result of enhanced inspection by PSC relating to the ISM Code which took place after July 2002, the number of ISM non-compliant ships per month had increased about 3 times as many as compared with the previous months. These changes are shown on Table 1.2 and Fig. 1.2.

Tab. 1.2 Number of ISM non-compliant ships per month in 2002

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Phase I	9	6	4	5	6	3	10	13	13	12	12	10	103
Phase II	1	0	0	4	2	2	14	17	15	16	19	11	101
Total	10	6	4	9	8	5	24	30	28	28	31	21	204

Fig. 1.2 Number of ISM non-compliant ships per month in 2002



The steep increase of ISM non-compliant ships after July 2002 was the result of enhanced inspection campaign by PSC relating to the ISM Code which was carried out between July and September by both the Paris MOU and Tokyo MOU. The increase was seen conspicuous with "other cargo ships" to which the ISM Code newly came to apply. As a result the total number of ISM non-compliant ships in 2002 counted up about 3 times as many of 2001.

1.3 ISM non-compliant ships sorted by Flag State

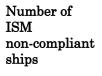
1.3.1 ISM non-compliant ships sorted by Flag State in 2002

Flag states of ISM non-compliant NKSMC ships (151 ships) and percentage of non-compliance are listed in Table 1.3.1 and Fig. 1.3.1.

(Percentage of noncompliance = Number of ISM non-compliant ships/ Number of NKSMC ships x 100)

Tab.1.3.1 ISM non-compliant ships sorted by Flag State in 2002

Flag State	No. of ISM non-compliant ships(A)	No. of NKSMC ships(B)	Percentage (%) (A/B)
Cyprus	13	115	11.3
Turkey	7	75	9.3
Malaysia	5	64	7.8
Liberia	10	149	6.7
Malta	6	89	6.7
Hong Kong	5	115	4.3
Panama	79	1963	4
Philippines	4	99	4
Singapore	9	372	2.4
Thailand	1	83	1.2
Japan	1	148	0.7
Other	11	180	6.1
Total	151	3452	4.4



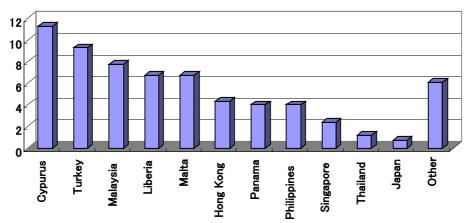


Fig.1.3.1 Percentage of non-compliant ships sorted by Flag State (2002) (%)

* This graph shows only those Flag States which have 50 and more NKSMC ships.

1.3.2 ISM non-compliant ships sorted by Flag State for over four years.

The total number and percentage of ISM non-compliant NKSMC ships sorted by Flag States for over four years are shown in the following Tables (1.3.2 & 1.3.3) and Figures (1.3.2 & 1.3.3). While some states like Panama, Cyprus and Liberia, the number and percentage have increased year by year, there are some states like Singapore and Hong Kong which do not show a sign of increase. Among a general trend of increasing tendency, these states seems to have suppressed the increase by means of enhanced Flag State Control (FSC).

Tab. 1.3.2 Number of ISM non-compliant NKSMC ships

Flag State	1999	2000	2001	2002
Panama	25	25	36	79
Cyprus	7	3	3	13
Liberia	4	6	4	10
Singapore	7	8	8	9
Turkey	3	2	6	7
Malta	1	2	2	6
Hong Kong	4	5	3	5
Malaysia	0	0	1	5
Philippines	1	3	6	4
Japan	3	0	2	1
Other	7	8	4	13
Total	60	59	75	151

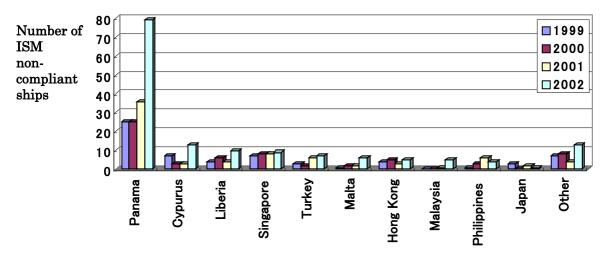


Fig.1.3.2 Number of ISM non-compliant NKSMC ships

Percentage of ISM non-compliant ships shows the increasing tendency with Cyprus, Turkey, Liberia and Malta and aggravating situation with Malaysia. Hong Kong shows a decreasing tendency, while Singapore has maintained a low level of percentage.

Tab.1.3.3 Percentage of ISM non-compliant ships(%)

Flag State	1999	2000	2001	2002
Cyprus	8	3.2	3.3	11.3
Turkey	3.8	2.8	9.2	9.3
Malaysia	0	0	2	7.8
Liberia	2.4	4.1	3	6.7
Malta	2.2	3.9	3	6.7
Hong Kong	8.5	7.1	3.9	4.3
Panama	2	1.8	2.4	4
Philippines	1	2.9	6.5	4
Singapore	2.1	2.3	2.3	2.4
Thailand	0	0	0	1.2
Japan	1.6	0	1.5	0.7

Number of ISM non-compliant ships

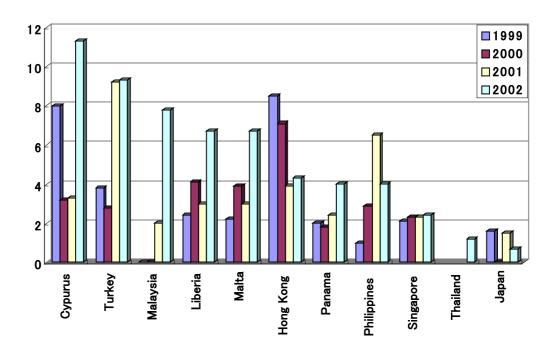


Fig.1.3.3 Percentage of ISM non-compliant NKSMC ships (%)

* This graph shows only those Flag States which have 50 and more NKSMC ships.

1.4 ISM non-compliant ships sorted by Type of Ship.

The total number of NKSMC ships (3452 ships) are sorted into various types of ships as shown in Table 1.4.1. Percentage of "other cargo ship" increased up to 45% from 34% of previous year. Percentage of ISM non-compliant ships was 4.4% for all NKSMC ships. Breakdown of this percentage for each type of ships were: other cargo ship 5.1%, bulk carrier 4.5%, oil tanker 3.0%, gas carrier 2.0%. Although the average percentage was 2.7% in the previous year, this figure increased up to 4.4% by virtue of enhanced PSC inspection after the ISM Code came into effect to cover all types of ships in July 2002.

Tab.1.4.1 ISM	non-comp	liant shi	ips sorted	by Ty	pe of Ship

Type of Ships	No. of ISM non- compliant	No. of NKSMC	Per	centage (A/B)	Percentage of each Ship's	
	NKSMC ships (A)	All Ships (B)	2000	2001	2002	Type (B/C)
Bulk Carrier	49	1082	3.9	4.8	4.5	30
Gas Carrier	3	147	4.9	2.7	2.0	4
Oil Tanker	20	668	0.5	2.2	3.0	19
Chemical Tanker	3	45	0.8	0.8	6.7	1
Other Cargo	77	1503	ı	0	5.1	45
Passenger & HSC	0	7	0	0	0	0.2
Total	75	2815(C)	2.2	2.7	4.4	-

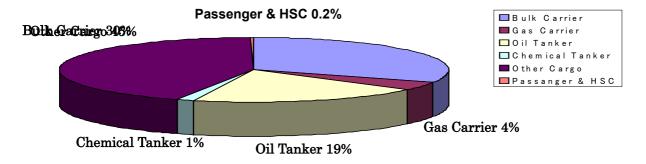


Fig1.4.1 Percentage of NKSMC Ships sorted by Type of Ship(%)

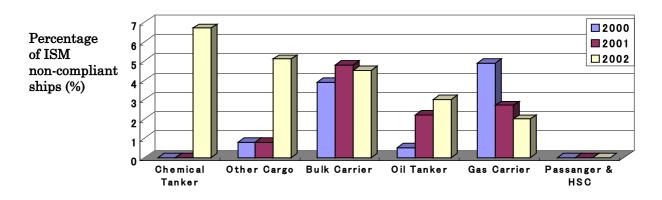


Fig 1.4.2 Percentage of ISM non-compliant ships sorted by Type of Ship

1.5 ISM non-compliant ships sorted by Age of Ship

The number of ISM non-compliant ships and their percentage of NKSMC ships sorted by Age of Ships for over past four years are shown in Table 1.5.1 and Fig. 1.5.1

Tab.1.5.1. ISM non-compliant ships of NKSMC ships sorted by Age of Ship

Chinle Age	ISM	non-com	oliant shi	ps(A)	NKSMC Ships(B)			
Ship's Age	1999	2000	2001	2002	1999	2000	2001	2002
0 to 4	4	7	10	27	739	779	848	959
5 to 9	7	9	19	29	544	609	690	952
10 to 14	14	8	5	15	394	378	342	471
15 to 19	17	17	22	49	427	442	486	510
20 to 24	16	15	13	21	313	306	315	369
25 and more	2	3	6	10	124	150	121	186

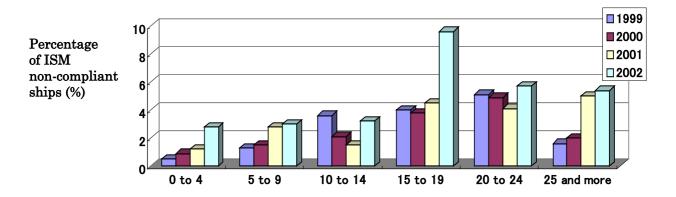


Fig.1.5.1. Percentage of ISM non-compliant ships of NKSMC ships sorted by Age of Ship (%) * Percentage = $A/B \times 100(\%)$

In general, the higher the Age of Ship the higher the percentage of ISM non-compliance, as we have seen in every year. In 2002 this percentage increased with ships of 15 years and above, and this tendency has remain unchanged during the past four years. Fig. 1.5.2 shows the percentage of ISM non-compliant ships sorted by Age of Ships for three different types of ships.

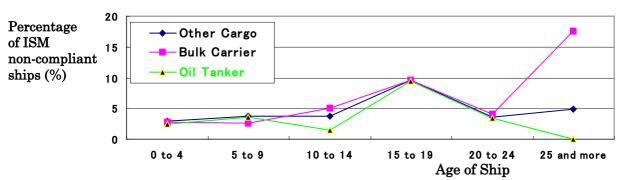


Fig. 1.5.2 Percentage of ISM non-compliant ships sorted by Age of Ship for three types of NKSMC ships

1.6 ISM non-compliant ships sorted by Gross Tonnage

The number of ISM non-compliant ships and its percentage of NKSMC ships sorted by Gross Tonnage are shown in Table 1.6.1 and Fig. 1.6.1.

Tab.1.6.1 Number of ISM non-compliant ships sorted by Gross Tonnage

G/T	ISM	Non-com	oliant shi	ps(A)	NKSMC ships(B)				
(x 1000)	1999	2000	2001	2002	1999	2000	2001	2002	
0 to 10	6	12	20	70	731	811	826	1239	
10 to 20	24	32	14	26	623	635	677	763	
20 to 30	11	6	16	31	336	332	362	396	
30 to 40	7	3	8	8	309	318	335	383	
40 to 50	2	3	4	5	171	179	209	221	
50 to 60	1	0	0	3	79	88	97	108	
60 to 80	5	0	10	1	88	92	88	107	
80 and more	4	3	3	7	204	209	217	235	

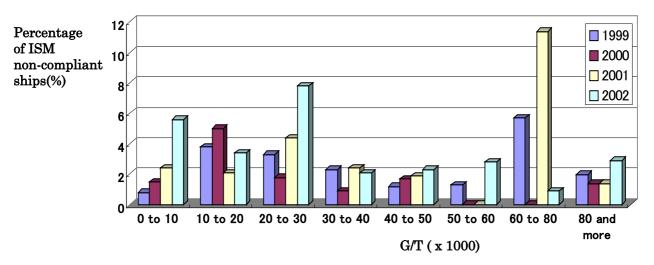


Fig.1.6.1 Percentage of ISM non-compliant NKSMC ships sorted by Gross Tonnage for over past four years (%)

* Percentage = A/B x 100 (%)

In 2002, the percentage of ISM non-compliant ships has increased with ships of 30,000 G/T and smaller; and most of them are "other cargo ships". Ships of 10,000G/T to 30,000G/T show high percentage every year.

1.7 Port States of ISM non-compliant ships

Number of ISM non-compliant ships sorted by Port States and six regional areas of the world are shown in Table 1.7.1 and 1.7.2, and Figure 1.7.2. In comparison with the previous year, the number greatly increased in Asia resulting in relative decrease in Europe. Number of ISM non-compliant ships sorted into Port States are as follows.

Tab.1.7.1 Number of ISM non-compliant ships sorted into six regional areas and their percentage.

Area	No. of ISM non- compliant ships	Percentage (A/B) (%)						
	(A)	2000	2001	2002				
Asia	88	32	33	43				
Europe	57	25	40	28				
Oceania	31	22	10	15				
North America	21	16	10	10				
South America	4	5	7	2				
Russia	3	0	0	2				
Total	204(B)	100	100	100				
		(%)	(%)	(%)				

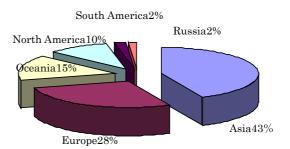


Fig.1.7.1 Percentage of ships sorted by area

Tab.1.7.2 Number of ISM non-compliant ships sorted in Port State (2002)

Country	No. of non-compliant
	Ships
Japan	38
Australia	31
Hong Kong	23
Netherlands	22
U.S.A	15
China	10
Portugal	8
Korea	7
Germany	7
Canada	6
Italy	5
U.K.	5
Singapore	5
India	4
France	3
Belgium	3
Russian	3
Argentina	2
Spain	2
Chile	2
Indonesia	1
Greece	1
Croatia	1
Malta	1

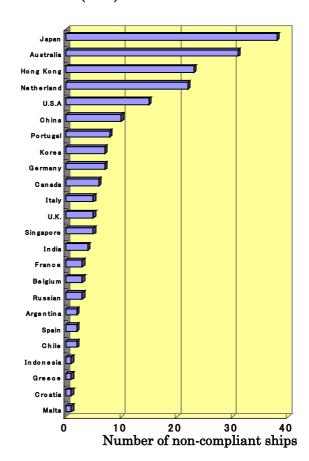


Fig.1.7.2 Number of ISM non-compliant ships sorted in Port States (2002)

Number of ISM non-compliant ships sorted by Port States for over four years are shown in Table 1.7.3 and Figure 1.7.3. Increasing tendency in number of ISM non-compliant ships is seen in Japan, Netherlands and China. Australia and U.S.A. are maintaining high level as before, and it has made a steep increase in Hong Kong where PSC had enhanced its inspection.

Tab.1.7.3 Number of ISM non-compliant ships sorted by Port State

		Number of ISM:		
Port State	1999	2000	2001	2002
Japan	4	6	14	38
Australia	21	15	8	31
Hong Kong	2	2	1	23
Netherlands	4	2	13	21
U.S.A.	13	6	8	15
China	2	4	2	10
Portugal	0	0	3	8
Germany	2	5	4	7
Korea	2	1	5	7
Canada	2	5	1	6
Singapore	2	2	2	5
U.K.	6	3	10	5
Italy	0	1	0	5
India	1	6	2	4
Russia	0	1	0	3
Belgium	0	1	2	3
France	0	1	1	3
Chile	0	0	4	2
Spain	0	1	1	2
Argentina	0	0	1	2
Malta	0	0	0	1
Croatia	0	0	0	1
Greece	0	0	1	1
Indonesia	0	0	0	1
Brazil	1	0	1	0
New Zealand	1	0	1	0
Turkey	0	0	1	0
Israel	3	2	0	0
Bangladesh	2	1	0	0
Ireland	0	1	0	0
Pier to Rico	0	1	0	0
Poland	0	1	0	0
Total	68	68	86	204

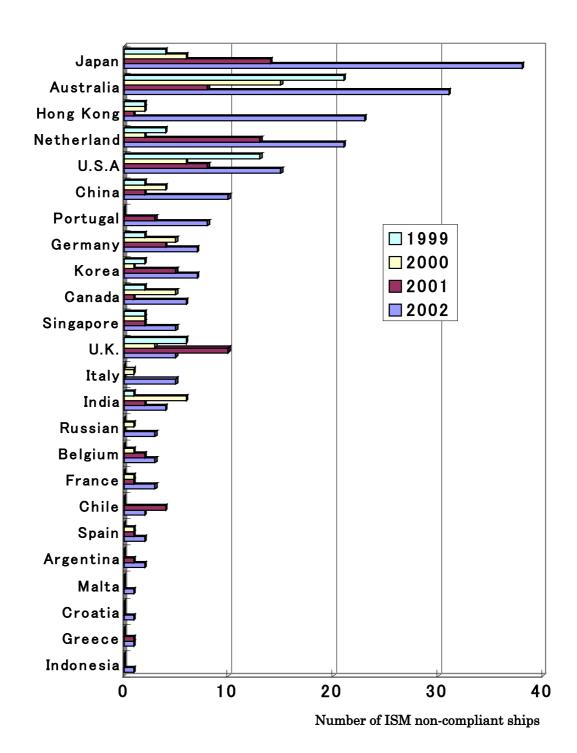


Fig. 1.7.3 Number of ISM non-compliant ships sorted by Port State (1999-2002)

Chapter 2 Analysis of deficiencies related to the ISM Code

2.1 ISM deficiencies classified by dominant cause

During 2002, the total number of ISM deficiencies reported for all 204 ISM non-compliant ships was 350 items as shown in Table 2.1.1. The average number of deficiencies per ship did increase in 2002 contrary to the decreasing trend until the previous year as shown in Fig. 2.1.1.

Tab.2.1.1 Number of ISM deficiencies of ISM non-compliant ships

Year	No. of deficiency	Ships (B)	Rate (A/B)
1999	118	68	1.74
2000	113	68	1.66
2001	132	86	1.53
2002	350	204	1.71

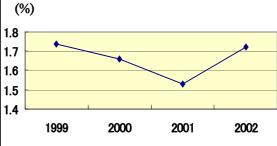
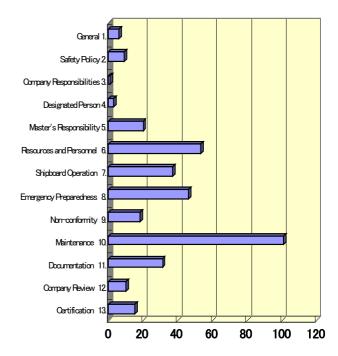


Fig. 2.1.1 Number of ISM deficiencies per ship

Number of ISM deficiencies in 2002 sorted by ISM Code sections are shown in Table 2.1.2 and Figure 2.1.2

Tab.2.1.2 Number of ISM deficiencies sorted by ISM Code section (2002)

ISM Code section	No of ISM deficiencies
1.General	5
2.Safety Policy	0
3.Company Responsibilities	1
4.Designated Person	0
5.Master's Responsibility	10
6.Resources and Personnel	16
7.Shipboard Operation	18
8.Emergency Preparedness	27
9.Non-conformity	4
10.Maintenance	28
11.Documentation	19
12.Company Review	2
13.Certification	2
Total	132



Number of ISM deficiencies

Fig. 2.1.2 Number of ISM deficiencies sorted by ISM Code section

2.2 Number of ISM deficiencies sorted by section of ISM Code for the past four years

Number of ISM deficiencies sorted by ISM Code section for the past four years is shown in the following Tables 2.2.1 and Figures 2.2.1.

Tab.2.2.1 Number of ISM deficiencies sorted by ISM Code section for the past four year	Tab.2.2.1	Number of ISM deficiencies sorted by	y ISM Code section for the past four ye	ars
--	-----------	--------------------------------------	---	-----

Vasu		ISM Code section												
Year	1	2	3	4	5	6	7	8	9	10	11	12	13	Total
1999	21	1	1	0	2	30	2	9	7	31	2	3	9	118
2000	5	0	3	3	5	11	7	17	7	34	7	4	10	113
2001	5	0	1	0	10	16	18	27	4	28	19	2	2	132
2002	6	9	1	3	20	53	37	46	18	101	31	10	15	350

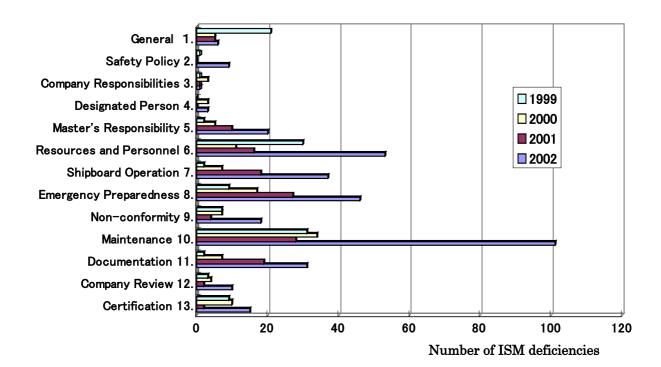


Fig.2.2.1 Number of ISM deficiencies sorted by ISM Code section for the past four years

In general, deficiencies relating to Section 5 "Master's Responsibility", Section 6 "Resources and Personnel", Section 7 "Shipboard Operation", Section 8 "Emergency Preparedness" and Section 11 "Documentation" have shown an increasing tendency year by year; while many deficiencies relating to Section 10 "Maintenance" have been pointed out every year, and this feature was conspicuous in 2002. During the PSC inspection the matters relating to maintenance of the ship and equipment are addressed with greatest care and their deficiencies are comparatively easy to find out. As the number of deficiencies pointed out increases, the company and ship shall be pointed out of their insufficient control over the maintenance system of SMS which has not been operating functionally.

2.3 Number of ISM deficiencies sorted by the States of PSC

Number of ISM deficiencies pointed out by respective port States is shown in Table 2.3.1 and Figure 2.3.1. A feature in 2002 is that the number of ISM deficiencies pointed out has increased in most of the States. A remarkable increases in number from 2001 to 2002 are noted in Japan(23 to 77), Hong Kong(2 to 59), Australia(16 to 37) and Netherlands(16 to 31). Considerable increase are seen in U.S.A., Portugal and China. Deficiencies relating to the software aspect of the ISM Code have been pointed out by PSC all over the world including Italy, Russia, Croatia, Indonesia and Malta.

Tab.2.3.1 Number of ISM deficiencies sorted by the State of PSC (1999-2002)

Port State	1999	2000	2001	2002
Japan	4	11	23	77
Hong Kong	8	5	2	59
Australia	28	24	16	37
Netherlands	7	4	16	31
U.S.A	24	8	13	25
Portugal	0	0	6	22
China	3	3	3	15
Germany	3	11	6	10
U.K.	17	5	17	9
Italy	0	2	0	9
Canada	2	8	1	8
Korea	5	1	7	7
Singapore	3	5	2	6
France	0	2	1	6
Russian	0	1	0	6
India	1	12	4	5
Belgium	0	1	4	5
Argentina	0	0	1	3
Croatia	0	0	0	3
Chile	0	0	4	2
Spain	0	3	1	2
Greece	0	0	2	1
Malta	0	0	0	1
Indonesia	0	0	0	1
Other	13	7	3	0
Total	118	113	132	350

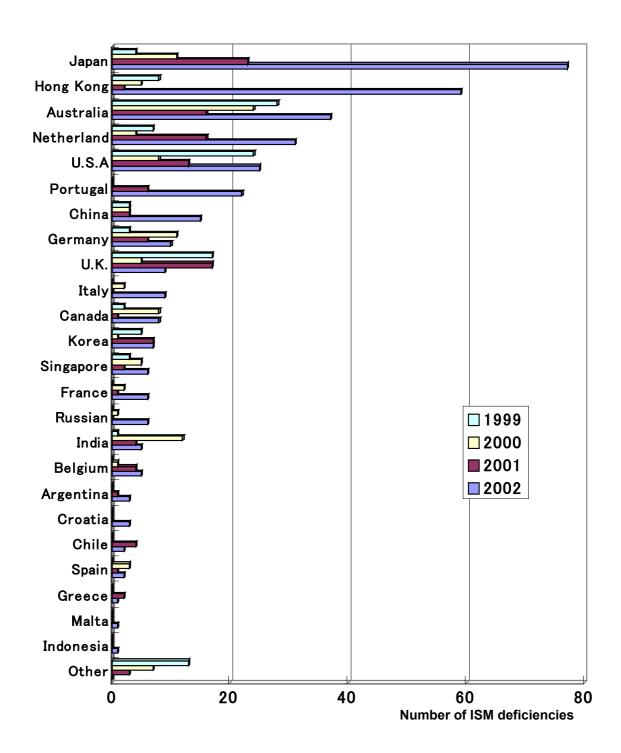


Fig. 2.3.1 Number of ISM deficiencies sorted by the State of PSC(1999-2002)

2.4 Particulars of deficiencies sorted by PSC

Number of ISM deficiencies sorted by the ISM Code sections, and number of pointing out that caused the detention of ship (Action Code 30) sorted also by the ISM Code sections in eight port States are shown in Table 2.4. These eight States are Japan, Hong Kong, Australia, Netherlands, U.S.A., Portugal, China, Germany which have pointed out greater number of ISM deficiencies than other States. Actual examples of statements of PSC pointing out deficiencies that caused the detention of ships are also shown under each State.

Tab. 2.4. No. of ISM deficiencies sorted by the ISM Code section each PSC

PSC							ISM	I Cod	le se	ction	L				
		1	2	3	4	5	6	7	8	9	10	11	12	13	Total
Japan	ISM Deficiencies	6	5			6	10	10	7	3	24	5		1	77
	Ship detained		1			5	2	1	0		3	1		1	14
Hong Kong	ISM Deficiencies		1			8	9	3	17	1	8	5	5	2	59
	Ship detained					5	2	1	11		6		2	1	28
Australia	ISM Deficiencies					2	2	4	4		23	1	1		37
	Ship detained										3				3
Netherlands	ISM Deficiencies						2	1	3	3	12	5	1	4	31
	Ship detained										4	1			5
U.S.A.	ISM Deficiencies		1			1	7	5	2	2	5		1	1	25
	Ship detained		1				2	2	1	2	1		1	1	11
Portugal	ISM Deficiencies		1		1	2	1	3	1	4	5	4			22
	Ship detained		1			2	1	1	1	2	3				11
China	ISM Deficiencies					1	4	5			1	2	1	1	15
	Ship detained					1	2					1			4
Germany	ISM Deficiencies		1			1	1	1			4		1	1	10
	Ship detained		1				1		1		3		1		7
Other	ISM Deficiencies	0	0	1	2	1	17	5	12	5	19	9	0	5	74
	Ship detained		0	0	0	0	5	1	2	2	7	0	0	2	19
Total	ISM Deficiencies	6	9	1	3	20	53	37	46	18	101	31	10	16	350
	Ship detained	0	4	0	0	13	15	6	16	6	30	3	4	5	102

* ISM Deficiencies: Number of ISM deficiencies

Ship detained: Pointed out by Action Code 30.

2.4.1 JAPAN

ISM Code section	1	2	3	4	5	6	7	8	9	10	11	12	13	Total
Ship detained		1			5	2	1	0		3	1		1	14
ISM Deficiencies	6	5			6	10	10	7	3	24	5		1	77

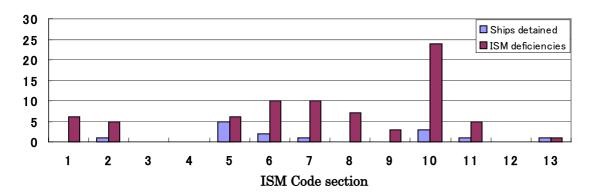


Fig. 2.4.1 ISM Deficiencies that caused ship's detention, sorted by ISM Code section

ISM Code	Action	
section	Code	Deficiencies
2	30	Safety and environmental policy of safe working equipment is not understood by the
		captain.
5	30	Master didn't recognize the regulations for inspection of Life saving apparatus.
5	30	Master's responsibility and authority not recognized completely.
5	30	Master's overriding authorities- not recognized completely.
5	30	Document which prescribed the authority of the master- not identify.
5	30	Master's responsibility and authority are not developed in the documents and not recognized by the master.
6	30	Resources and personnel -master and 2/0 were not aware of procedure for check chart and nautical publication.
6	30	Shipboard sanitary, heroin and alcohol control procedures in SMM are not implemented.
7	30	Cargo operation procedure in the Safety Management Manual is not implemented.
10	30	Maintenance at Cargo Holds- not carried out correctly.
10	30	Maintenance & Inspection - not carried out correctly.
10	30	1.Oily-water separator is not operated normally o
		2. Fire main on the captain deck holed.
		3.Sea water pipe in f'cle deck and wall plates of f'cle space at Fr.128 are holed.
11	30	Documentation- not maintained.
13	30	ISM certificates(Safety Management Certificate and copy of Document of Compliance) are not provided on board.

2.4.2 Hong Kong

ISM Code section	1	2	3	4	5	6	7	8	9	10	11	12	13	Tota I
Ship detained					5	2	1	11		6		2	1	28
ISM deficiencies		1			8	9	3	17	1	8	5	5	2	59

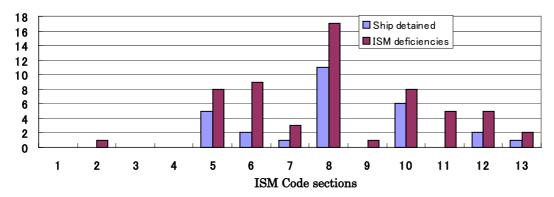


Fig. 2.4.2 ISM Deficiencies that caused a ship's detention, sorted by ISM Code section

ISM Code section	Action Code	Deficiencies
10	30	No maintenance plan (deck part) done since voyage 17.(8 Jan 02)
10	30	Maintenance not carried out according to SMS specified interval, e.g. M/E, A/E and critical equipment.
10	30	No records of maintenance on critical equipment such as Radar, Radio, EPIRB, Echo Sounder, Radar Transponder and other navigation equipment.
10	30	The company failed to ensure critical equipment to be maintained properly based on followings. 1)Port liferaft release gear, support frame seriously corroded. 2) Stbd lifeboat support bolts and nuts seriously wasted, seat plate damaged. Engine exhaust no lagging, lashing gear wasted. Others.
10	30	Maintenance programs is not available for inspection.
10	30	Maintenance for safety devices not done as per Company schedule.
12	30	No internal audit program for ship since 2000 and no record showing internal audit been carried out since 1 Feb. 2001.
12	30	There was no internal audit record on board, could not demonstrate that same had been conducted.
13	30	Safe management certificate; - Liberia registry showed as bulk carrier ship type but SMC indicated as general cargo ship type. -Difference address showed at DOC/SMC.
5	30	Master could not identify his duties & responsibility under ISM in particular his overriding power in emergency. Safety management manual also did not specify the Master's overriding power.

TONE		
ISM	Action	
Code	Code	Deficiencies
section		
5	30	1.No master's review. 2.Master do not have full overriding authority stated in the SMS.
5	30	No master review record on board.
5	30	Master review not done as per SMM (MK-03-01) dated 31 March 2001 (3 months interval)
5	30	Master could not demonstrated the master's overriding in SMS.
6		1.Chief Engineer's English limited could not conversant with Safety Management Manual and difficult to communicate with his staff who only understood English. 2.Many senior officers could not identify the Company responsible for the safe operation of the vessel. 3.Many senior officers could not identify the DP.
6	30	No proper familiarization for C/E
7	30	1.Bunkering process did not follow the procedure for Prevention of pollution from ship. (not all deck scuppers closed, etc.) 2.Garbage drums on poop deck (2pcs) not labeled. 3.Entries in Garbage Record Book not in completion. (Shore discharge not recorded all)
8	30	No programs for drills and exercises were established by the company.
8	30	Boat No.1 not lowered into water since 25 March 2002.
8	30	Emergency drill program & record/review is not established.
8	30	No evidence indicated that the planned emergency situation drills for May & June. "Grounding & Damages to Critical Machinery were carried out."
8	30	NO program for shipboard emergency exercise & drill according to SMS.
8	30	Emergency drill plan for identified emergency situation was not found onboard.
8	30	Programs for drill & exercises to prepare for emergency is not available.
8	30	Vital shipboard drills such as grounding, heavy weather etc not done as per Company plan.
8	30	1. There is not always evidence the SMS has provided for measures ensuring the ship can respond at any time to hazards, accidents and emergency situations. (O.E.) 1. Plan for the drill not completed (refer to clause #6, FLG drill plan not include) 2. STBD lifeboat not lowed into water for prolong period. 2. Identified drills main engine failure and electric power failure not carried out as per contingency plan.
8	30	Emergency drill programs not on board.
8	30	No plan had been established by Master as per procedure for identified shipboard drill.

2.4.3 Australia

ISM Code section	1	2	3	4	5	6	7	8	9	10	11	12	13	Tota I
Ship detained										3				3
ISM Deficiencies					2	2	4	4		23	1	1		37

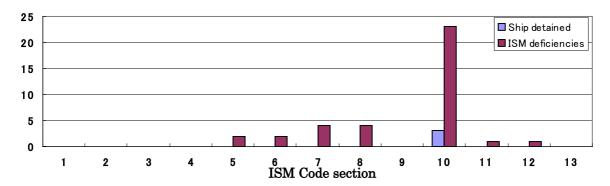


Fig. 2.4.3 ISM Deficiencies that caused a ship's detention, sorted by ISM Code section

ISM Code section	Action Code	Deficiencies
10	30	Failure of ISM system due to reported deficiencies.
10	30	Maintenance of the ship and equipment not functional.
10	30	ISM procedures not being followed for maintenance of ships equipment.

2.4.4 Netherlands

ISM Code section	1	2	3	4	5	6	7	8	9	10	11	12	13	Total
Ship detained										4	1			5
ISM deficiencies						2	1	3	3	12	5	1	4	31

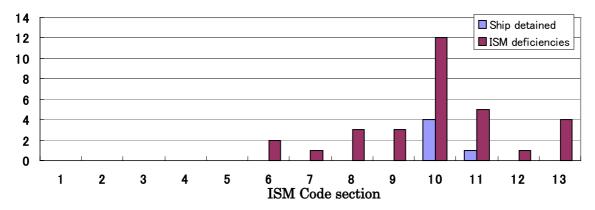


Fig. 2.4.4 ISM Deficiencies that caused a ship's detention, sorted by ISM Code section

ISM Code section	Action Code	Deficiencies
10	30	1. Maintenance of ship and equipment in general is lacking. For instance, only reference is made to; -Lifeboat falls have recently been renewed but no attention to sheave supporting plate. -Knowledge of collision regulation navigation bulbs were lacking maintenance. -Exercise PS & SB lifeboat launching into water & sailing was due,
10	30	but noting was planed at A port. 1.Major ISM non-conformity by lack of maintenance due to deficiencies (frames Hold 2 SB, Hold 1 PS, other affected frames, fire line)
10	30	Poor maintenance of ship and equipment.
10	30	Poor maintenance of ship and equipment.
11	30	Ship sailed with outdated charts/books for B. Sea to A-Port.

2.4.5 U.S.A.

ISM Code section	1	2	3	4	5	6	7	8	9	10	11	12	13	Total
ISM Deficiencies		1			1	7	5	2	2	5		1	1	25
Ship detained		1				2	2	1	2	1		1	1	11

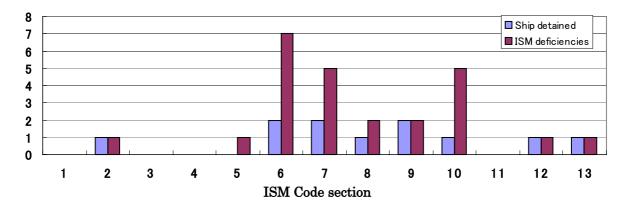


Fig. 2.4.5. ISM Deficiencies that caused a ship's detention, sorted by ISM Code section

ISM Code section	Action Code	Deficiencies
10	30	Vessel's crew is not following maintenance as outlined by the company for fire-fighting equipment. Although documentation. indicates maintenance has been performed the vessel's equipment does not function and is in overall poor condition.
12	30	Captioned Objective Evidence indicates that the company/vessel has failed to fully implement of the ISM Code.
13	30	Doubt validity of Certificate, several discrepancies noted.
2	30	Objective evidence exists that the company failed to fully implement the requirements of the ISM code and therefore external audit ordered.
6	30	Vessel crew failed to perform proper fire drill on four separate occasions. Both EEBDs are not ready for immediate use and not in operable condition. Vessels crew is not trained in the company procedure as detailed in onboard training manual.
6	30	The harbor pilot and U.S.C.G team had detected a strong order of alcohol on the Master's breath while the vessel was preparing for departure. Conduct stated external ISM audit by Flag State recognized classification Society to the satisfaction of the attending U.S. Coast Guard Marine Inspector prior to departure.
7	30	1.Current cargo, ulexite was declared with a density of 1.41. No test analysis was conducted as required by SOLAS prior to loading cargo with condition of class imposed on forward most cargo hold bulkhead. 2.A cargo of phosphate was loaded 30 Sep., 2002. A declaration of density was

ISM Code section	Action Code	Deficiencies
		not provided by the shipper as required by SOLAS.
		3.No company instruction could be provided addressing the restriction imposed with respect to loading dry bulk cargoes without meeting the requirement of SOLAS.
8	30	The Safety Management System is not being maintained onboard in accordance with SOLAS IX 74/78 and the ISM Code. Flag State or recognized organization to perform a full ISM Audit to verify the SMS is working properly. 2. Crew failed fire and abandon ship drills. General knowledge and competency of crew was poor. Crew did not report to situation or duties as required by the Master and Master was not properly taken. The closer of ventilation and watertight doors did not occur. Crew to perform satisfactory fire and abandon ship drill to the satisfaction of the USCG prior to departure.
9	30	The ship did not provide a non-conformity report to the Company regarding the lifeboat engines and seawater piping deficiencies on 18 and 19 July 2002 respectively, however these problems have not been addressed nor evidence that they will anytime in the near future.
9	30	No non-conformities written for doublers installed the week of 29 Sep and 02 Nov.

2.4.6 Portugal

ISM Code section	1	2	3	4	5	6	7	8	9	10	11	12	13	Total
Ship detained		1			2	1	1	1	2	3				11
ISM Deficiencies		1		1	2	1	3	1	4	5	4			22

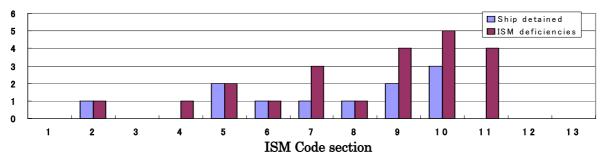


Fig. 2.4.6 ISM Deficiencies that caused a ship's detention, sorted by ISM Code section

ISM		
	Action	D. Catanatan
Code	Code	Deficiencies
section		
10	30	Maintenance of equipment/ship -Company not ensuring the inspections are held at appropriate interval.
10	30	1.Instruction for L.S.A. maintenance not defined as per SOLAS Reg.III/36 the same for the fire equipment under the maintenance
		routine of SMS. 2.Due to above deficiencies (language), the SMS on board to guarantee the maintenance of ship evidence a clear failure company ISM Code.
10	30	Maintenance of ship and equipment; Ship not maintained according relevant rules and regulation(2015/0330/1540/0669) ISM/S10.
2	30	Company not keeping the ship according mandatory rules and regulations as previous evidence and not according Company policy.
5	30	Master responsibility and authority-MNC.
5	30	Master could not present his authority and overriding authority.
6	30	Resources and personnel; Company not ensuring that the ships is manned with qualified and certificate seafarer and according safe manning ISM/S6.
7	30	Shipboard operationMNC.
8	30	Company contents in case of emergency are different from what is posted(EG, DPA)
9	30	Non-conformities reports system not working.(Last PSC deficiencies on 12 June,2002 not raised or not solved.)
9	30	1.Last PSC inspection defective 2550 not dealt with according SMS Manual and ISM requirements. 2.No non-conformities reports were raised in consequence of deficiencies found during last PSC inspection.

2.4.7 China

ISM Code section	1	2	3	4	5	6	7	8	9	10	11	12	13	Total
ISM Deficiencies					1	4	5			1	2	1	1	15
Ship detained					1	2					1			4

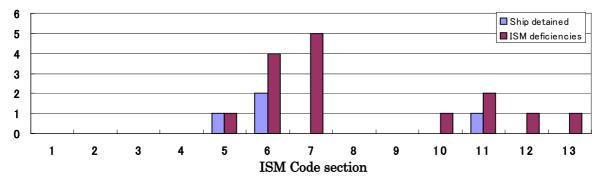


Fig. 2.4.7 ISM Deficiencies that caused a ship's detention, sorted by ISM Code section

ISM Code section	Action Code	Deficiencies
11	30	1.The operator name in DOC and SMC is different with it in SMS manual. 2.The agreement between owner and operator not available onboard.
5	30	 The ship's captain can not connected with the Designated Person. The ship's captain can not provide documented proof of his responsibilities and authority which must include his overriding authority. The ship's captain not familiar the company's SMS.
6	30	C/E can't read SMS documents.
6	30	Several officer not familiar with his duty in SMS.

2.4.8 Germany

ISM Code section	1	2	3	4	5	6	7	8	9	10	11	12	13	Total
ISM Deficiencies		1			1	1	1			4		1	1	10
Ship detained		1				1		1		3		1		7

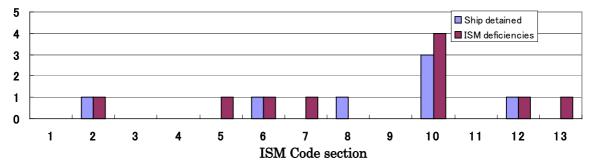


Fig. 2.4.8 ISM Deficiencies that caused a ship's detention, sorted by ISM Code section

ISM Code section	Action Code	Deficiencies
10	30	Maintenance of the ship and equipment. 1) Hull damage was reported to the Company but not reported to Class. 2) Cargo hold ventilators and fan houses- hole corrosion. 3) Outer stairs- hole corrosion. 4) Stern ramp securing support- wasted and broken off.
10	30	Maintenance of the ship and equipment.
10	30	Ext. audit focused ISM Ch.X.
12	30	External audit to be carried out referring to ISM Code S XII.
2	30	Ext. audit focused ISM Ch.II.
6	30	COC of master and not endorsed by Flag State.
8	30	Ext. audit focused ISM Ch.VIII.

Chapter 3. ISM deficiencies and Action Code

3.1 ISM deficiencies and Action Code

For all 350 ISM deficiency items the analyses were made to sort them by the ISM Code sections in the vertical column, and by the Action Code on the horizontal line, as shown in Table 3.1.1. 102 items (29% of all deficiency items) were related to detention of the ship (Action Code 30). This number was a double of the same of 2001 where it counted up to 50 detentions. 52 items (15%) were required correction of the defect before departure of the ship (Action Code 17), 136 items (39%) were required correction within 3 months (Action Code 18), and 22 items (6%) were required correction within 14 days (Action Code 16). The aggregate percentage of the above was 89% of the all deficiency items. Many items relating to Action Code 18 were pointed out about the functional defects of key element of the SMS, and the company was required to carry out the investigation and analysis of the root cause, and establish the measures to prevent recurrence.

Table 3.1.1 ISM deficiencies arranged by matrix of Action Code and ISM Code section

1able 3.1.1 15N	denci	encies	arran	geu by	maur.	IX OI F	COLOIL (Joue 8	iiiu ic	NI COC	te secu	011	
			Action Code 10 10 12 15 16 17 18 19 30 50 70 99										
ISM Code	No. of ISM	0	10	12	15	16	17	18	19	30	50	70	99
section	deficiencie	No	Rectified	All	NTtt	143	Before	3 month	Rectify	Detained	Flag	Class	Other
	8	action	Recuiled	rectified	Nextport	140ays	departure		MNC	Detained	informed	informed	
1.General	6						6						
2. Policy	9					1		3		4			1
3.Company	1						1						
4. DP	3	1						2					
5. Master	20						3	4		13			
6. Resources	53					5	9	18	1	15		1	4
7. Operation	37					2	10	17		6		1	1
8.Emergency	47					3	7	15	3	17			2
9. NC Report	18						2	8		6			2
10. Maintenance	101		1		2	2	3	55	3	30		3	2
11.Documentation	30					4	9	12		2	1		2
12. Review	10					1		2		4		1	2
13. Certification	16				1	4	2			5		1	2
Total(2002)	350	1	1	0	3	22	52	136	7	102	1	7	18
Total(2001)	132	3	5	0	3	14	22	22	2	50	2	4	5

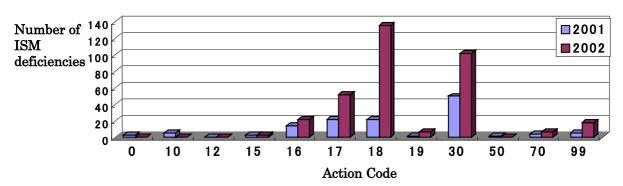


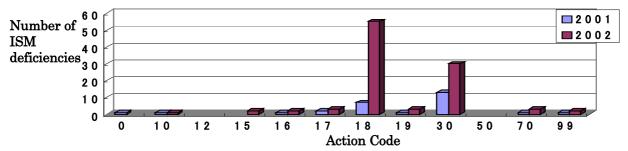
Fig. 3.1.1 Number of ISM deficiencies sorted by Action Code (2001,2002)

3.2 Action Code sorted by section of ISM Code

The patterns of Action Codes have been analyzed by the respective section of the ISM Code. Section numbers selected from the ISM Code are 10."Maintenance of the Ship and Equipment", 6."Resources and Personnel", 8." Emergency Preparedness", 7."Development of Plans for Shipboard Operations", 11."Documentation" and 5."Master's Responsibility and Authority".

3.2.1 ISM Code section 10 "Maintenance of the ship and equipment"

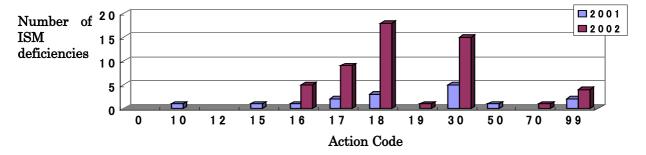
0														
Action Code		0	10	12	15	16	17	18	19	30	50	70	99	Total
Number of ISM	2001	1	1			1	2	7	1	13		1	1	28
deficiencies	2002		1		2	2	3	55	3	30		3	2	101



As a rule, when many deficiencies relating to the hard ware are pointed out, the ship is detained until the repair work and inspection is completed. In addition, a defect of the software aspect of maintenance function relating to SMS often cause a basis to require correction within 3 months, or to detain the ship. Most of the hardware related deficiencies are fire fighting equipment, life saving appliances, bilge separator and closing appliances.

3.2.2 ISM Code section 6 "Resources and personnel"

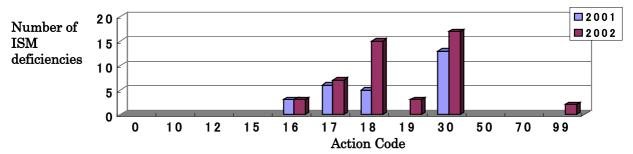
Action		0	10	12	15	16	17	18	19	30	50	70	99	Total
Code														
Number of ISM	2001		1		1	1	2	3		5	1		2	16
deficiencies	2002					5	9	18	1	15		1	4	53



The deficiencies relating to the training and qualification of new personnel are often pointed out. The deficiency of qualification relating to the STCW establishes the cause to detain the ship until it is corrected. Poor understanding of ship's personnel about SMS are often pointed out.

3.2.3 ISM Code section 8 "Emergency preparedness"

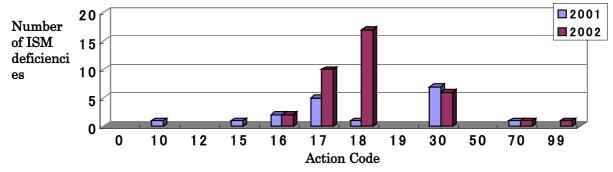
Action Code		0	10	12	15	16	17	18	19	30	50	70	99	Total
Number of ISM	2001					3	6	5		13				27
deficiencies	2002					3	7	15	3	17			2	47



Most of ship's detention are due to lack of drill program to respond to emergency situations such as fire and life saving, insufficient implementation of drill and lack of records. Also poor maintenance of equipment and machinery used to respond to emergency are pointed out. In the above cases, although the detention may be released if re-demonstration of drill is accepted, ship needs to repeat the familiarization drills. Company should pay attention on shipboard drills at change of crew members in order to prevent detention of the ship due to above reasons.

3.2.4 ISM Code section 7 "Development of plans for shipboard operation"

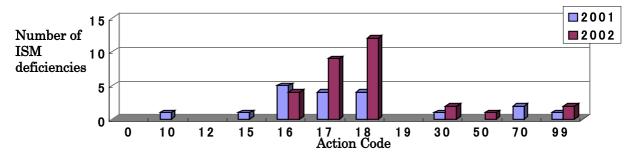
Action Code		0	10	12	15	16	17	18	19	30	50	70	99	Total
Number of ISM	2001		1		1	2	5	1		7		1		18
deficiencies	2002					2	10	17		6		1	1	37



Recently, the PSC inspections have been covering over wide range of shipboard operations including cargo handling, equipment operation, bunkering, waste disposal and preparation for sailing, etc., and lack of procedure, checklist and record are pointed out. Non-compliance with the procedure of SMS are also pointed out as deficiencies. Matters under ILO conventions such as provision of seafarers, accommodation and accident preventive measures are also considered as an object to check.

3.2.5 ISM Code section 11 "Documentation"

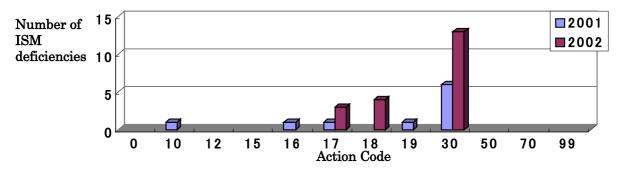
Action Code		0	10	12	15	16	17	18	19	30	50	70	99	Total
Number of ISM	2001		1		1	5	4	4		1		2	1	19
deficiencies	2002					4	9	12		2	1		2	30



Ships are seldom detained due to deficiencies of documentation. In most cases, ships are required to correct deficiency before departure, or within some period of time (14 days or 3 months). Sometimes it is not clear if the ship has just missed to prepare certain document, or it has failed to follow the prescribed procedures. Many cases of incorrect entry on certificates or amendment to documents have been pointed out.

3.2.6 ISM Code section 5 "Master's responsibility and authority"

Action Code		0	10	12	15	16	17	18	19	30	50	70	99	Total
Number of ISM	2001		1			1	1		1	6				10
deficiencies	2002						3	4		13				20



Ships have often been detained due to insufficient conversance of the master with SMS, failure to review the SMS by the master, failure of the master to explain his overriding authority or his responsibility and authority relating to SMS.

Chapter 4 Companies managing the ISM Non-compliant ships

With regard to those companies which are managing ships that have ISM non-compliant deficiencies, analysis was made regarding the number of ships under their management and duration of years of SMS operation (counting from the year when the company registered the ISM operation with ClassNK).

4.1 Management companies and number of ships

Table 4.1.1 shows the relation between the number of ISM non-compliant ships and number of ships under management sorted by eight different sizes of companies which have been grouped by the number of ships under their management. For a group which holds 1 to 5 ships, its detailed breakdown is shown. For each group the percentage of ISM non-compliant ships was calculated. As a result we can see a tendency that percentage goes down smaller as the size of company goes up larger, except 41—50 group. It seems that better quality of management is performed by larger size companies, perhaps by virtue of knowledge gained by feed-back information from large number of ships. The total number of 134 ISM non-compliant ships belong to 93 companies which hold DOC issued by NK. 27 companies had more than one ISM non-compliant ships, and the worst company had 5 ships.

Table 4.1.1 Number of ISM non-compliant ships and size of company

No. of managing	No. of Managing	No. of ISM non- compliant	NO. of NKSMC ships	Percentage (%)
ships	company	NKSMC ships (A)	(B)	(A/B)
1	78	9	78	11.5
2	51	10	102	9.8
3	48	9	144	6.3
4	44	13	176	7.4
5	35	9	175	5.1
1-5	262	50	675	7.49
6-10	77	24	590	4.1
11-15	37	21	468	4.5
16-20	15	10	255	3.9
21-30	17	7	425	1.6
31-40	7	3	247	1.2
41-50	5	15	222	6.8
51 over	3	4	193	2.1
Total	417	134	3075	4.4

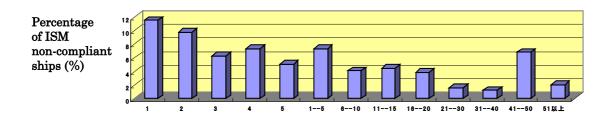


Fig. 4.1.1Percentage of ISM non-compliant ships sorted by size of companies (%)

4.2 Management company and years of ISM system operation

In Table 4.2.1 the calendar years are arranged vertically, and number of companies to which DOCs were issued by NK (NKDOC company) are listed corresponding to the year (when the company registered the ISM operation with ClassNK). For each year the number of ISM noncompliant ship and the number of ships managed by respective companies are listed, and percentage of ISM non-compliant ships was calculated. The number of companies registered with NKDOC had increased since 1994 and reached the greatest in 1997, then decreased until 2000, and again increased in 2001 and 2002. The percentage of ISM non-compliant ships shows a tendency that the older the registration of the company, the lower the percentage.

Table 4.2.1 Year of ISM Register of Companies and Non-compliant Ships

Year	No. of NKDOC company	No. of ISM non-compliant ships(A)	No. of NKSMC ships (B)	Percentage (%) A/B
1994	4	1	52	2.0
1995	29	17	603	2.8
1996	59	22	675	3.3
1997	107	37	739	5.0
1998	86	25	421	5.9
1999	24	5	163	3.1
2000	15	5	67	7.5
2001	37	7	148	4.7
2002	62	15	207	7.2
Total	423	134	3075	4.4

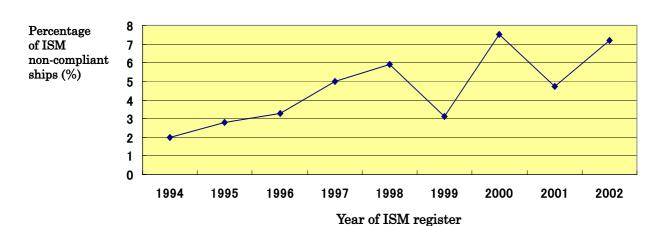


Fig. 4.2.1 Year of ISM Register of Companies and Percentage of ISM non-compliant ships

4.3 Nationalities of companies managing ISM non-compliant ships

Table 4.3.1 shows the list of nationalities to which the companies that are managing the ISM non-compliant ships have registered. For each nationality the percentage of ISM non-compliant ships was calculated against the total number of NKSMC ships. (Note: In the 2001 Annual Report this was calculated against NKDOC companies) The percentage of ISM non-compliant ships was high in Greece and Turkey as same as the previous year.

Table 4.3.1 Nationality of companies managing ISM non-compliant ships

Nationality	No. of NKDOC company	No. of NKDOC non-compliant ships (A)	No. of NKSMC ships (B)	Percentage (A/B) (%)	
Greece	39	18	168	10.7	
Turkey	23	11	105	10.5	
Taiwan	15	8	146	5.5	
Hong Kong	14	7	145	4.8	
Japan	221	70	1608	4.4	
Philippines	14	3	83	3.6	
Singapore	39	7	442	1.6	
Thailand	13	1	98	1.0	

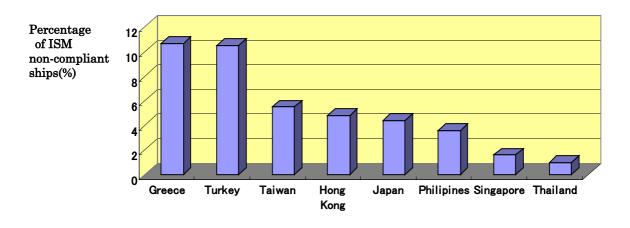


Fig. 4.3.1. Percentage of ISM non-compliant ships sorted by the Nationalities(%)

*This graph show only those nationalities which have 10 and more NKDOC companies.

Chapter 5 Analysis of ISM Non-compliant Ships based on Open Information

5.1 General

This Chapter shows the results of analyses on actions taken by various PSCs for ISM non-compliance, based on the data collected from open information revealed on the web sites of the Tokyo MOU, Paris MOU and USCG. The data includes those ships detained during the period of January to December 2002 collected from the Detention Lists. Therefore, the data of those ships which were pointed out the ISM non-compliance, but were not detained, are not included in this Chapter. On the other side, the data include those ships which were detained by a deficiency not related to the ISM Code. The number of ISM non-compliant ships and the number of ISM deficiencies pointed out in the above three areas during the year of 2002 amounted to: 174 ships and 244 items in Tokyo MOU; 422 ships and 693 items in Paris MOU; and 61 ships and 127 items in USCG. In comparison with the previous year the number of ships and number of deficiencies were almost twice as much in the Tokyo and Paris MOUs. From July 2002 when the mandatory requirements of the ISM Code came to apply to all types of ships, every PSC enhanced its inspection relating to the ISM Code.

Tab. 5.1 Number of ISM non-compliant ships and ISM deficiencies

Donlon	ISM no	n-complian	t ships	Number of ISM deficiencies			
Region	2000	2001	2002	2000	2001	2002	
Tokyo MOU	36	81	174	46	93	244	
Paris MOU	108	231	422	157	299	693	
USCG	20	37	61	37	128	127	

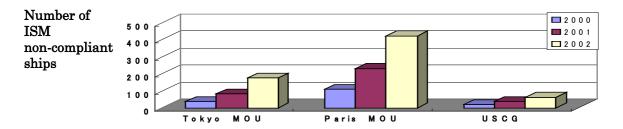


Fig. 5.1.1 Number of ISM non-compliant ships

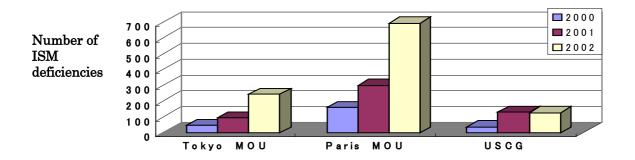


Fig. 5.1.2 Number of ISM deficiencies

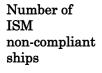
5.2 ISM non-compliant ships sorted by Flag States

Number of ISM non-compliant ships under various Flag States sorted by three areas are shown in Table 5.2.1 and Figure 5.2.1.

Tab.5.2.1 ISM non-compliant ships sorted by Flag States

	Tokyo MOU	Paris MOU	USCG	Total		
Panama	44	55	19	118		
Cambodia	26	20	1	47		
Cyprus	9	29	7	45		
Malta	2	38	5	45		
St. Vincent and the Grenadines	8	30	5	43		
Turkey	1	35	3	39		
Antigua and Barbuda	0	23	1	24		
Liberia	9	9	5	23		
Korea	21	1	0	22		
Russia	1	15	0	16		
Bahamas	2	10	3	15		

^{*}Name of Flag States shaded are those states listed on Paris MOU 2000-2002 Black List.



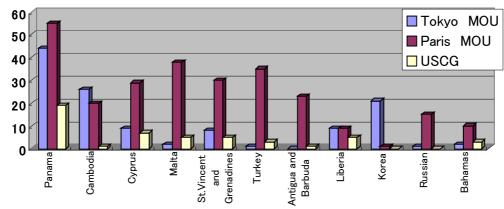


Fig.5.2.1 ISM non-compliant ships sorted by Flag States

*The above Table and Figure show only those Flag States which have 15 and more of ISM non-compliant ships.

5.3 ISM Non-compliant Ships sorted by Port State

The number of PSC which took action of ISM non-compliant ships were 57 States in Paris MOU, and 10 States in Tokyo MOU. The number of ISM non-compliant ships taken action in five regional areas are shown in Table 5.3.1 and Figure 5.3.1.

Tab.5.3.1 ISM non-compliant Ships sorted by Port State

Regions	ISM non-compliant ships	Percentage (%)
Europe	343	55
Asia	141	22
North America	101	16
Russian	33	5
Oceania	14	2

Russia 5% Oceania 2%

North America 16%

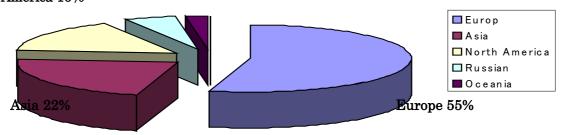


Fig.5.3.1 Percentage of ISM non-compliant ship sorted by PSC areas(%)

ISM non-compliant ships sorted by each State of PSC is shown in Fig. 5.3.2

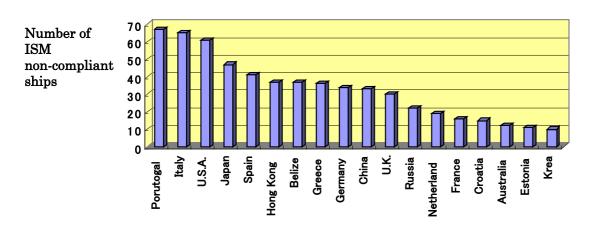


Fig.5.3.2 ISM non-compliant ships sorted by State of PSC

*The above figure shows only those States of PSC which have 10 and more ISM non-compliant ships.

5.4 ISM deficiencies sorted by ISM Code section

Table 5.4.1 shows the number of ISM deficiencies (deficient items) pointed out by PSC in Tokyo MOU, Paris MOU and USCG sorted by sections of the ISM Code.

Tab.5.4.1 ISM deficiencies sorted by PSC areas and ISM Code section

TOM O 1 (* N	Tokyo		Paris			USCG			
ISM Code section No.	2000	2001	2002	2000	2001	2002	2000	2001	2002
General 1.	1	0	0	2	0	0	0	0	1
Safety Policy 2.	0	1	9	5	4	9	0	8	14
Company Responsibilities 3.	1	0	7	5	8	14	0	5	14
Designated Person 4.	2	0	8	3	4	32	0	0	0
Master's Responsibility 5.	3	4	43	5	7	31	4	18	12
Resources and Personnel 6.	4	6	37	10	27	49	10	12	10
Shipboard Operation 7.	0	46	13	13	46	78	0	12	7
Emergency Preparedness 8.	3	16	30	16	86	92	2	5	15
Non-conformity 9.	1	3	7	4	9	20	8	20	11
Maintenance 10.	15	6	37	55	54	183	8	36	27
Documentation 11.	3	6	23	15	35	95	3	7	9
Company Review 12.	2	0	4	1	1	12	2	4	4
Certification 13.	5	5	26	23	18	82	0	1	3

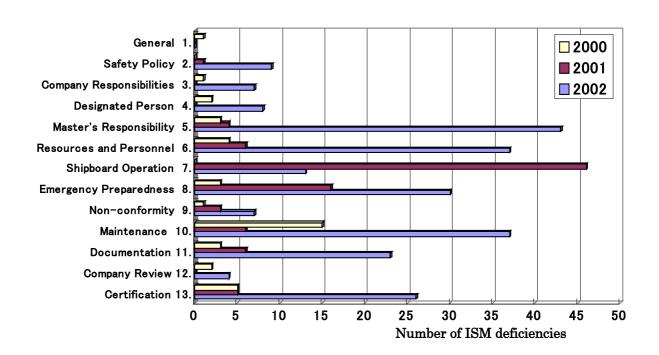


Fig.5.4.1 Tokyo MOU Number of ISM deficiencies sorted by ISM Code section (2000- 2002)

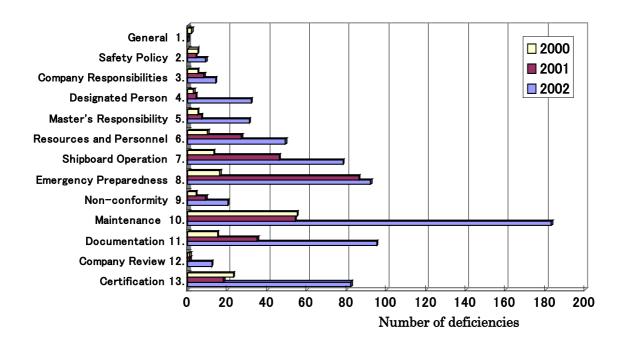


Fig.5.4.2 Paris MOU Number of ISM deficiencies sorted by ISM Code section (2000-2002)

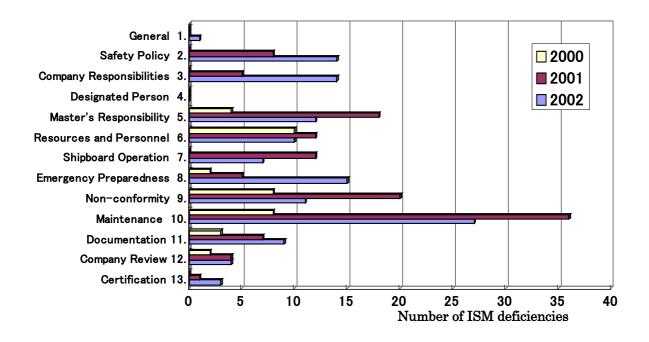


Fig.5.4.3 USCG Number of ISM deficiencies sorted by ISM Code section (2000 - 2002)

The tendency of pointing out the ISM deficiencies by PSCs of three areas has been analyzed and summarized in percentage to correspond to each section of the ISM Code as shown in Table 5.4.2 and Figure 5.4.5.

Tab. 5.4.2 Percentage of ISM deficiencies sorted by ISM Code sections (%)

ISM Code section	Tokyo MOU	Paris MOU	USCG
General 1.	0	0	1
Safety Policy 2.	4	1	11
Company Responsibilities 3.	3	2	11
Designated Person 4.	3	5	0
Master's Responsibility 5.	18	4	9
Resources and Personnel 6.	15	7	8
Shipboard Operation 7.	5	11	6
Emergency Preparedness 8.	12	13	12
Non-conformity 9.	3	3	9
Maintenance 10.	15	26	21
Documentation 11.	9	14	7
Company Review 12.	2	2	3
Certification 13.	11	12	2

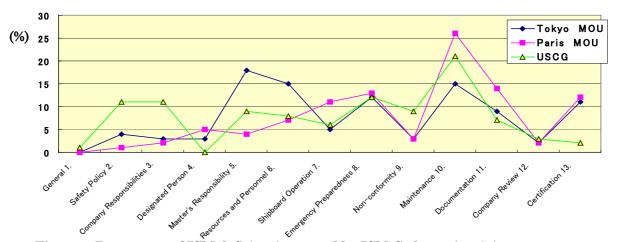


Fig.5.4.4 Percentage of ISM deficiencies sorted by ISM Code section (%)

In the area of Tokyo MOU, many deficiencies have been pointed out relating to the ISM Code section 5. "Master's Responsibility and Authority" and section 6. "Resources and Personnel". Many statements of pointing out have reported that the master and officers were not conversant with their duties specified in the SMS. In the area of Paris MOU, deficiencies relating to section 10. "Maintenance of the Ship and Equipment" were pointed out at higher rate as was in the previous year. Deficiencies relating to section 11. "Documentation" and section 7. "Development of Plans for Shipboard Operations" were pointed out many more than other areas. The pointing out relating to section 13." Certification and Periodical Verification" was also made as many as in Tokyo MOU. Paris MOU and Tokyo MOU are carrying out an enhanced campaign for strict implementation of the ISM Code for a period of 3 months from July 2003. In the area of USCG a specific feature is seen in pointing out deficiencies relating to section 2. "Safety and Environmental Protection Policy" and section 3. "Company Responsibility and Authority". These were remarks to point out an insufficient functioning of SMS and that the companies have not been fulfilling their responsibilities to support their ships. Another notable remarks were made relating to section 9. "Reports and Analysis of Nonconformities, Accidents and Hazardous Occurrences" in which the USCG pointed out the default of the company and ship to remedy the deficiencies or failures occurred or found in the PSC inspection, in accordance with the prescribed procedures.

Conclusions

This report is the 4th "Annual Report on Port State Control regarding the ISM Code" issued by ClassNK. During the early stage after the ISM Code came into effect, there were not so many ships detained due to ISM deficiencies since PSCOs were not familiar with the essence of the ISM Code. But year by year the number of ships detained has increased due to ISM deficiencies pointed out by PSCOs with reasons getting the heart of the ISM Code. The activities of PSC relating to the ISM Code was specially enhanced in 2002 after mandatory requirements of the ISM Code came to apply to all types of ships of 500 GT and more engaged on the international voyages.

In the recent years the information technology has extensively been adopted by the maritime industry, and it has become easy for everybody to obtain various data of ships by having internet access to EQUASIS (http://www.equasis.org). The ships detention information by PSC is also open on EQUASIS, and as such, a tendency to make information transparent is progressing. Once a ship is detained the ship is apt to be chased as a target. By virtue of advanced information technology, the substandard ships are identified easily. In the area of Paris MOU, if those ships entered in the Black List are detained several times during a certain period of time, they will not be permitted to enter in ports of the Paris MOU. As the relation between the ship and company became clear in virtue of the ISM Code, identification of the company which manages the substandard ship has become easy. A company which is managing a substandard ship shall be identified as a substandard company. Once identified as a substandard company it shall bear a heavy burden in its business activities.

The classification societies are the key members to constitute the "safety ring", and are striving to ensure safety of ships by fulfilling their duties. One example is presented hereunder. IACS established last year a procedural requirement PR-17 "Reporting Procedure of Possible Failure of SMS" and set forth to implement the activity by all member societies. During the shipboard ISM audit, when any deficiency is found on the hull or equipment, it is pointed out as a non-conformity and the ship and company are required to take corrective action and to improve their SMS. However, as the shipboard audit takes place only 2 times in 5 years, the classification society which issued SMC to the ship is unable to see the actual operational condition of SMS on board for long period of time, even for 3 years at maximum. In order to supplement the foregoing situation, IACS decided to avail of the annual class survey also to verify indirectly the overall condition of ship's SMS. In short, the classification societies have established an annual verification system by reporting a possible failure of the SMS if a surveyor finds any doubt during an annual class survey.

The final responsibility for safety and environmental protection rests on the ship operator (ship's personnel and ship management company). The responsibility of the Company is not concluded only by establishing and implementing the SMS. The company is required to conduct regular review of the SMS and to improve it continuously. In the next year the International Code for the Security of Ships and of Port Facilities (ISPS Code) will come in effect and the company and ships shall be required to establish the Ship Security Plan and implement it. Thus, the rolls and responsibility of the company shall be increased and strenuous efforts of all personnel concerned are hoped for.

Key Contacts

Head office Information Center Safety Management Systems Department

Nippon Kaiji Kyokai 1-8-5 Ohnodai, Midori-ku, Chiba 267-0056 Tel:+81-43-294-5999 Fax:+81-43-294-7206

E-mail: smd@classnk.or.jp

Regional Offices

South Asia and Oceania Singapore Office

Nippon Kaiji Kyokai 101, Cecil Street, #21-01 Tong Eng Building, Singapore, 069533

Tel: +65-62223133, Fax: +65-62255942 E-mail: sp@classnk.or.jp

Middle East, East Mediterranean and Black Sea

Piraeus Office
Nippon Kajij K

Nippon Kaiji Kyokai 39-41 Akti Posidonos, Moschato 183 44, Piraeus, Greece Tel: +30-1-09420020,

Fax: +30-1-09420079 E-mail: pr@classnk.or.jp **Europe and Africa London Office**

Nippon Kaiji Kyokai 6th Floor, Finsbury Circus House, 12-15 Finsbury Circus, London, EC2M 7EB, United Kingdom

Tel: +44-20-7621-0963, Fax: +44-20-7626-0383 E-mail: ln@classnk.or.jp

The Americas
New York office

Nippon Kaiji Kyokai One Parker Plaza, 11th Floor 400 Kelby Street, Fort Lee, N.J. 07024, U.S.A.

Tel: +1-201-944-8021, Fax: +1-201-944-8183 E-mail: ny@classnk.or.jp



NIPPON KAIJI KYOKAI

For more information on this publication, please contact the Safety Management Systems Department 1-8-5, Ohnodai, Midori-ku, Chiba 267-0056, Japan

TEL: +81-43-294-5999 FAX: +81-43-294-7206 e-mail: smd@classnk.or.jp http://www.classnk.or.jp