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WORLD MARITIME UNIVERSITY

Malmö, Sweden

THE ENHANCED ENFORCEMENT OF IMO CONVENTIONS BY THE VIETNAM REGISTER

By

TRAN ANH DUONG

Vietnam

A dissertation submitted to the World Maritime University in partial fulfilment of the requirements for the award of the degree of

MASTER OF SCIENCE

in

MARITIME SAFETY AND ENVIRONMENT PROTECTION

2000

THE DECLARATION

I certify at the material in this dissertation that is not my own work has been identified, and that no materials is included for which a degree has previously been conferred on me.

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DEDICATION

I dedicate this paper to my dear father and mother

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ABSTRACT

Title of dissertation: The enhanced enforcement of IMO conventions by the Vietnam Register.

Degree: MSc

In line with the IMO's policy of shifting to the flag State implementation, the paper is a study of statutory activities of the Vietnam Register, analysing the internal and external business environment of the organisation; its objective is to address measures for improving the performance of statutory surveys and certification of VR. A brief overview is taken of the present functioning of the Vietnam Maritime Administration in order to examine the jurisdiction of VR pertaining to the enforcement of the IMO conventions ratified by the government for Vietnamese flag ships.

All aspects of the infrastructure of VR concerning statutory matters are investigated to indicate the recent status of the internal business environment of the organisation. Additionally, the external business environment of VR is investigated through status of the Vietnamese mercantile fleet and the Vietnamese ship building and repairing industry, the activities of the port State control in the Asia-Pacific region and the IMO instruments on flag State implementation.

The features of the business environment are collated and evaluated for indicating the strengths and weaknesses as well as opportunities and threats of VR and, furthermore, pointing out the strategic issues to be dealt with.

The concluding chapter proposes the measures for solving the difficulties under each issue with the purpose of enhancement of the capacity of VR to perform statutory tasks.

KEYWORDS: maritime administration, maritime safety administration, statutory survey, certification, classification societies.

TABLE OF CONTENTS

Decl	iii			
Ack	nowle	edger	nents	iv
Abs	tract			v
Tab	le of (Cont	ents	vii
List	of Ta	ables		xiii
List	of Fig	gures	S	xv
List	of Al	brev	viations	xvi
1.	Intr	oduc	etion	1
	1.1	Inti	roduction	1
	1.2	Ob	jectives of the dissertation	2
	1.3	Me	thodology	2
	1.4	Ou	tline of the work	3
2.	Viet	tnam	Maritime Administration	4
	2.1	Gei	neral	4
		.1	Vietnamese merchant fleet	4
		.2	Shipyards in Vietnam	4
		.3	Seaports	5
		.4	Sea-going personnel and maritime training	5
		.5	Other related business	5
	2.2	Vie	etnam Maritime Administration	6
		.1	Vietnam maritime legislation	6

		.1.1	The V	ietnam Maritime Code	6
		.1.2	Subsid	liary legislation	6
		.1.3	Interna	ational conventions	7
		.2	The or	ganisation	7
		.2.1	Vietna	m National Maritime Bureau	8
		.2.2	Vietna	m Register	8
		.3	Analys	sing the delivery tasks of VMA	9
		.3.1	Adviso	ory functions	9
		.3.2	Admir	nistrative functions	10
		.3.3	Develo	opmental and promotional functions	11
		.3.4	Regula	atory functions	12
			.1	General superintendence and co-ordination	13
			.2 I	Registration of ships	14
			.3	Surveys, inspections and certification of ships;	
]	Ensuring the safety of fishing vessels and other small	
			(eraft	15
			.4 1	Examination and certification of seafarers; Manning	
			(of ships; Crew matters	16
			.5	Conducting inquiries or investigations into shipping	
			(casualties	17
			.6 I	Dealing with matters pertaining to prevention,	
			(control and combating of marine pollution	17
			.7 I	Dealing with matters relating to maritime search and	
			1	rescue; Dealing with the removal of wrecks	18
	2.3	Conc	lusion		18
3.	Enfo	orcem	ent of I	MO Conventions - The Recent Situation	19
	3.1	Rule	s and re	gulations	19
	3.2	Orga	nisatior	n for exercising statutory duties	19
	3.3	Perso	onnel		21

	3.4	Viet	nam Register quality management system	22
	3.5	Con	trol procedures for organising the statutory activities	23
		.1	Procedure for statutory surveys	23
		.2	Procedure for verifying a Safety Management System	24
		.3	Procedure for plan approval	25
		.4	Procedure for issuing full-term statutory certificates	26
		.5	Procedure for reviewing and evaluating survey documents	26
		.6	Procedure for statutory surveys on behalf of other	
			classification societies	27
		.7	Procedure for dealing with PSC matters	28
		.8	Procedure for establishment, revision and provision of the	
			Guidelines for surveyor	29
		.9	Procedure for establishment, revision and provision of the	
			certificate and survey report forms	29
		.10	Procedure for compilation and notification of the ship	
			status	30
		.11	Procedure for marine casualty investigation	30
		.12	Procedure for recognition and delegation of authority to	
			foreign classification societies	32
	3.6	Dele	egation of statutory survey and certifications	32
	3.7	The	performance of VR in recent years	34
4.	Exte	ernal l	Business Environment Analysis	36
	4.1	The	Vietnamese mercantile fleet	36
		.1	The diversity of the fleet	36
		.2	The technical condition of the fleet	37
		.3	The changing of the fleet in recent years and its expanded	
			direction	39
	4.2	The	Vietnamese shipowners	41
	4.3	The	Vietnamese ship building and repairing industry	43

		.1	The Vietnamese ship building yards	43
		.2	The Vietnamese ship repairing yards	45
		.3	The development directions of the Vietnamese ship	
			building and repairing industry	46
	4.4	The	activities of Port State Control in the Asia-Pacific region	47
		.1	Tokyo Memorandum of Understanding on Port State	
			Control	47
		.2	The detention of Vietnamese flag ships in the Asia-Pacific	
			region	48
	4.5	The	IMO instrument on flag State implementation	50
		.1	The IMO's sub-committee on flag State implementation	50
		.2	Guidelines for the authorisation of organisations acting on	
			behalf of the administration	51
		.3	Model agreement for the authorisation of recognised	
			organisations acting on behalf of the administration	53
		.4	Specifications on the survey and certification functions of	
			recognised organisations acting on behalf of the	
			administration	54
		.5	Guidelines to assist flag States in the implementation of	
			IMO instruments	54
		.6	Self-assessment of flag State performance	54
5.	SW	OT Aı	nalysis and Issues	56
	5.1	SWC	OT analysis	56
		.1	Strengths	56
		.1.1	Management system	56
		.1.2	Rules and regulations	58
		.1.3	Organisation and personnel	59
		.1.4	Relationship with the maritime industry	60
		.2	Weaknesses	61

		.2.1	Management system	61
		.2.2	Laboratory facilities, tools and equipment	62
		.2.3	Personnel	63
		.3	Opportunities	63
		.3.1	The successfully launched QMS	63
		.3.2	The improvement of the Vietnamese maritime industry	64
		.3.3	The international recognition of VR	65
		.4	Threats	66
		.4.1	The technical condition of the Vietnamese fleet	66
		.4.2	The characteristics of the Vietnamese shipowners	66
		.4.3	The developmental trend of the Vietnamese maritime	
			industry	67
	5.2	Issue	es	67
6.	Prop	osals	for Measures	68
	6.1	Hand	dling of IMO matters	68
		.1	Revision of control procedures	68
		.2	Participating in IMO activities	68
	6.2	Enha	ancement of the qualification of VR surveyors	69
	6.3	Enha	ancement of the test and research capacity	70
	6.4	Info	rmation to the Vietnamese shipowners	71
Ref	erence	'S		i
App	endic	es		iv
App	endix	I		
	Chap	oters o	of the Vietnam Maritime Code	v
App	endix	II		
	The	organi	isation chart of VINAMARINE	vi
App	endix	III		
	The	organi	isation chart of VR	vii

Appendix IV	
VR rules and regulations vi	ii
Appendix V	
VR main branch offices	X
Appendix VI	
Agreement governing the delegation of statutory certification services	
for vessels registered in Finland between the Finnish Maritime	
Administration and Lloyd's Register of Shipping	ιi

LIST OF TABLES

Table 1	
VR staff trained abroad	21
Table 2	
VR performance from 1997 to 1999	35
Table 3	
The particulars of the Vietnamese mercantile fleet	36
Table 4	
The average figures of the Vietnamese mercantile fleet	37
Table 5	
The matrix age of the Vietnamese mercantile fleet	38
Table 6	
The Vietnamese mercantile fleet by types and main SOLAS sizes	38
Table 7	
The average age of the Vietnamese mercantile fleet by types and main	
SOLAS sizes	39
Table 8	
Vietnamese flag ships purchased form foreign countries in recent years	
	40
Table 9	
Expanded plan for the Vietnamese mercantile fleet	40

Table 10	
The categories of the Vietnamese shipowners	41
Table 11	
The major Vietnamese shipowners and their fleets	42
Table 12	
The major Vietnamese coastal-ship owners and their fleets	42
Table 13	
The Vietnamese mercantile fleet by ship types, deadweight and place	
of built	43
Table 14	
The Vietnamese ships detained by Tokyo MOU members	48
Table 15	
Deficiencies by categories for detained ships in 1996, 1997, 1998 and	
1999	49

LIST OF FIGURES

Figure 1	
The Vietnam Maritime Administration	7
Figure 2	
The pyramid of OMS documentation of VR	57

LIST OF ABBREVIATIONS

ABS American Bureau of Shipping

BV Bureau Veritas

BVQI Bureau Veritas Quality International

CID Sea-going Ship Classification Department

CMI Comite' Maritime International

COLREG 72 Convention on the International Regulations for Preventing

Collisions at Sea, 1972

DNV Det Norske Veritas

DWT Deadweight (metric ton)

FSI Sub-committee on Flag State Implementation

GL Germanischer Lloyd

GT Gross tonnage

IACS International Association of Classification Societies

ILO International Labour Organisation

IMO International Maritime Organisation

InD Industrial Department

INMARSAT 76 Convention on the International Maritime Satellite Organisation

(INMARSAT) and Operating Agreement, 1976

IrD International Relationship and Development Department

IsD International Safety Management Department

ISM Code International Safety Management Code

ISO International Organisation for Standardisation

Load Lines 66 International Convention on Load Lines, 1966

LR Lloyd's Register of Shipping

M.C.O Maximum continuous output (HP)

MARPOL 73/78 International Convention for the Prevention of Pollution from

Ships, 1973, as modified by the Protocol 1978 relating thereto

MEPC Maritime Environment Protection Committee

MOT Ministry of Transport

MOU Memorandum of Understanding

MSC Maritime Safety Committee

NK Nippon Kaiji Kyokai

OfD Offshore Department

PSC Port State Control

QMS Quality Management System

RuD Rule Department

SOLAS 74/78 International Convention for the Safety of Life at Sea, 1974, as

amended by the Protocol 1978 relating thereto

STCW International Convention on Standards of Training, Certification

and Watchkeeping for Seafarers, 1978, as amended

SWOT Strengths, Weaknesses, Opportunities and Threats analysis

TCVN Vietnam National Standard

Tonnage 69 International Convention on Tonnage Measurement of Ships, 1969

UNDP United Nations Conference on Trade and Development

VINAMARINE Vietnam National Maritime Bureau

VINASHIN Vietnam Shipbuilding Industry Corporation

VMA Vietnam Maritime Administration

VR Vietnam Register

WMU World Maritime University

CHAPTER I

Introduction

1.1 Introduction

It is the responsibility of the Vietnam Register (VR) to establish and maintain measures for the effective application and enforcement of most provisions of the IMO instruments ratified by the Vietnamese Government to the ships, which are entitled to fly the Vietnamese flag. These instruments consist of:

- the International Convention for the Safety of Life at Sea, 1974, as amended by the Protocol 1978 relating thereto, as amended;
- the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol 1978 relating thereto, as amended (Annex I and Annex II);
- the International Convention on Load Lines, 1966;
- the Convention on the International Regulations for Preventing Collisions at Sea, 1972, as amended; and
- the International Convention on Tonnage Measurement of Ships, 1969.

Established in 1964, VR has gained much experience and become an important part of the Vietnam Maritime Administration (VMA). However, in line with the development of the maritime industry in Vietnam and the region, there is a need to improve the mechanics of organisation in order to ensure the quality of services and catch up with the demand of the business environment.

1.2 Objectives of the paper

In order to get a real picture of VMA and the Vietnamese shipping industry, the author will examine the major aspects of the functional basis of VMA and the data from the past, present and the plan for the near future development of the Vietnamese shipping industry. These resources are analysed with regard to:

- identifying VMA;
- examining the recent status of the enforcement of IMO technical conventions in Vietnam;
- analysing the internal and external business environment of VR;
- indicating the factors, which need to be improved in order to achieve more effective outputs; and
- proposing measures for achieve the above objectives.

1.3 Methodology

The author's knowledge gained in the two years of study at WMU and experiences gained during working time in VR are mainly used in this study. By interviewing WMU resident/visiting lecturers and professors, students from other courses, as well as maritime administration authorities during field studies, the author concentrated on the actual implementation of VR. Besides that, the study also analyses the actual activities of the Vietnamese shipping industry.

In addition, information was obtained from relevant technical issues collected in WMU field studies, insights from relevant visiting professors and WMU's lecturers and WMU library information, which includes published periodicals, and books. Information was also obtained from the Vietnam Register Book of Ships, reports, technical papers, magazines and bulletins of VR, VINAMARINE and other governmental agencies concerned in Vietnam, which the author collected during the mid-term vacation in 1999.

Other daily information, gained through the internet, plays an important part for the up date of the study, especially the statistics of ships detained by Port State control in Asian-Pacific countries.

1.4 Outline of the work

This paper is a one-volume work divided into six chapters. As will be seen, the first chapter concentrates on the general layout of the dissertation.

The second chapter is concerned with the clarification of the structure and authorised functions of VMA. In order to achieve the objective, the author will first give a brief recent picture of the maritime industry in Vietnam and analyse the legal instruments to which VMA is established in line with the form of a Maritime Administration pointed out by former-resident Professor P. S. Vanchiswar at WMU in the "Establishment/Administration of maritime matters with particular reference to developing countries".

The third and fourth chapters will deal with:

- the recent status of the enforcement of IMO technical conventions by VR;
- the recent situation and the near future development plan of the Vietnamese fleet and its owners and of the Vietnamese shipbuilding and ship repairing industry;
- the activity of the Port State control in Asian-Pacific countries and its influences to the Vietnamese flag ships; and
- the IMO instruments relating to the implementation of the flag State.

From the discussion throughout the four chapters above, the fifth chapter provides an analysis and a conclusion regarding the weaknesses and strengths of VR in delivering the tasks of a Maritime Administration, the negative and positive influences of the external business environment to the performance of VR. The sixth chapter presents recommendations for VR to overcome the difficulties, fulfil its maritime administration responsibilities, and to achieve the organisation's mission in the coming time.

CHAPTER II

Vietnam Maritime Administration

2.1 General

Situated in the eastern part of the Indochina peninsula, surrounded on the east, the south and the southwest by the Gulf of Tonking, the East Sea and the Gulf of Thailand, Vietnam has a long coast line measuring up to 3,444 kilometres, excluding the islands (The World Factbook 1993, p. 412), and one million square kilometres of judicial waters. Since the beginning, the sea and maritime transport has had a very important role in the economy of the country.

2.1.1 Vietnamese merchant fleet

The Vietnamese merchant fleet comprised 840 ships at the end of 1999 with a total deadweight of 1,636,869 tons. Vietnamese ships have been sailing on 30 international sea routes and have visited over 100 international seaports around the world. With regard to carriage of cargo, the Vietnamese fleet has carried 11,440,576 tons in 1997, 12,866,309 tons in 1998 and 16,266,300 tons in 1999. The fleet is owned by 321 owners, most of whom are small shipping companies. There are only about ten major national shipping companies.

2.1.2 Shipyards in Vietnam

Based on recent statistical data, 60 shipyards are operating in Vietnam, excluding those supporting river service ships and wooden vessels. Almost all shipyards have both new building and repair facilities. Regarding new building facilities for large ships, the distribution is concentrated in the northern part of the country and there are fewer new building and repairing facilities in the central part.

Among these 60 shipyards, 10 are supervised by the Ministry of Defence, 14 by the Vietnam Shipbuilding Industry Corporation (VINASHIN), and the remaining 36 by regional state owned shipyards. Most of the major shipyards are supervised by VINASHIN.

2.1.3 Seaports

Ports are a major sector of the maritime industry. At the end of 1998, there were over 100 ports in Vietnam of varying sizes. In recent years, the total cargo throughput handled by them has been increasing rapidly: 36 million tons in 1995, 39.7 million tons in 1996, 45.76 million tons in 1997, 56.89 million tons in 1998 and 67.54 in 1999. The seaport system is composed of three strategic components - the northern seaport system, the central seaport system and the southern seaport system.

2.1.4 Sea-going personnel and maritime training

One of the basic components of efficient merchant shipping is the sea-going personnel who man them and ensure safety and the proper operation of ships. From statistics assembled for 31 December 1998, there were 6110 Vietnamese masters and nautical officers and 4373 Vietnamese chief engineers and engineer officers throughout the country.

The maritime training infrastructure consists of three main institutes: the Vietnam Maritime University (VIMARU) and the Maritime Technical and Training School No.1 in Haiphong, VIMARU branch and the Maritime Technical and Training School No.2 in HoChiMinh City.

2.1.5 Other related businesses

In the Vietnam shipping market, there are also various intermediate and ship service companies, who connect the shipping companies with the shippers and provide services for ships and crews. There are around 160 companies operating mainly in Haiphong and HoChiMinh City. The over 90 intermediate companies, consisting of chartering brokers, shipping agents and freight forwarders, are working in connection with a number of major shipping companies such as MAERSK - SEALAND, EVERGREEN, P&OCL, OOCL, NOL, MOL, NYK, HANJIN, and APL. The other

companies are interested in providing services such as towing, minor repairing, bunkering, and food and water supplying for ships when they are in port.

2.2 Vietnam Maritime Administration

2.2.1 Vietnam maritime legislation

.1 The Vietnam Maritime Code

As the country is involved to a quite high degree in maritime activities, there is a need for suitable maritime legislation to govern them. The highest legal instrument, the Vietnam Maritime Code (thereafter called "the Code"), was adopted by the National Assembly on 30 June 1990 (enforced on 01 January 1991). The Code consists of eighteen Chapters as shown in Appendix I, which cover all the principal activities of Vietnamese merchant shipping and provide the legal framework for the national maritime administration.

.2 Subsidiary legislation

For the effective operation of the provisions of the Code, the various rules and regulations need to be promulgated as subsidiary legislation.

Under the Code, a number of important legal instruments have been produced by the Prime Minister's Office and Ministry of Transport defining the duties, responsibilities and the organisation of the maritime administrative machinery, in which the most important ones are:

- Decision No.239/HDBT, dated 29 June 1992, by the Prime Minister on the establishment of VINAMARINE;
- Decision No.31/Ttg, dated 02 February 1993, by the Prime Minister on the duties, responsibilities and the organisation of VINAMARINE;
- Decision No.203/Ttg, dated 28 December 1992, by the Prime Minister on sea-going ship registration activities in Vietnam;
- Decision No.639/Ttg, dated 12 August 1997, by the Prime Minister on the duties, responsibilities and the organisation of Maritime Port Authorities; and

- Decision No.75/Ttg, dated 03 February 1997, by the Prime Minister on duties, responsibilities and organisation of the Vietnam Register.

There are also a certain number of rules and regulations, which have been formulated by the maritime administrative machinery and approved by the proper governmental level for implementation in the maritime field.

.3 International conventions

Under the provisions of the Code, an international maritime treaty, to which Vietnam is a Party, is declared as national law. At the present time, Vietnam has only ratified eight IMO conventions, i.e. IMO Convention and 1993 Amendments, SOLAS 74/78, MARPOL73/78 Annex I and Annex II, Tonnage 69, Load Lines 66, COLREG 72, STCW 78, INMARSAT 76 and INMARSAT OA 76; none of the ILO conventions, UNDP conventions or CMI conventions regarding maritime activities was ratified. However, Vietnam has been a party to the most important multilateral maritime convention, that is the United Nations Convention on the Law of the Sea 1982.

2.2.2 The organisation

The Vietnam Maritime Administration (VMA) under the general direction of the Ministry of Transport (MOT) is the administrative agency that enables the government to satisfactorily and efficiently undertake the functions embodied within the Code and the framework of the country's overall maritime policy.

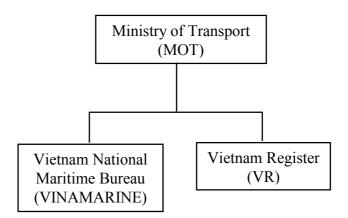


Figure 1: The Vietnam Maritime Administration

While MOT italics is responsible for maritime legislation, implementation of broad government policy and for overall co-ordination, as well as for concerted action in harmony with the other related ministries, VMA performs the functions and roles of the subsidiary organisation for MOT through its two main independent organisations:

- the Vietnam National Maritime Bureau (VINAMARINE), and
- the Vietnam Register (VR).

The structure of the Vietnam Maritime Administration is given in Figure 1.

1 Vietnam National Maritime Bureau

VINAMARINE is the authority of the State Administration of the shipping industry in Vietnam. The earliest form of the recent bureau was founded on the 13th November 1945 as a maritime department of MOT. At the beginning of 1955, the Department was upgraded to be the Waterway Transport Bureau. Together with the development of the transport infrastructure and the need for professional administrative machinery for maritime transport, the MOT by Decision No.1046 on the 5th May 1965 decided to establish the Maritime Transport Bureau to assist it in exercising the functions pertaining to maritime activities; it is now recognised as the founding day of VINAMARINE. On the 29th June 1992, by Decision No.239/HDBT of the Prime Minister, the organisation's name was changed to VINAMARINE.

Appendix II describes the organisation chart of VINAMARINE.

.2 Vietnam Register

VR is a state organisation responsible for safety and quality management for means of transport, and is concurrently a non-profit classification society.

Ship registration activities in Vietnam originally began in the 1880s when the first dry dock for repair and building of sea-going ships was completed at Bason shipyard in HoChiMinh City. Later, the Craft Registration Department of MOT was founded on the 27th April 1962. Two years later, on the 25th April 1964, the section of the Vietnam Register of Shipping located in Haiphong City

was officially founded according to Decision No.345/TL of MOT. This day has officially been recognised as the founding day of VR.

After reunification in 1975, this section was upgraded as the Vietnam Register of Shipping (VIRES) on the 19th January 1979. Since 1990, the organisation has been responsible for the technical supervision and classification services for offshore installations; furthermore, it has also been responsible for implementation and development of the vehicle technical safety inspection system since 1995.

Considering the important roles of the organisation in the transport field, on the 3rd February 1997, the Prime Minister, by Decision No.75/Ttg, redefined its functions and jurisdiction and also changed its name to the Vietnam Register with the Headquarters situated in the capital City Hanoi.

The organisation structure of VR is as shown in Appendix III.

2.2.3 Analysis of the delivery tasks of the Vietnam Maritime Administration

The roles and functions of VMA are defined by the Code and the related Decisions of the Government. Thus, VMA is responsible for performing:

- advisory functions,
- administrative functions,
- developmental and promotional functions, and
- regulatory functions

as the subsidiary machinery for MOT.

.1 Advisory functions

Obviously, the advisory functions of VMA are in the form of advising the Government on the related responsible tasks, and the drafting of maritime legislation and shipping policy for consideration and approval at the political level. In exercising these functions, VINMARINE is authorised to perform the following major tasks:

- preparing strategy, a five year programme and long term plans for the development of all the sectors of the Vietnamese shipping industry

throughout the country, which covers shipping, ports, shipbuilding, ship repair, maritime training, etc. and submitting them to the Minister of MOT for consideration, and thereafter, to the Prime Minister, for approval;

- proposing to the Minister of MOT and the Prime Minister the ratification of international maritime conventions and the signing of shipping acts and protocols; and
- drafting laws, ordinances, circulars, regulations, policies, rules of management, procedures and legal norms on maritime activities, and reporting to the Minister of MOT for his decision, if empowered, or for his submission to the Government.

In addition, VR is responsible for drafting rules and regulations, and other related technical legal documents for safety and quality of the objects under its responsibilities and submitting to MOT or the Ministry of Science, Technology and Environment for consideration, approval and promulgation;

.2 Administrative functions

Clearly VMA is not only part of the overall Public Administration of the government but is also a specialised executive arm of the government regarding maritime matters. Therefore, it has to discharge its administrative functions in the same way as any other administrative unit, following the same administrative and financial rules and procedures, to ensure implementation of shipping policy, and to carry out the mandated specialised functions. In these functions, VINAMARINE is responsible for:

- proclaiming the circulars giving guidelines on the implementation of maritime legislation;
- signing the shipping agreements with foreign countries, and participating in international shipping organisations and conventions, under the authorisation of the Prime Minister or of the Minister of MOT;

- considering, together with other competent authorities of the Government, the issuance of licences on co-operation and investment as well as operating permits in the shipping field;
- promulgating the statutes of seaports, and declaring their opening for navigation under authorisation of the Minister of MOT;
- issuing entry permits to foreign ships and boats entering into the territorial waters of Vietnam in accordance with the national legislation and international shipping customs;
- issuing permits and guidelines, and exercising control over the statutory activities of shipping agents, shipbrokers, pilotage, maritime service agents and shipping representatives at home and abroad;
- leading maritime inspections and exercising control over the execution of laws, regulations and state provisions in shipping
- performing the procedures of a shipping public notary as provided by laws; and
- acting as investor/sponsor or as administrative agency for maritime construction projects envisaged in the State plan and authoritatively managed by it.

.3 Developmental and promotional functions

Under its assigned duties, VMA is structured to be capable of performing those functions pertaining to the development and promotion of the shipping industry. The developmental and promotional functions take the form of participation in the process of formulating the policy of the government regarding maritime development and promotion as well as deciding upon the activities to be undertaken in connection with it. These functions essentially contribute to the overall economic policy decisions to be taken by the Government through the other related ministries such as the Ministry of Trade, the Ministry of Heavy Industry and the Ministry of Finance. The following tasks are performed by VINAMARINE:

- together with competent state authorities, participate in domestic and foreign investment projects directed at maritime infrastructure development in Vietnam;
- submission for approval, or approval as empowered, of the new formation or upgrading of seaports and navigation aids systems throughout the country;
- governing and leading work on research and application of shipping technology as well as training, examination and certification of ship officers:
- analysing and assessing the most suitable types and numbers of ships required to meet the scale of development planned, and making proposals for expansion of the national fleet; and
- cooperating with the Ministry of Trade and the Ministry of Finance in making subsidiary policy for shipping, shipbuilding and ports, as well as the policy for apportionment of trade and cargo sharing.

.4 Regulatory functions

Generally, the functions embodied in national maritime legislation, especially those pertaining to registration of ships, maritime safety, marine personnel, maritime casualty investigation and protection of the marine environment are enforced by the Maritime Safety Administration in most countries. The Maritime Safety Administration is an integral part of the Maritime Administration and is the specialised executive arm of a maritime government. The tasks of the Maritime Safety Administration in Vietnam are laid on both VINAMARINE and VR. The most vital regulatory functions of the Maritime Safety Administration take the form of:

- General superintendence and co-ordination;
- Registration of ships;
- Surveys, inspections and certification of ships;
- Examination and certification of seafarers;

- Manning of ships;
- Conducting inquiries or investigations into shipping casualties;
- Dealing with matters pertaining to prevention, control and combating of marine pollution;
- Dealing with matters relating to maritime search and rescue;
- Crew matters;
- Ensuring the safety of fishing vessels and other small craft; and
- Dealing with the removal of wrecks.

.4.1 General superintendence and co-ordination

The functions of general superintendence and co-ordination of the work of the Maritime Safety Administration in Vietnam are exercised by the Chairman of VINAMARINE, and the General Director of VR as they are the statutory officials duly appointed and appropriately empowered under Decision No.239/HDBT and Decision No.203/Ttg of the Prime Minister.

The Vietnam National Maritime Bureau is the authority of the State Administration of the shipping industry of Vietnam. Acting on behalf of the Minister of MOT the chairman of the Bureau is responsible to the Prime Minister and the Minister for exercising the functions of the State Administration over the shipping industry throughout the country, which consists of all State-run (central and local authorities) and non State-run companies, organisations and individuals (including foreign organisations and individuals in Vietnam).

(Article 1, Decision No.239/HDBT)

"The General Director of the Vietnam Register is responsible for organising, managing and directing all the sea-going ship registration activities in Vietnam under the provisions of the Vietnam Maritime Code ..."

(Article 3, Decision No.203/Ttg)

.4.2 Registration of ships

The registration of a ship is used as evidence of the right to fly the flag of the State as well as the right of ownership and mortgage. Relevant to the question of registration of ships, Articles 91, 92, 93 and 94 of the United Nation Convention on the Law of the Sea 1982 lay down the international principles in this connection. The procedure for registration of ships is set out in several provisions of the Code and the Rules for Registration of Sea-going Ships and Seafarers (Decisions No.91/CP, dated 23rd August 1997, by the Prime Minister).

According to these provisions, it is mandatory for the following kinds of vessels to be registered in the National Registry Book of Ships:

- a. self-propelled sea-going vessels with propulsion engines of 75 (hp) and above;
- b. non-propelled sea-going vessels with a gross tonnage of 50 GT and above; or with a deadweight of 100 tons and above; or with a length measured at the designed waterline of 20 meters and above;
- c. vessels of smaller sizes than mentioned in a. and b. but engaged in international voyage; and
- d. fishing vessels, fish processing vessels and vessels used for the domestic transport of fish.

VINAMARINE is responsible for issuing the Certificates of Registry for those sea-going vessels satisfying the criteria in paragraphs a., b. and c., and other related requirements about the qualifications for ownership, and for entering and maintaining the required ship's particulars in the National Registry Book of Ships. The vessels under paragraph d. are under the responsibility of the Ministry of Fisheries.

In the process of registration, VR is responsible for carrying out technical surveys and issuing the appropriate technical certificates under the

requirements of national legislation and ratified IMO conventions if necessary, or for delegating the tasks to international classification societies.

.4.3 Surveys, inspections and certification of ships; Ensuring the safety of fishing vessels and other small craft

The tasks pertaining to this item are mostly performed by VR as empowered under Articles 13, 18 and 25 of the Code, and defined by the Decisions No.75/Ttg and No.203/Ttg of the Prime Minister, covering the following:

- to review and approve technical designs for new building, conversion, renewal or reinstallation of sea-going ships;
- to carry out inspections/testings of, and issue relevant certificates to, materials, equipment and components intended for the objects, which are under scope of service of VR;
- to carry out surveys/inspections of sea-going ships, floating structures, offshore installations, work machines, boilers, pressure vessels, lifting appliances, containers, etc., under construction/manufacture, conversion, repair or assembly;
- to carry out surveys/inspections of the above objects in service;
- to issue relevant certificates in compliance with the requirements of those rules and regulations, technical standards and IMO technical conventions that have been ratified by Vietnam;
- to measure, calculate and issue tonnage certificates according to the International Convention on Tonnage Measurement of Ships 1969 or the relevant national regulation;
- to carry out audits of, and issue certificates as required by, the ISM Code and in conformity with the ISO 9000;
- to co-operate with other international classification societies, and to coordinate the work of those classification societies to whom statutory
 functions have been delegated, regarding surveys of Vietnamese ships;
 and

- to publish the register books and to maintain technical records on the means of transport and projects which are under inspections/surveys.

In addition to VR, VINAMARINE is empowered by Decision No.239/HDBT of the Prime Minister to perform inspections pertaining to port State control of foreign ships, as well as inspections and detention of unseaworthy/unsafe ships.

.4.4 Examination and certification of seafarers; Manning of ships; Crew matters

The standards for examination of various grades of seafarers and their appropriate certification constitute the first element in determining the standards of safety and efficiency of the ships being operated. Clearly, all maritime countries through their respective Maritime Safety Administrations should decide upon the standards and systems required in consultation with the parties concerned. As defined by Decisions No.239/HDBT and No.31/Ttg, VINAMARINE is in charge of:

- establishing the standards for the competency and proficiency of seafarers and the appropriate grade and level at which seafarers have to perform their duties on board the ships, and submitting to the concerned authority for approval and proclamation; and
- issuing or withdrawing certificates of competency and seapasses for crew working on board ships of over 100 DWT belonging to enterprises and individuals throughout the country.

The second element is the manning structure of the ships, especially the "certificated manning". In regulating it, VINAMARINE is empowered to:

- establish the safe manning standards, the labour conditions and discipline
 of seafarers in Vietnamese ships and submit to the concerned authority
 for approval and proclamation;
- issue and maintain the manning register cards and registration of seamen;
 and

- co-ordinate with other related authorities to examine the health of maritime personnel and sea-going ships' medical care.

Obviously, the third element, the fundamental determinant of the quality chain, is the quality of the relevant maritime education and training (MET) of seafarers. The Vietnamese maritime education and training institutions are authorised to conduct examinations of seafarers; VINAMARINE is entitled to monitor and audit the performance of MET institutions as regards standards of education, training and examination of seafarers, and further on, to plan and assist in the development of maritime training in Vietnam.

.4.5 Conducting inquiries or investigations into shipping casualties

The primary purpose of these functions is to ascertain the facts, to obtain all the relevant information, and to determine as precisely as possible the cause(s) of maritime casualties, so as to enable the government to take the necessary steps to prevent, as far as practicable, the reccurrence of similar casualties. In order to fulfil these functions, VINAMARINE is responsible for leading and coordinating casualty investigations regarding shipping activities. In addition, VR is obligated to take part in carrying out investigations of casualties involving transport.

.4.6 Dealing with matters pertaining to prevention, control and combating of marine pollution

One out of two roles of the Maritime Safety Administration in the protection of the marine environment has already been discussed under paragraph .4.3; the second one, the participating and/or co-ordinating role for combating marine pollution when it occurs, is discussed here. Under Decision 639/Ttg, dated 12th August 1997, of the Prime Minister, the Port Authority, a specialised agency under control of VINAMARINE, is obligated to co-ordinate with the other related organisations to combat marine pollution when it occurs within local waters. It is also responsible for the provision of adequate reception facilities, and for receiving oily residues and chemical cargo residues from ships.

Furthermore, there are also the obligations of the Vietnam Oil and Gas Corporation and the Vietnam Coast Guard for organising marine pollution combating within their respective areas of responsibilities. However, the role of co-ordinating and participating in combating marine pollution at area and national levels has not yet been assigned by legislation to any organisation.

.4.7 Dealing with matters related to maritime search and rescue; Dealing with the removal of wrecks

According to national policy and the circumstances in Vietnam, VINAMARINE is obligated, under Decision No.780/Ttg, dated 23rd October 1996, of the Prime Minister, to be a Member of the National Search and Rescue Committee, and to be lead organisation when co-ordinating with other organisations to provide search and rescue services at sea.

The provisions pertaining to wrecks are laid down in Chapter XII of the Code, which entitles the Minister of MOT to be responsible for all matters dealing with wrecks.

2.3 Conclusion

It may be seen from the above examination that VMA is appropriately established to deliver the various duties and responsibilities of a Maritime Administration as required by national legislation and international maritime conventions ratified by Vietnam. Besides VINAMARINE, the main responsible administrative machinery of VMA, VR is a part the of Maritime Safety Administration and is mainly obligated to enforce an important part of the regulatory functions, statutory surveys and certification as embodied in the national rules, SOLAS 74/78, MARPOL 73/78, Load Line 66, Tonnage 69, and COLREG 72. So, the efficient and satisfactory performance of VR is of great importance to the safety of life and property at sea and pollution prevention from Vietnamese flag ships.

CHAPTER III

Enforcement of IMO Technical Conventions - The recent situation

3.1 Rules and Regulations

As discussed in Chapter II, VR is a public organisation responsible for enforcing the statutory surveys and certification as required by the national rules and incorporated IMO conventions (SOLAS 74/78, MARPOL 73/78, Tonnage 69, Load Line 66, and COLREG 72); in addition, it functions recently as a non-profit classification society. In order to determine the structural and mechanical fitness of ships and other marine structures for their intended purpose and to promote the safety of life, property and marine environment, the organisation has been establishing, revising and abolishing a system of rules and regulations, which consists of class requirements and statutory requirements (see Appendix IV for details).

These rules and regulations and a number of guidelines and instructions are real powerful instruments for the supporting departments, branch offices and surveyors in carrying out their duties.

3.2 Organisation for exercising statutory duties

Through 35 years of development, VR has established a proper network, composed of the management departments in the Headquarters and the 23 outport branches throughout the country, for undertaking the various tasks of the statutory duties to support the Board of Directors fulfilling its obligations. Within VR Headquarters, the Sea-going Ship Classification Department (CID), the Rule Department (RuD), the Industrial Department (InD), the ISM Code Department (IsD), the International Relationship and Development Department (IrD), and the Offshore Department

(OfD) have the function to manage the class matters and the following statutory tasks:

- the management of statutory surveys for Vietnamese flag ships, foreign flag ships, and on behalf the other classification societies;
- the establishment, revision and/or abolition of survey record, survey report and certificate forms and the custody of survey records for ships;
- the preparation of statistics for Vietnamese flag ships and ships under class;
- the issuance of full-term statutory certificates;
- the assessment of survey records and survey reports;
- the issuance of lists of survey status and notification of ship's recommendation;
- the establishment, revision and abolition of rules and regulations relating to international conventions;
- the compilation of the publications of rules and regulations relating to international conventions;
- co-operating with the Training Department to plan and execute the education and training for personnel;
- the approval of various plans of a new ship under construction or a VR classed ship under conversion;
- the tonnage measurement, assignment of loadlines, approval of stability booklet and the various booklet as required under the international conventions;
- the establishment, revision of the guidances for surveyors pertaining to statutory surveys;
- appraisal of request for "exemptions" from any statutory requirements;
- participating in maritime casualty investigation conducted by VINAMARINE;
- delegating the statutory surveys and certification to the international classification societies who have been signed the agreements with VR;
- type approval of machinery, equipment, automatic devices, materials, welding consumables;
- verification, audit and certification according to the ISM Code; and

- surveys and certification of fixed and mobile offshore units.

The 23 branch offices are responsible for carrying out site surveys and issuing of authorised reports, records and certificates under the direction of the departments in the Headquarters; they cover all the most attractive maritime locations over the country, including Haiphong, HoChiMinh City, Quangninh, Vungtau, Nhatrang and Danang (see Appendix V).

3.3 Personnel

VR currently employs 700 staff, including 600 technicians with qualification of university graduate and postgraduate; among them, the site surveyors for sea-going ships are 129.

Right after joining VR, every staff member has had to undergo the required training courses held at VR Headquarters or at premises of the manufacturers/builders or assemblers. Training time required for staff to be a junior marine surveyor is from two to three years, including 120 hours of theory knowledge at Headquarters and on the job training.

VR staff trained abroad

Table 1

International organisations/institutions	Number of VR surveyors
Lloyd's Register of Shipping	32
Bureau Veritas	5
Germanischer Lloyd	12
Det Norske Veritas	4
Nippon Kaiji Kyokai	14
Russian Maritime Register of Shipping	8
Polish Register of Shipping	3
American Bureau of Shipping	2
Korean Register of Shipping	2
International Maritime Academy	2
World Maritime University	5
SIDA (Sweden)	2
Total	91

Source: Vietnam Register Technical Journal, No.2

VR has established a set of training course materials for all kinds of different surveyor grades on the basis of the IMO Model Course programme. Training courses,

seminars and workshops are organised at the Headquarters or at regional offices to maintain and update staff knowledge, such as the ISM Code, ISO 9000, enhanced survey programs, and financial management.

Many VR surveyors and inspectors have been appointed to attend training/seminars abroad, held by international organisations, IMO or IACS members. As at the end of 1999, the numbers of VR staff trained abroad can be seen in Table 1.

Seven VR staff members have studied at World Maritime University since 1994; among them five have already graduated. Others are still studying English, and expecting to get access to join courses at WMU in the future. Annually, from 5% to 7% of VR turnover is spent for staff training and training materials/equipment.

3.4 Vietnam Register Quality Management System

Mission statement

The mission of VR is to serve the public interest as well as the needs of our clients by promoting the security of life, property and natural environment, primarily through the development and improvement of standards and the performance of design appraisal, surveys/testings during construction/manufacture and in service of water crafts, roadway and railway motor vehicles and offshore installations.

Quality Policy

It is the policy of VR to provide the quality services to achieve our mission and meet demands of our clients. VR activities of classification and certification for safety and quality are always assured in truth, reliability, promptness, and cleanness and constant improvement. The policy is understood, implemented and maintained at all levels of VR.

Since 1996, VR has been making efforts to establish a quality management system in order to set out in a formal framework the basis of controlling critical activities that effect quality in the organisation and achieve better service in the shipping industry.

VR has also collaborated with BV quality division in drafting its quality manual and control procedures. The quality management system was documented to communicate to everyone in the organisation:

- The mission of the system
- The policy of the organisation
- Employee's responsibilities within the organisation
- The operational procedures.

In April 2000, VR quality management system, which consisted of the Quality Manual and 47 Control Procedures, was successfully verified by BVQI for achieving an ISO 9002 quality management system certificate. The Quality Manual consists of 4 chapters and two annexes, including the General Director's statement, concerning the growth and development of the organisation and the decision by management to formalise and document the commitment to achieve better service in the shipping industry. The chapters are as follows:

VR Quality Manual

Chapter 1: Mission statement, quality policy, and the declaration of VR General Director

Chapter 2: Quality Manual - Introduction

Chapter 3: Definitions

Chapter 4: Obligations under the Quality Manual

The Control Procedures following this Quality Manual are discussed in section 3.5 of this Chapter.

3.5 Procedures for organising the statutory activities

3.5.1 Procedure for statutory surveys

The procedure defines the unified steps and the responsibilities of the relevant levels of delivery machinery in carrying out statutory surveys of sea-going vessels. It organises the statutory surveys conducted for:

- the Vietnamese ships engaged in international voyages under requirements of SOLAS 74/78, MARPOL 73/78, Load Line 66 and Tonnage 69;

- the Vietnamese ships engaged in domestic voyage and non-convention size ships under requirements of national rules; and
- foreign ships as delegated by their flag States.

Under the text of this procedure, the General Managers of ClD or InD is responsible for:

- giving instructions as requested by the branch office and the surveyors carrying out the survey;
- leading the flag-in surveys or initial surveys of in-service ships;
- considering the request of shipowner, delegating the statutory surveys for the proper international classification societies;
- conducting inspections of sea-going ships as required by the Board of Directors;
- verifying the survey reports and survey records;
- solving the matters pertaining to delegations; and
- proposing to issue or issuing full-term certificates under authority.

The Directors of the branch offices are responsible for:

- considering the survey applications;
- leading and conducting the surveys;
- verifying the survey reports, survey records, and invoices;
- issuing short-term certificates and full-term certificates under authority;
- issuing receipts

The surveyors are responsible for:

- determining scope of surveys;
- carrying out the surveys;
- preparing survey reports, survey records, and invoices.

3.5.2 Procedure for verifying a Safety Management System

The working procedure and duties of related bodies for verifying safety management systems of shipping companies and ships according to the regulations of the ISM Code are laid down in this document.

The General Manager of IsD is in charge of:

- governing the verifications;
- considering the survey application;
- appointing verifying team and the leading auditor;
- solving the matters pertaining to delegations; and
- proposing the Board of Directors to issue full-term DOC and SMC.

The Directors of the branch offices are responsible for:

- co-ordinating with IsD to perform intermediate verifications of the safety management systems of ships; and
- appointing auditor as requested by the General Manager of IsD.

The auditors are obligated for:

- carrying out the verifications in according to Guidelines for Verification of Safety Management Systems; and
- issuing invoices.

3.5.3 Procedure for plan approval

The principles for design approval and duties of bodies involved are indicated within the text of this procedure. It applies for both the approval of new building designs and the conversion designs of sea-going ships and offshore units.

The heads of the departments/branch offices functioned the task are responsible for:

- governing the design approval under authority;
- appointing the approval team; and
- signing the approved documents.

In addition, the General Manager of RuD is in charge of instructing and monitoring the design approval within VR.

The members of approval team are responsible for:

- examining and evaluating the design in accordance with the proper requirements; and
- performing design approval in compliance with Rule for manage and approve designs of VR.

The clerical staff is responsible for:

- receiving applications and design documents;
- documenting the designs and transferring the design documents to appointed approval team;
- compiling the recommendations or reports from the approval team, and submitting to the head of unit for approval;
- sending the approved design to responsible VR units and designer/shipbuilder;
- issuing invoices.

3.5.4 Procedure for issuing full-term statutory certificates

The procedure defines the unified steps for issuing full-term statutory certificates and the duties of the related VR units. It is composed of:

- issuing statutory certificates for Vietnamese ships engaged in international voyages under requirements of international and national requirements;
- issuing statutory certificates for Vietnamese ships engaged in domestic voyages under national requirements;
- issuing statutory certificates for foreign ships as delegated by their flag State;
- issuing document of compliance for foreign ships that their flag State are not party to the international conventions.

As indicated in the text, the General Managers of ClD and OfD are responsible for verifying the survey documents of sea-going ships and offshore units and proposing the Board of Directors to issue certificates or issuing certificates under authority. The General Managers of IsD is responsible for proposing the Board of Directors to issuing DOC and SMC.

3.5.5 Procedure for reviewing and evaluating survey documents

The procedure indicates the reviewing methods, actions to be taken, and duties of related bodies for ascertaining the quality of survey documents of sea-going ships and offshore units. It applies for the survey documents prepared by VR surveyors, surveyors of the delegated classification societies, and the reports of sub-contractors.

The site surveyors are in charge of reviewing the reports submitted by the subcontractors, such as thickness measurement reports, non-destructive testing reports, continuous machinery survey reports and under-water survey reports.

The Directors of the branch offices are responsible for:

- reviewing the survey documents prepared by site surveyors; and
- conducting the random verifications for the completed survey documents.

The General Managers of ClD, OfD and InD are responsible for:

- reviewing the survey documents received from the branch offices;
- monitoring the "actions to be taken" for correcting non-conformities;
- proposing to issue or issuing full-term certificates under authority; and
- conducting the random verifications for the completed survey documents.
- 3.5.6 Procedure for statutory surveys on behalf of foreign classification societies

The procedure defines the unified steps for carrying out statutory surveys of inservice sea-going ships and offshore units on behalf of the other classification societies, and the responsibilities of the related VR levels.

The General Manager of ClD and OfD are in charge of:

- checking the survey authority and consulting with the classification society involved, if necessary;
- appointing branch office or surveyors to perform the survey;
- instructing and monitoring the surveys; and
- reviewing the survey documents.

The Directors of the branch offices are responsible for:

- conducting the surveys as directed by the ClD or OfD;
- reviewing the survey documents and invoices prepared by the surveyors; and
- signing the survey documents and issuing receipts.

The site surveyors are responsible for:

- determining the scope of surveys;
- carrying out the surveys; and
- preparing survey documents and invoices.

3.5.7 Procedure for dealing with PSC matter

The aim of the procedure is to determine the appropriate actions of VR for ensuring that any PSC information pertaining to Vietnamese ships and VR class ships is investigated, analysed and evaluated and that the proper measures are taken to prevent the reoccurrence.

The General Manager of ClD is responsible for:

- leading and deciding the response activities;
- co-ordinating with PSCs, related foreign maritime administrations, classification societies, shipowners, and ships' masters to solve the detentions;
- appointing branch offices or surveyors to carry out inspections of detained ships when it arrived Vietnamese ports;
- authorising other classification societies to perform surveys of detained VR class ships to rectify the deficiencies;
- informing PSCs about the actions taken by VR with detained ships; and
- preparing inspection reports and submitting them to the Board of Directors.

The Manager of the Statutory Survey Section is responsible for:

- compiling, analysing and evaluating of PSC information;
- consulting with PSCs, related foreign maritime administrations, classification societies, shipowners, and ships' masters;
- proposing the measures to the General Manager of ClD for correcting and preventing reoccurrence; monitoring the performance of these measures;
- preparing quarterly statistic figures and detention list of ships.

The Directors of branch offices are responsible for:

- conducting the inspections of detained ships as required by the General Manager of CID;
- leading and monitoring the inspections and the measures for correcting and preventing reoccurrence.

The site surveyors are responsible for:

performing the inspections;

- preparing reports and proposing the measures for correcting and preventing reoccurrence.
- 3.5.8 Procedure for establishment, revision and provision of the Guidelines for Surveyor

The procedure defines the unified steps for establishing and amending the Guidelines for Surveyors so that the Guidelines are in compliance with the updated national legislation, the international conventions, and the agreements between VR and the other classification societies; it also indicates the duties of the related VR units and the procedure for publication and delivery to surveyors.

The Board of Directors is responsible for:

- making decision to establish, amend, publish and deliver the Guidelines; and
- proclaiming new Guidelines and the Amendments.

The General Managers of the departments are in charge of:

- compiling and reviewing the proposal of the need of new Guidelines or Amendments from VR units;
- proposing the need to the Board of Directors for approval;
- conducting the works for drafting the texts;
- monitoring the interpretation of the texts;

The heads of the other units are responsible for:

- proposing the need of new Guidelines or Amendments; and
- co-ordinating with the departments in charge to draft the texts.

The General Manager of IrD is obligated for the publication of the Guidelines.

3.5.9 Procedure for establishment, revision and provision of the certificate and survey report forms

The procedure organises the tasks to establish and to revise the forms pertaining to activities of VR for complying with the updated national, international and foreign maritime administrations requirements. It also defines the duties of VR units and the provision of the forms.

The General Managers of departments are responsible for:

- establishing or revising forms for compliance with relevant requirements;
- requiring to print the forms;
- delivering the forms to related VR units;
- storing of the forms.

The Directors of the branch offices are responsible for:

- ensuring to apply proper survey report, survey record, and certificate forms;
 and
- maintaining the forms;
- proposing to establish/revise and be additionally provided the forms.

The General Manager of IrD is responsible for printing the forms.

The clerical staff is responsible for typing and reviewing the forms and for submitting to General Managers for approval.

3.5.10 Procedure for compilation and notification of the ship status

The procedure defines the unified steps for updating and maintaining the technical information of VR class ships, and the duties of VR units involved.

The General Manager of ClD is responsible for:

- updating accurately the ships' technical information;
- maintaining the updated information;
- sending the ships' technical information to the branch offices, and shipowners if necessary; and
- listing the ships over due and ships being withdrawn VR class.

The General Manager of Computerised Department is responsible for maintaining the ships' technical information in VR network.

3.5.11 Procedure for marine casualty investigation

The procedure aims to organise the activities pertaining to:

- collecting and analysing the maritime casualty information;
- determining the root causes of the accidents;
- reporting as requested by other administrative organisations;

- determining the measures related to the performance of VR or other parties to prevent reoccurrence; and
- amending or revising rules and guidelines of VR.

The Board of Directors is responsible for:

- leading the participating in serious maritime casualty investigations;
- declaring the opinion of VR in related with the serious maritime casualty; and
- approving the measures for preventing.

The General Managers of departments are responsible for:

- conducting or participating in the serious maritime casualty investigations as required by the Board of Directors;
- monitoring the performance of the branch offices in doing this task;
- compiling, analysing the gathering information, and proposing the preventive measures.

The Directors of branch offices are responsible for:

- conducting the maritime casualty investigations;
- co-ordinating with related departments or administrative organisations in the maritime casualty investigations; and
- reporting the information and sending the related document to the departments in charge.

Investigators are responsible for:

- carrying out the maritime casualty investigations;
- analysing the gathering information;
- co-operating with other administrative officers in the maritime casualty investigations;
- determining, if possible, the causes and proposing the preventive measures.

The staff in charge of the departments is responsible for:

- compiling the investigations' information under authority; and
- analysing and proposing the preventive measures.

3.5.12 Procedure for recognition and delegation of authority to foreign classification societies

The procedure indicates the unified steps for considering the capabilities of the foreign classification societies for recognition and delegation of the statutory work, and the responsibilities of related units.

The Board of Directors is responsible for reviewing and signing agreement.

The General Manager of IrD is responsible for:

- conducting and monitoring the drafting process;
- dealing with the suggestions from other VR units;
- discussing the articles with related classification society;
- submitting to the Board of Directors for signing; and
- updating and providing the agreement.

The head of the other VR units are responsible for:

- examining and giving suggestions for the agreement; and
- implementing the articles of the signed agreement.

3.6 Delegation of statutory surveys and certification

Nowadays, more than 100 governments have authorised the international classification societies, in view of their expertise and the world-wide availability of qualified surveying staff, to implement the statutory regulations of the conventions and related codes and resolutions, either wholly or partly, and issue statutory certificates on their behalf. Such delegation is permissible under the IMO convention system. However, it is important to note that delegating administrations still retain their responsibilities and obligations under the conventions they have ratified.

While VR has just established a national network, it is difficult to exercise a full and continuous control over the ships that fly the Vietnamese flag and that do not regularly call at a Vietnamese port; moreover, the development of ships in terms of technology is becoming a challenge for VR.

The problem has been overcome by authorising the international classification societies to act on behalf of VR. The following factors are also considered as the reasons why VR delegates the statutory tasks to them.

- the class surveys and the statutory surveys for the overall control of ship safety should avoid duplicated jobs; and
- the international classification societies are capable of maintaining a world-wide network of qualified surveyors; having comprehensive classification rules compiled on the basis of sound research and development; efficient and effective feedback of significant technical data via survey reports and an internationally recognised quality management system.

VR has signed agreements for mutual co-operation and substitution in the field of ships/offshore classification and certification with all members of IACS as below:

- American Bureau of Shipping
- Bureau Veritas
- China Classification Society
- Det Norske Veritas
- Germanischer Lloyd
- Korean Register of Shipping
- Lloyd's Register of Shipping
- Nippon Kaiji Kyokai
- Registro Italiano Navale
- Russian Maritime Register of Shipping.

These agreements generally include the following items:

- subject and scope of agreement, definitions
- classification standards and records
- survey during construction, conversion and repair of ships
- periodical survey on in-service ships
- surveys relating to the manufacture of materials and products intended for installation onboard ships

- statutory surveys
- exchange of rules, regulations and other publications
- communications
- training VR personnel
- invoicing and sharing of fees and expenses
- liability
- settling disputes
- amendment, validity and entry into force
- legal restraints.

However, these agreements are likely the co-operative agreements between two classification societies; under which, the signing parties can assist each other with class and statutory surveys of their classed ships.

By entering into the agreements with VR, the class rules of these societies are simultaneously recognised by the provisions of the Vietnamese Maritime Code to serve as basis for the design and construction of the Vietnamese flag ships.

In case a Vietnamese flag ship is holding class of one of these parties, and at the request of the shipowner, VR could issue an "Survey Authority" to delegate the statutory surveys and issue of certificates for the appropriate society. The delegation does usually not cover the tonnage computation, the tasks under the ISM Code, the approval of ships' manuals, booklets and plans, and the issue of exemption certificates. However, there are just LR, DNV, NK and GL being delegated to perform the statutory matters.

3.7 The performance of VR in the recent years

The following Table 2 illustrates the efforts of VR and its employees in exercising the statutory tasks and the related functions in the past three years. A number of control procedures had initially been applied by the network of departments and branch offices in carrying out ship surveys.

VR performance from 1997 to 1999

Table 2

No.	Items	1997	1998	1999
1	Total number of surveys carried out	1149	1313	1126
	Number of surveys on behalf of foreign classification societies	152	176	171
	Number of initial surveys	61	78	110
	Number of periodical surveys	591	736	622
2	Total number of survey reports reviewed	578	616	465
	Number of survey reports with grade A	287	341	320
	Number of survey reports with grade B	260	246	134
	Number of survey reports with grade C	31	29	11
3	Surveyor's performance evaluated through reviewed survey reports	1570	1712	1248
	Times of performance with grade A	966	1163	926
	Times of performance with grade B	547	493	298
	Times of performance with grade C	57	56	24

Source: Vietnam Register Annual Reports from 1997 to 1999

CHAPTER IV

External Business Environment Analysis

4.1 The Vietnamese mercantile fleet

4.1.1 The diversity of the fleet

The total number of self-propelled sea-going steel ships of all kinds of dry cargo ships and liquid bulk ships was 549 ships according to the Vietnam Register Book of Ships at the end of 1999. As shown in Table 3, the general dry cargo ships dominated the fleet with 85.25 % in number, 54.81 % gross tonnage, 52.58 % ton deadweight and 64.48 % maximum continuos output of main engines (M.C.O).

The particulars of the Vietnamese mercantile fleet

Table 3

No.	Ship type	Number	Gross tonnage	Deadweight	M.C.O
1	Bulk carrier	4	54,983	92,119	32,800
2	General dry cargo ship	468	401,053	601,016	409,164
3	Container ship	6	62,061	73,918	52,976
4	Tanker	59	205,979	368,551	120,366
5	Refrigerated cargo ship	12	7,700	7,373	19,265
	Total	549	731,776	1,142,977	643,571

It is clear that there is an imbalance in types of ships. The number of general dry cargo ships is too high in terms of tonnage distribution by type, accounting for 54.81 % against the world distribution of only 20%. There are low percentages of the specialised ships such as container ships, bulk carriers and crude oil tankers that can contribute to huge quantity of cargo carrying capacity.

This situation reflects the low level of competitiveness in respect of national demand for sea borne trade. Especially, since Vietnam is the world's third biggest exporter of rice - a commodity that is transported under break-bulk type. Crude oil is a strategic export commodity, which contributes to the main income of the country. Recently the quantity of containerised cargoes has increased. So, from the demand point of view, the Vietnamese fleet should have respectively a larger number of specialised ships than present types in order to meet the national demand.

However, from Table 4, in terms of the average size, the bulk carrier and container ship are the two biggest types with the average gross tonnage over 10,000. The general dry cargo ship and reefer ship are rather small with an average gross tonnage between 500 and 1000.

The average figures of the Vietnamese mercantile fleet

Table 4

No.	Ship type	Gross tonnage	Deadweight	M.C.O	Age
1	Bulk carrier	13,746	23,029.68	8,200.00	20.00
2	General dry cargo ship	857	1,284.22	874.28	14.12
3	Container ship	10,344	12,319.68	8,829.33	17.83
4	Tanker	3,491	6,246.63	2,040.10	20.05
5	Refrigerated cargo ship	642	614.43	1,605.42	26.00

4.1.2 The technical condition of the fleet

Also from the figures in Table 4, the average ages of the fleet are high, especially with the reefer ships (26 years old), tanker (20.05 years old) and bulk carrier (20 years old). The ships certainly operate with high costs due to intensive repair and maintenance cost and high insurance premiums are inefficient and less competitive. In consequence, the Vietnamese fleet is mostly outdated, with low level of modern automation and specialised control systems. Moreover, there is a clear link between the safety of life and property at sea and environment protection and the age of ships. According to Table 5, it is clear that the main age of the Vietnamese fleet is between 10 years old and 30 with the number of 321 out of 549 ships. Many superannuated ships aged more than 20 years are still in operation; the total number equals 24.41 % number of the fleet, especially 75 % reefer ships, 47.46 % tankers and 20.30 % general dry cargo ships. There are only 32.79 % ships of 10 years old and below, in which the majority is general dry cargo ships. As discussed in the above paragraph,

there is a vital need to introduce effective countermeasures for the rehabilitation of the Vietnamese fleet.

The matrix age of the Vietnamese mercantile fleet

Table 5

No.	Ship type	Age≤10 years	10 <age≤20< th=""><th>20<age≤30< th=""><th>Over 30 years</th></age≤30<></th></age≤20<>	20 <age≤30< th=""><th>Over 30 years</th></age≤30<>	Over 30 years
			years	years	
1	Bulk carrier	-	3	1	-
2	General dry cargo ship	168	205	62	33
3	Container ship	-	5	1	-
4	Tanker	12	19	16	12
5	Refrigerated cargo ship	-	3	6	3
	Total	180	235	86	48

If looking at the diversity of ships according to main applicable sizes of SOLAS 74/78 and the appropriately average ages at these sizes in Table 6 and Table 7, there will be a big challenge to the maintenance of the carrying capacity for the Vietnamese fleet in the coming year.

Table 6
The Vietnamese mercantile fleet by types and main SOLAS sizes

No.	Ship type	GT<300	300≤GT<	500≤GT<	1000≤GT<	GT≥10,000
			500	1000	10,000	
1	Bulk carrier	0	0	0	0	4
2	General dry cargo ship	230	120	44	73	1
3	Container ship	0	0	0	4	2
4	Tanker	18	10	13	13	5
5	Refrigerated cargo ship	3	3	2	4	0
	Total	251	133	59	94	12

Most of the fleet consists of coastal ships with the number of 384 ships of less than 500 gross tonnage took 69.95 % number of ships; moreover, these ships are the youngest ship generation with an average age of 12.10 for 230 general dry cargo ship of less than 300 gross tonnage and with the average age of 12.30 for 120 general dry cargo ship of 300 gross tonnage and above but less than 500 gross tonnage.

The higher carrying capacity ships of 500 gross tonnage and above cover 30.05 % in number of ships, but their average age is about 15 years old and above, in particular the tanker and reefer ship.

Table 7
The average age of the Vietnamese mercantile fleet by types and main SOLAS sizes

No.	Ship type	GT<300	300≤GT<	500≤GT<	1000≤GT<	GT≥10,000
			500	1000	10,000	
1	Bulk carrier	-	-	-	-	20
2	General dry cargo ship	12.10	12.30	14.64	23.62	11.00
3	Container ship	-	-	-	17.75	18.00
4	Tanker	17.39	18.20	26.15	20.46	16.40
5	Refrigerated cargo ship	25.67	29.67	26.00	22.25	-

According to the statistics in Japan, the replacing of ships is done after 17.4 years for general cargo ships and 13.5 years for tankers, where repairing and maintenance work is done comparatively well. So, it is strongly suggested that superannuated ships in Vietnam be replaced with used ships sooner than the current policy of 20 years for general cargo ships, and 15 years for tankers. This will ensure safe navigation of ships and protection of the marine environment.

4.1.3 The changing of the fleet in recent years and its expanded direction

As mentioned above, to catch up with the demand of the market and also to achieve better technical condition of the ships, Vietnamese shipping companies have been investing more capital to:

- purchase ships (new or second hand) to increase carrying capacity and for reducing the average age of the fleet;
- maintain hull, machinery, auxiliary machinery and equipment and install new equipment as required by the international conventions as well as national regulations.

Considerable governmental funds have been spent to develop better vessel design standards, improved structural analysis, better trained staff and crew members and use of sophisticated information technologies while rigorously implementing enhanced survey requirement.

All the newly bought ships indicated in Table 8 are large ships and are owned by big state-owned companies such as VINALINES, VOSCO, FALCON, VITRANSCHART and VITACO. It also noted that most of these ships are classed by the international classification societies.

Table 8

Vietnamese flag ships purchased form foreign countries in recent years

No.	Ship type	1997	1998	1999
1	General dry cargo ship	2	6	4
2	Container ship	2	1	2
3	Tanker	-	4	4

Expanded plan for the Vietnamese mercantile fleet Table 9

No.	Ship type	Year of 2005	Year of 2010
		(DWT)	(DWT)
1	Bulk carrier	218,850	291,750
2	General dry cargo ship	842,740	1,989,030
3	Container ship	197,600	499,800
4	Tanker	2,263,200	3,241,800

According to Saigon Time (2000), Vietnamese shipping companies in 1999 transported only 13.4% of the total volume of import-export cargoes. The Vietnamese fleet, with a combined capacity of over 1 million tons, carried only 1.1 million tons of rice, 0.51 millions tons of coal and 0.6 millions tons of crude oil against the total export volume of 3.8 million tons, three million tons and 11.5 million tons of the above commodities respectively.

In order to be active in the prospect of the national shipping market, VINAMARINE have drawn planned target of handling 30% and 40% export/import cargo in the years 2005 and 2010 respectively; handling well 99% north-south domestic cargo. For reaching the target the Vietnam shipping industry expects to develop the national fleet as shown in Table 9.

4.2 The Vietnamese shipowners

Vietnamese shipowners having from one to seventeen ships are 235 as shown in Table 10 (only for the fleet as mentioned in 4.1.1). In fact, there are only nine large shipping companies, which own ocean-going ships with a total deadweight about ten thousand tons and above as indicated in Table 11. The majority of them are state-owned companies. The total tons deadweight of ships owned by these shipowners alone constitutes 56.22 % of the fleet and dominates the capacity of carrying liquid bulk, dry bulk, container and also general dry cargo. The state-owned shipowners significantly contributed productivity of the national fleet.

The categories of the Vietnamese shipowners

Table 10

Shipowners	Total number of ships
129	01
43	02
22	03
14	04
8	05
5	06
5	07
1	08
1	09
1	10
2	11
2	12
2	17
Total: 235	

There are also ten other big coastal shipping companies with the number of ships owned above five ships as indicated in Table 12. Most of the coastal shipping companies are private companies, which have just been established in the line with the economic renovation policy of the Vietnamese Government since the beginning of 1989; they have less advantages than the larger ones, which are financed by the government.

The major Vietnamese shipowners and their fleets Table 11

No.	Shipowners	No. of	Average	Gross	Deadweight	M.C.O
		ships	age	tonnage		
1	VOSCO	17	19.12	150,980	249,090	107,355
2	VINASHIP	11	24.82	46,869	75,443	39,710
3	VITACO	9	26.56	25,417	44,026	21,961
4	VISERITRANS	8	16.50	7,688	9,215	7,830
5	FALCON	6	23.50	59,600	93,964	32,250
6	VITRANSCHART	6	23.33	45,533	76,228	42,750
7	Saigon Ship	6	23.67	7,649	11,253	11,080
8	VINALINES	5	16.60	45,216	49,990	40,704
9	Eastern Dragon Shipping Co. Ltd	5	28.40	22,178	33,370	17,845
	Total	73		411,130	642,579	321,485

The major Vietnamese coastal-ship owners and their fleets Table 12

No.	Shipowners	No. of	Average	Gross	Deadweight	M.C.O
		ships	age	tonnage		
1	Trung Kien Co.Ltd.	17	6.29	4,891	7,555	5,110
2	Hoang Phuong Co.Ltd.	12	5.42	3,949	6,270	4,577
3	Thanh Hoa Maritrans Co.	12	13.25	2,702	3,344	2,654
4	Dai Thanh Co. Ltd.	11	9.00	4,024	5,798	5,039
5	Quang Minh Water Way	10	11.50	1,657	2,300	1,600
6	Qui Nhon Shipping Co. Ltd.	7	12.29	1,600	1,700	1,565
7	Thanh Hoa Sea Transport	7	10.71	1,484	1,800	1,330
8	Binh Thuan Sea	7	15.57	1,368	3,340	1,360
9	Thanh Dong Transport	7	10.86	1,111	1,350	960
10	Tuan Quynh Co. Ltd.	6	8.67	3,101	4,931	3,158

The major part of the remaining shipowners is operating at very small scale with less than four coastal general dry cargo ships. These shipowners together with the ten big coastal shipowners above performed the main part of the domestic flow of cargoes. Despite the limited capacity of most privately owned vessels, they compete even on the longer coastal shipping routes. There have been an increasing amount of money invested in new building ships in this sector in recent years.

4.3 The Vietnamese ship building and repairing industry

4.3.1 The Vietnamese ship building yards

It is obviously that the Vietnamese shipbuilding capacity is still restricted to coastal size ships of around 1,000 tons deadweight and ship types of general dry cargo and tankers, while looking at the present proportions of the Vietnamese fleet built by the domestic (VN) and foreign (Fr) shippards in Table 13.

Ships built by the Vietnamese shipyards consist of 377 ships, which form 68.67 % in number of ships of the fleet. However, most of them are small size ships of less than 1,000 tons deadweight (90.72 %) and general dry cargo type of ships (93.63 %). There are just 29 general dry cargo ships of 1,000 tons deadweight and above built domestically, among them the biggest was 3,850 tons deadweight.

Table 13

The Vietnamese mercantile fleet by ship types, deadweight and place of built

	Ship type	DWT <		400≤DWT		1000≤DWT		3000≤DWT		DWT≥	
No.		400		< 1000		<3000		< 10,000		10,000	
		VN	Fr	VN	Fr	VN	Fr	VN	Fr	VN	Fr
1	Bulk carrier	-	ı	-	ı	-	ı	ı	ı	-	4
2	General dry cargo ship	189	27	135	10	28	26	1	37	-	15
3	Container ship	-	ı	-	ı	-	ı	ı	1	-	5
4	Tanker	10	9	7	3	6	13	ı	6	-	5
5	Refrigerated cargo ship	1	5	-	1	-	5	ı	ı	-	-
Total 20			41	142	14	34	44	1	44	-	29

Ships built by foreign shipyards contribute 31.33 % in number of ships in the fleet. However, these ships dominated the large size ships with the deadweight of 1,000 tons and above (117 ships against 152); they contributed to the national carrying capacity of liquid, dry bulk, container and general dry cargo on international routes.

Presently, there are about 10 shipyards for new building ships of 1,000 DWT and above located in the northern and southern areas. Among them, the following three shipyards located in the northern area can build large size ships:

Bachdang shipyard - 6,500 DWT;

Halong shipyard - 5,000 DWT; and

Benkien shipyard - 1,500 DWT.

The estimated nation-wide productivity of new building shipyards are six ships of 1,000 DWT and above per year. The time needed to build a general dry cargo ship of 1,000 DWT is on average 15 months. Technical backwardness in production efficiency, quality control and accuracy control was frequently noted in the Vietnamese shipyards. It seems that this is a most essential problem in the modernisation of all building shipyards in Vietnam so that they may contribute to the rehabilitation of the country's fleet and compete with shipyards in the region in the long term.

However, in the recent years, the Vietnamese new building shipyards have achieved the following technical improvements so that they may build standard ships to replace the excessively superannuated ships.

- the welding work is performed by the welders certified by the international classification society such as LR and NK;
- the yard design has been respectively developed in each shipyard with due consideration to their respective working practices, facilities, and capacity of workshop. Production sections have established their own proper working standards and practice to achieve higher work efficiency.
- the shipyards strict control building schedule from keel laying to the completion of the ship, and also strict respect for the delivery time limit. The placing order of machinery and materials is done intentionally in connection with the building schedule.

In the middle of 1999, Bachdang shipyard started construction of the largest ship ever built in the country, the 6,500 DWT general dry cargo ship, one of four national key engineering products entitled to preferential state financial support. Another VINASHIN facility, Halong shipyard, completed a 3,500 DWT oil product tanker in June 1999, the largest designed and built oil tanker so far in Vietnam.

4.3.2 The Vietnamese ship repairing yards

Recently, there are about 19 shipyards for repairing ships of 1,000 DWT and above located in the northern, central and southern areas. Among them, the following eight shipyards can repair large size ships.

Bachdang Shipyard	8,000 DWT
Halong Shipyard	3,500 DWT
Benkien Shipyard	2,000 DWT
Pharung Shipyard	16,000 DWT
Bason Shipyard	15,000 DWT
Saigon Shipbuilding Co.	8,000 DWT
SHIPPLACOM	10,000 DWT
Hyundai - VINASHIN Shipyard	400,000 DWT

The other 12 shipyards can repair ships of below 1,000 DWT.

In 1997, the estimated nation-wide productivity of repairing shipyards was approximately 220 ships of 1,000 - 16,000 tons deadweight per year. The distribution circumstances of repairing shipyards are as following:

- northern area (Haiphong and Quangninh areas): technical material facilities are comparatively sufficient. The estimated capacity for repairing ships is approximately 90 ships of 1,000 16,000 tons deadweight per year;
- southern area (HoChiMinh and Vungtau areas): the capacity of shipyards is small except for a few of them which are distributed separately, while the demand of repairing ships is very high. The estimated capacity for repairing ships is approximately 110 ships of 1,000 15,000 tons deadweight per year;
- central area (Danang and Khanhhoa area): the estimated capacity is approximately 20 ships of 1,000 4,500 tons deadweight per year.
 - However, with the coming into operation in March 1999 of the Hyundai-VINASHIN joint venture shipyard located in Vanphong Bay Khanhhoa, the largest and best equipped with the most modern facilities in the Southeast Asia,

the ship repairing capacity of the area has extremely increased up to 400,000 tons deadweight ships.

4.3.3 The development directions of the Vietnamese ship building and repairing industry

In the development strategy to 2010 drawn up by VINASHIN, the rehabilitation and development plans for the modernisation of shipyard facilities and machine equipment and the improvement of the technical skill and quality for repairing work are being concentrated on the ship building and repairing yards in the key economic areas, which have a big sea port system with high ship traffic density. According to the national economic development strategy, these key economic areas are the Northern, Central, and Southern areas.

In the Northern area: the shipyards are concentrated in the Quangninh-Haiphong area. This area has an almost complete mechanical network for ship building and repairing work. Therefore, in the development plan, the upgrading and widening of the shipyard facilities should be done to increase the capacities for bigger ships and to improve productivity. The expected repairing capacity in this area till the year 2010 is 400 ships of 1,000 tons deadweight and above per year, with the maximum capacity of 30,000 tons deadweight ships. The expected building capacity in this area till the year 2010 is ships up to 10,000 tons deadweight, in which the Bachdang shipyard is to become a centre for building two ships of 10,000 tons deadweight per year.

In the Central area: the present situation of this area is repairing ships only; new building is not yet available. However, the location of this area is very close to the international maritime routes, compared to other areas in the country, and it is possible to attract foreign flag ships operating in Southeast Asian and North Asian sea areas. Recently, the Hyundai-VINASHIN yard located in the area is the first to open in Vietnam targeted at ocean shipping and is used as a base for Vietnam's offshore and steel structures; the yard will also engage in building ships up to 30,000 tons deadweight ranging from normal types to special purposes such as cable layers and asphalt carriers in the short-term. Furthermore, the state plan on the economic

development in the area is to build large-scale factories and to improve port facilities. The expected repairing capacity till the year 2010 is 280 ships of 1,000 tons deadweight and above per year, with maximum capacity of 400,000 tons deadweight ships.

In the Southern area: this area has the biggest market demand for repairing ships, but the shipyards are scattered and they do not yet possess high-level abilities. The upgrading of existing shipyards facilities in HoChiMinh City is being done; a new shipyard for building two ships of 5,000 - 10,000 tons deadweight and repairing ships up to 30,000 tons deadweight and also sea drilling platforms will be built in the Vungtau - Thivai area.

The expected repairing capacity in this area till the year 2010 is 600 ships of 1,000 tons deadweight and above per year, with maximum capacity of 30,000 tons deadweight ships.

4.4 The activities of Port State Control in the Asia-Pacific region

4.4.1 Tokyo Memorandum of Understanding on Port State Control

Port State control (PSC) comes into the scene when shipowners, classification societies and flag State administrations have failed to comply with the requirements of the international maritime conventions. Although it is well understood that the ultimate responsibility for implementing conventions is left to the flag States, port States are entitled to control foreign ships visiting their own ports to ensure that any deficiencies found are rectified before they are allowed to sail. Port State control is regarded as measures complementary to the flag State control.

It is well recognised by everybody that the Asia-Pacific region has become a fast developing region economically in the world during the past years. Likewise, the volume of seaborne trade and the size of merchant fleets operating in the region increased considerably. This has resulted in increasing pressure and the urgent need for the region to promote safety at sea and to protect the marine environment, in particular, to combat the so-called "substandard shipping", a major threat to maritime safety and the marine environment. To address this concern, the Memorandum of

Understanding on Port State Control in the Asia-Pacific Region (Tokyo MOU) was concluded in December 1993 by 18 maritime Authorities in the region and came into effect in April 1994. At present, there are 17 Authorities which have officially accepted the Tokyo MOU.

The number of annual port State inspections increased from 8,000 in 1994 to 14,921 in 1999. This is a reflection of the serious efforts made by the member Authorities to achieve what it set out to do. Recently, the Tokyo MOU adopted the adjustment to the regional inspection percentage from 50 % to 75 % of the ships operating in the region. The effective date of the amendments is 1 November 2000. For the purposes of the Memorandum, SOLAS 74/78, MARPOL 73/78, LL 66, Tonnage 69, STCW 78, COLREG 72 and ILO Convention No.147 are the relevant instruments on which regional port State control is based.

4.4.2 The detention of Vietnamese flag ships in the Asia-Pacific region

According to the annual report of Port State Control in the Asia-Pacific region, in 1999, 14,921 ships registered in 99 countries were inspected in the Asian-Pacific ports, which represents an increase of 2.6 % compared with 1998.

The Vietnamese ships detained by Tokyo MOU members Table 14

	1994	1995	1996	1997	1998	1999
Number of ships inspected	19	39	51	55	62	73
Number of ships with deficiencies			43	46	50	54
Number of deficiencies			637	605	647	594
Number of detentions	2	11	28	22	9	9
Detention percentage	10.53	28.21	54.90	40.00	14.52	12.33
Average value in the region	3.80	5.93	5.63	5.41	7.29	7.18

Source: Tokyo MOU Annual Reports from 1996 to 1999

As a result, among them 9,599 ships were found with deficiencies; 1,071 ships registered in 55 countries were detained to rectify their deficiencies. Traditionally, Australia and Japan have led the way on inspections made, and have good cooperation with China, South Korea, Malaysia, Singapore, Indonesia, Hongkong and the Russian Federation in this respect.

Table 15

Deficiencies by categories for detained ships in 1996, 1997, 1998 and 1999

	No. of	No. of	No. of	No. of
Nature of deficiency	deficiencies	deficiencies	deficiencies	deficiencies
	1996	1997	1998	1999
Ship's certificates/logbooks	1,036	1,767	3,646	2,204
Crew	420	910	1,267	1,234
Accommodation	850	1,102	920	717
Food and catering	496	520	387	462
Working spaces	123	306	267	260
Lifesaving appliances	8,290	10,447	11,025	10,266
Fire fighting appliances	5,248	6,589	8,050	6,407
Accident prevention	257	289	352	521
Safety in general	4,067	4,477	5,816	5,550
Alarm signal	158	151	180	145
Cargo	270	338	617	517
Load lines	3,441	4,034	4,209	3,844
Mooring and arrangements	387	393	619	638
Propulsion and auxiliary machinery	1,168	1,269	1,665	1,555
Navigation	2,616	3,997	5,542	5,813
Radio	890	1,189	1,275	2,504
Marine pollution - Annex I MARPOL	756	1,418	2,104	2,944
Tankers	60	85	88	93
Marine pollution - Annex II MARPOL	22	30	40	36
SOLAS related operational deficiencies	575	1,757	3,047	2,641
MARPOL related operational	103	183	486	814
deficiencies				
Marine pollution - Annex III MARPOL	20	16	23	50
Marine pollution - Annex V MARPOL	_		18	83
ISM related deficiencies	-	-	419	531
Other deficiencies	347	189	289	307
Total	31,600	41,456	52,351	50,136

Source: Tokyo MOU Annual Reports from 1996 to 1999

In 1999, 73 Vietnamese flag ships were inspected by the Authorities in the region; among them, 9 ships were detained because of serious deficiencies found on board. From Table 14, it is clear that the detention rates have been continuously high for the Vietnamese ships since 1994. According to the Tokyo MOU annual reports, Vietnam had been at the top list of the ship detentions per flag from 1994 to 1997. There was a significant improvement of the fleet condition in 1998 and 1999 with the seventh and

eighth position in the list; however, the rate for detention compared with the number of inspections carried out was still almost double against the average detention rate of the whole region.

Through the inspections, 50,136 deficiencies were recorded in 1999. From the statistic figures as shown in Table 15, it is noted that the main categories of deficiencies are deficiencies in life saving appliances and fire extinguishing appliances; these two categories alone contributed 42.84 %, 38.32 %, 36.44 % and 33.26 % deficiencies in 1996, 1997, 1998 and 1999 respectively. Based on this statistics, the diversity of the Vietnamese ships' deficiencies should also be at the same scale.

4.5 The IMO instruments on Flag State Implementation

4.5.1 The IMO's Sub-Committee on Flag State Implementation (FSI)

Since established, IMO has succeeded in winning the support of the maritime world by being pragmatic, effective and above all by concentrating on the technical issues related to safety at sea and prevention of pollution from ships, topics that are of most concern to its member States. Besides a safety culture policy, policies aimed at shifting of emphasis from the development of new to the implementation of existing standards (Flag State Implementation), support to port State control when implementation is lacking, and emphasising the role of the human element (STCW, ISM Code), so much linked to IMO actions nowadays, are high on the IMO's agenda. It was agreed that the effectiveness of IMO safety and pollution prevention instruments depends primarily on the application and enforcement of their requirements by the States party to them and that there is an increasing awareness that States have experienced difficulties in complying fully with the provisions of the instrument.

Recognising that a new IMO body, namely the Sub-Committee on Flag State Implementation (FSI), was established at the end of 1992. The FSI has as a primary objective the identification of measures necessary to ensure effective and consistent

global implementation of IMO instruments and also consideration of the special related difficulties faced by developing countries.

During its eight years of existence the FSI has progressively discharged its mandate and produced several important sets of guidelines and recommendations; some have already been adopted by the IMO Assembly, while others are still in drafting process and subject to the consideration and approval of MSC and MEPC. Among these instruments, the following ones are considered as the great achievement FSI has reached through the years.

- the Resolution A.739(18) Guidelines for the authorisation of organisations acting on behalf of the administration.
- MSC/Circ.710/MEPC/Circ.307 Model agreement for the authorisation of recognised organisations acting on behalf of the administration.
- Resolution A.789(19) Specifications on the survey and certification functions of recognised organisations acting on behalf of the administration.
- Resolution A.847(20) Guidelines to assist flag States in the implementation of IMO instruments.
- MSC/Circ.889/MEPC/Circ.353 Self-assessment of flag State performance.
- 4.5.2 Guidelines for the authorisation of organisations acting on behalf of the administration

Noting that the administrations are responsible for taking necessary measures to ensure that ships flying their State's flag comply with the provisions of the relevant conventions ratified by the government of the country such as SOLAS 74/78, Load Lines 66, MARPOL 73/78 and STCW, including surveys and certification as required, in order to ensure prevention of maritime casualties and marine pollution from ships.

However, under several regulations of the above-mentioned conventions such as regulation I/6 of SOLAS 74 and regulation 4 of Annex I and regulation 10 of Annex II of MARPOL 73/78, the administration may entrust the surveys and certification to nominated surveyors or recognised organisations and further that the administration

shall notify the Organisation of the specific responsibilities and conditions of the authority delegated to those parties. With the aim of assisting flag State in the matter, the resolution A.739(18), adopted on 4 November 1993 by Assembly, laid down the uniform procedures and a mechanism for the delegation of authority to, and the minimum standards for, recognised organisations acting on behalf of the administration.

The text of the resolution stated that control in the assignment of such authority is needed in order to promote uniformity of surveys and maintain established standards. Therefore, any assignment of authority to recognised organisations should:

- determine that the organisation has adequate resources in terms of technical, managerial and research capabilities to accomplish the tasks being assigned, in accordance with the minimum standards set out in appendix 1 of resolution;
- have a formal written agreement between the administration and the organisation being authorised which should as a minimum include elements as set out in appendix 2 of resolution or equivalent legal arrangements;
- specific instructions detailing actions to be followed in the event that a ship is found not fit to proceed to sea without danger to the ship or persons on board, or presenting unreasonable threat of harm to the marine environment;
- provide the organisation with all the appropriate instruments of national law giving effect to the provisions of the conventions or specify whether the administration's standards go beyond convention requirements in any respect;
 and
- specify that the organisation maintains records, which can provide the administration with data to assist in interpretation of convention regulations.

Furthermore, the administration should establish a system to ensure the adequacy of work performed by the organisations authorised to act on its behalf; the system should, inter alia, include the following items:

- procedures for communication with the organisation

- procedures for reporting from the organisation and processing of reports by the administration
- additional ship's inspections by the administration
- the administration's evaluation/acceptance of the certification of the organisation's quality system by an independent body of auditors recognised by the administration
- monitoring and verification of class-related matters, as applicable.
- 4.5.3 Model agreement for the authorisation of recognised organisations acting on behalf of the administration

As mentioned in 4.5.2, the resolution A.739(18) prescribes that any assignment of authority to recognised organisations should have a formal written agreement between the administration and the organisation concerned which should as a minimum include the elements as set out in appendix 2 of the resolution, or equivalent legal arrangements. In order to assist administration when formalising in writing a delegation of authority for the purpose of having statutory certification services rendered by a recognised organisation on their behalf, in implementation of the above provisions, the model agreement was approved by MSC and MEPC. The text of the model agreement covers all items identified in the appendix 2 of resolution A.739(18). The Appendices 1 and 2 are integral parts to the model agreement; the former specifies the specific scope and extent of the delegated duties and authority which has to be individually set up in accordance with the intent of the administration; the latter specifies the reporting and communication patterns for the execution of the delegated duties which have to be individually agreed between the administration and the recognised organisation commensurate with the needs of both parties.

4.5.4 Specifications on the survey and certification functions of recognised organisations acting on behalf of the administration

In the line with the matters laid down by resolution A.739(18), the resolution A.789(19) indicates the detailed specifications on the precise survey and certification

functions of recognised organisations. The principle of the resolution is to divide the specifications required into different elementary modules with a view to selecting the relevant modules for each function of survey and certification. The specifications are categorised by the management, the technical appraisal performance, the survey functions and the qualifications and training of personnel of the recognised organisation.

4.5.5 Guidelines to assist flag States in the implementation of IMO instruments

As the matter of fact that, some flag States have encountered difficulties in fully implementing IMO instruments and in ensuring that prompt and timely surveys are conducted, which were caused by factors including finances, personnel and technical expertise, delegation of authority, division of responsibilities and inadequate supervision of bodies acting on behalf of the flag State. This instrument is aimed at assisting the member States to overcome these difficulties and to fully carry out their obligations as required by the conventions ratified by them. The text of resolution A.847(29) covers the necessary legal basic, actions, tasks, organisations and personnel that should be provided and performed in consideration of ratifying a convention, in implementing and enforcing it.

4.5.6 Self-assessment of flag State performance

The self-assessment is useful to member governments to obtain a clear picture of how well their maritime administrations are functioning. In turn, this would enable them to assess their deficiencies and take appropriate action, including requesting assistance to improve the situation. The outcome of any such assessment might also be used as basis for bilateral discussions between flag and port State concerned, which would lead to a more co-operative approach towards enhancing safety and environmental protection.

Member governments and parties to IMO safety and pollution instruments concerned, seeking technical assistance through IMO for the purpose of enabling them to fulfil their responsibilities as flag States may, to this end, communicate a copy of the self-

assessment to the IMO Secretary-General for the evaluating and determining the required assistance.

CHAPTER V

SWOT Analysis and Issues

5.1 SWOT analysis

5.1.1 Strengths

.1 Management system

Firstly, VR has clearly set out the mission for the existence and development of the organisation. This clear set of objectives for VR business, as mentioned in section 3.4 of Chapter III, is the fundamental basis for defining the requirements for the Quality Management System (QSM) of the organisation. The following text is extracted from the mission statement of the Australian Maritime Safety Authority in order to give a fully demonstration for the accuracy of VR's one.

The Australian Maritime Safety Authority will pursue world's best practice in the efficient provision of high effective maritime safety, ..., and maritime environment protection services. We will achieve this by continuing to develop our understanding of, and relationship with, our stakeholders (especially the Australian Government, the community and the maritime industry) and by applying the latest in management techniques, organisational systems and technology to fulfil their needs.

Secondly, VR has successfully launched the quality management system which was certified to comply with the ISO 9002. It provides the best tool to support the General Director to organise the activities so all the factors (be they technical, administrative or human) affecting the quality of the services VR

produces are under control. The VR Quality Policy as mentioned in section 3.4 of Chapter III, defined and published by the General Director based on the mission statement, is clearly set out in the QSM. It ensures that quality is taken seriously by all employees in the organisation; moreover, it defines the quality objectives of the business and helps demonstrate the commitment of the General Director to quality. This policy is published throughout the organisation, understood by employees, supported by management and regularly reviewed and maintained.

In order to be able to demonstrate that the General Director commitment is handed down and taken on board by each manager within the organisation, the requirements to implement the organisation's Quality Policy throughout each manager's area of influence were incorporated into his job description.

Quality documentation is ones of the keys to running an effective Quality Management System. The comprehensive set of documentation has been written to describe appropriate procedures to control the quality of the services. It consists of the different types of documentation as illustrated in Figure 2.

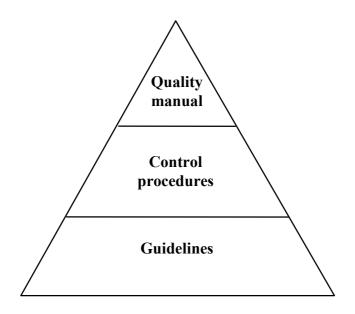


Figure 2: The pyramid of QMS documentation of VR

The Quality manual describes how a company ensures conformance to ISO 9002. As mentioned in section 3.4 of Chapter III, the manual starts with a statement of the Quality Policy, and defines how this is put into practice by addressing each of the requirements of ISO 9002. Detailed control procedures and other documents are referred to as appropriate under Chapter 4 of the manual. The manual is a formal declaration by VR of how it assures Quality, and forms a documented set of managerial instructions on Quality matters.

Control procedures define in detail the methods and controls adopted throughout VR to assure quality. These procedures, as discussed under section 3.5 of Chapter III, cover the authorised tasks and supported tasks of the statutory surveys and certification; they generally affect a number of people and departments, and frequently cover interfaces between functions. Individual Guidelines are refereed to where appropriate.

Guidelines are also available and define how to perform specific tasks or processes. They generally apply only to one task or to a small group of people, and include such as specific survey instructions, test specifications and calibration methods.

One commitment that is essential to meet the requirements of ISO 9002 is the nomination of a senior manager to be responsible for the continued integrity of the QMS. Within VR, the General Manager of the Internal Quality management Department is assigned this role. He has two key roles:

- to ensure that QSM is developed, implemented and maintained in accordance with ISO 9002; and
- to report on the performance of the QMS to the Director General.

.2 Rules and regulations

VR has established the appropriate Rules for governing the statutory activities. It is vital that, for achieving the "total" internationally recognised standard of ship safety and marine pollution prevention, ships must comply with the applicable IMO conventions and the rules of a classification society. As

discussed under section 3.1 of Chapter III, VR rules and regulations provide the uniquely set of requirements combine both classification rules and the requirements of the conventions; VR is therefore uniquely placed to positively assist builders and owners to comply with every aspect of the necessary regulatory instruments.

As mentioned in paragraph 2.2.3.1 of Chapter II, it is the obligation of VR to interpret and incorporate the requirements for design, construction arrangements and equipment contained in the IMO conventions and the related Codes and Resolutions into VR rules. These instruments contain detailed requirements for safety and marine environment protection, items other than those pertaining to hull structures and essential shipboard engineering systems; moreover, many of them contain statutory requirements that are conditional on the ship's structural and mechanical "fitness for purpose".

The gaps are covered by the remained part of VR rules which is developed in co-ordination with NK, an international classification society, and on the basis of the considerable experience of VR gained throughout its functioning. This part of rules contains detailed requirements for:

- Materials
- Ship structures
- Main and auxiliary machinery
- Control engineering systems
- Electrical installations.
- .3 Organisation and personnel

Firstly, VR has established a proper network consisting of Departments in Headquarters and outport offices throughout the country, especially in the busiest maritime locations of Vietnam. As discussed under section 3.2 of Chapter III and illustrated by Appendix III, the statutory survey and certification tasks are mainly delivered by six Departments in which the ClD and the RuD are the core machine. The network of branch offices is located

along the coastline of Vietnam. As the density of maritime activities has been highly focusing in Haiphong and HoChiMinh City, the branch offices located there are the two biggest with efficient management and sufficient qualified surveyors. In recent year, there has been a considerable increase of maritime activities such as offshore activities, ship repairing activities and trading activities in Vungtau, Quangninh and especially in Nhatrang; the branch offices there have been upgraded accordingly to catch up with the changing of the local environment.

Secondly, VR has sufficiently employed the staff with the basic level of university degree such as Naval Architect, Mechanical Marine Engineer, Marine Electrical Engineer, Marine Electronic Engineer capable for carrying out the statutory tasks. As illustrated in the section 3.7 of Chapter III, the organisation with these staff successfully performed a burden of work every year, including the initial and periodical surveys as required by statutory regulations of Vietnamese flag ships and foreign flag ships, the reviewing of survey reports and the evaluating of the performance of VR surveyors.

.4 Relationship with the maritime industry

VR has maintained the closest business relationship with the other related maritime sectors during its 35 years of functioning. Growing up from a Department of the MOT, VR has attracted enormous support from the public, national maritime industry, Vietnamese government, foreign maritime firms and international organisations to become an important part of the industry as it is now. It is obviously proved through the expanding of the business from the providing services for only sea-going and river-going vessels and associated equipment to the covering also of offshore facilities, fishing vessels, automobile and vehicle and safety management certification. VR has also had good co-operation with international organisations and foreign classification societies. As discussed in section 3.6 and 3.7 of Chapter III, the organisation has announced the signing of a co-operative agreements with ten international

classification societies and has performed a significant number of ship surveys on behalf of these societies; moreover, VR has received the technical assistance through the co-ordination in the formulation of VR rules and the training programmes of a large number of VR employees by them. The training of seven VR staff at WMU, the special agency of IMO, clearly demonstrates the support of IMO to the improvement of flag State implementation in Vietnam.

5.1.2 Weaknesses

.1 Management system

Within the control procedures discussed under section 3.5 of Chapter III, there are some procedures not fully adapted the statutory requirements.

The control procedure for issuing full-term statutory certificates was discussed under paragraph 3.5.4 of Chapter III. The regulation I/4(b) and IV/3.3 of SOLAS 74/78 and article 6(3) of Load Lines 66 require an administration which allows any exemption as regulated under the convention shall communicate to IMO particulars of same and the reasons therefor which IMO shall circulate to the contracting governments for their information. However, the text of this procedure not yet specifies any notification of the matter.

The regulation I/21(b) of SOLAS 74/78 and article 23(2) of Load Lines 66 require an administration undertakes to supply IMO with the pertinent information concerning the finding of maritime casualty investigations under its jurisdiction. As mentioned in paragraph 2.2.3.4.5 of Chapter II, VR is obligated to take part in carrying out maritime casualty investigations while VINAMARINE plays a main role. However, the SOLAS 74/78 and Load Lines 66 are mainly the responsibilities of VR. So, it is necessary for VR to comply with the above-mentioned provisions. The control procedure for this matter discussed under paragraph 3.5.11 of Chapter III shows that there is no requirement about this communication.

The articles 11(1)(a) and (c) of MARPOL 73/78, articles 26(1)(a) and (b) of Load Lines 66, and articles 15(a) and (b) of Tonnage 69 require an

administration undertake to communicate to IMO the specimens of their certificates issued under the requirements of conventions and the text of legal instruments which have been promulgated on the requirements of the conventions. These two matters are also not yet covered by the control procedure for establishment, revision and provision of the certificate and survey reports forms as mentioned in paragraph 3.5.9 of Chapter III and the control procedure for establishment, revision and provision of Rules.

As required by various provisions of IMO instruments such as article III of Protocol 1978 of SOLAS 74, article III of Protocol 1978 of MARPOL 73, article 26(1)(c) of Load Lines 66 and article 15(c) of Tonnage 69, an administration undertake to notify the IMO of the list of nominated surveyors of recognised organisations which are authorised to act on behalf of it and the specific responsibilities and conditions of the authority delegated. Moreover, the delegation of authority is required to comply with resolutions A.739(18) and A.789(19) as minimum requirements, the requirements of regulation XI/1 of SOLAS 74/78, and the analogous requirements of MARPOL 73/78. Looking at the control procedure for recognition and delegation to international classification societies in paragraph 3.5.12 of Chapter III, there is no consideration about the matters. Furthermore, as discussed under section 3.6 of Chapter III and paragraphs 4.5.2 and 4.5.3 of Chapter IV, it is clear that the recent agreements of co-operation between VR and the international classification societies can not satisfy the requirements set out in the abovementioned resolutions for a agreement of recognition and delegation.

.2 Laboratory facilities, tools and equipment

Firstly, VR has not yet the laboratory facility for performing tasks such as research and tests. Therefore, the organisation has to conduct the activities such as material examination and non-destructive tests at outside institutions and/or shipyards. However, those available facilities are not properly operated due to

lack of maintenance procedures and low technology equipment originally supplied from Eastern European countries.

Secondly, there are not sufficiently equipment, tools and safety gears to support a surveyor while he is carrying out the surveys. VR branch offices are responsible for conducting surveys onboard ships but do not have enough equipment nor instruments to confirm safe working conditions. Regarding surveys of new ships during construction, all machines, equipment and steel material are imported from foreign countries, which results in diversity of quality depending on the country of origin; so, it is very difficult for VR to carry out strict surveys and approval while it is not fully capable of testing performance.

.3 Personnel

VR still does not have sufficiently qualified surveyors for carrying out the surveys as required for the large ships and new types of ships. As discussed under section 4.1 of Chapter IV, the Vietnamese mercantile fleet is dominated by the large number of small size ships of general dry cargo type. Moreover, the Vietnamese ship building and repairing industry just experienced the thousands tons deadweight ships as illustrated through section 4.3 of Chapter IV. So, it is clear that the experience and technical knowledge VR surveyors gained from site surveys correspondingly restricted to this type and size of ships.

5.1.3 Opportunities

.1 The successfully launched QMS

The successfully launched QMS of VR is the key to achieving customer satisfaction and to improving the organisation's business performance. The approved QMS provides assurance to VR's customers that the organisation is committed to quality. It demonstrates that VR has implemented procedures which enable it to:

- identify the requirements of its customers

- ensure it is able to supply services in accordance with those requirements
- ensure delivered services conform to those requirements.

The effective activating of QMS will ensure that the activities of the business are understood, controlled and documented. This enables everyone in the organisation to know what they are doing and how to do it. As a result, inefficiencies and waste may be targeted and eliminated.

The benefits of an effective QMS are many but the following are typical benefits VR could gain through the implementation:

- satisfied and loyal customers because services are always produced according to their requirements;
- reduced operating costs as waste is eliminated and efficiency increasing as result of eliminating non-conformance;
- improved effectiveness of a public organisation as operating costs are reduced; and
- improved morale as employees develop greater understanding of the business, are able to work efficiently, and are involved in managing their working environment.

.2 The improvement of the Vietnamese maritime industry

Firstly, there has been changes in the way of management, operation and maintenance ships of the Vietnamese shipowners since the regional PSC was activated in the Asia-Pacific region. As discussed under section 4.4 of Chapter IV, the Vietnamese fleet had been at the top list of the ship detentions per flag in the region from 1994 to 1997; however, there have been significantly improvements in the past two years. This obviously demonstrated that the shipping industry and in particular the shipowners have made more efforts in management, operation and maintenance of the ships' technical condition.

Secondly, there has been better understanding of the responsibilities of a maritime administration in implementing IMO conventions to be ratified by the Government within the Vietnam Maritime Administration. With the

introduction of resolution A.739(18), circular MSC/Circ.710/MEPC/Circ.307, resolution A.847(20) and circular MSC/Circ.889/MEPC/Circ.353 as mentioned in section 4.5 of Chapter IV, VMA has recently been discussing to obtain a clear picture of how VMA were functioning and to assess deficiencies in performance of flag State implementation.

Finally, there has been a positive improvement of the ship building and repairing industry. As discussed under section 4.3 of Chapter IV, the involvement in building and repairing larger size ships of shipping industry is the best chance for VR to get in touch with the new technology and to exercise the statutory requirements for these subjects; furthermore, the organisation and its surveyors could gain experience and in turn improve its performance and rules.

.3 The international recognition of VR

Firstly, VR could have the support from the international classification societies and IMO for the training of surveyors and exchanging of technical expertise. As discussed under section 3.6 of Chapter III, the agreements between VR and IACS members address new constructions and conversions as well as statutory surveys and surveys of materials and equipment intended for installation on board ships. For ensuring there are VR surveyors available to carry out the surveys of the other parties' classed ships in Vietnam, these agreements also provide co-operative training programs for VR surveyors.

As pointed out in section 2.2 of Chapter II, VR is an important part of the Maritime Safety Administration to implement IMO instruments in Vietnam. So, in line with IMO's policy of shifting to the implementation of existing standards, the organisation has had the assistance of IMO through the training of its staff at the IMO training institutes. It could also get technical support from the co-ordinating with the Technical Co-operation Committee of IMO.

Secondly, VR has achieved the recognition of the IACS members in carrying out the surveys on their behalf. As illustrated under section 3.6 and 3.7 of

Chapter III, the co-operation between VR and all of the IACS members and the increasing number of surveys of IACS member classed ships carried out by VR in the recent years proved the entrusting of the organisation and its surveyors with the quality of services.

5 1 4 Threats

.1 The technical condition of the Vietnamese fleet

The Vietnamese fleet is not in good technical condition. As discussed under paragraph 4.1.2 of Chapter IV, the fleet has a rather high age with the majority of ships between 10 and 30 years old. A ship, when navigating at sea, is always exposed to the external hazards imposed by a very hostile environment of the sea and by other ships and to the internal hazards imposed by the ship itself such as cargo, main engine and auxiliary machinery systems; on the other hand, it also imposes hazards on the marine environment and other ships. So, the older the ship means the higher the risk to the safety at sea and environment protection. The matter is also reflected by the high rate of ship detentions per flag of the Vietnamese ships in the Tokyo MOU region as mentioned in paragraph 4.4.2 of Chapter IV. It is therefore a challenge for VR to enforce the statutory tasks and to balance the requirements for a pragmatic regulatory framework with the provisions of IMO instruments.

.2 The characteristics of the Vietnamese shipowners

It is vital that the majority of the Vietnamese shipowners are operating at small scale. As discussed under section 4.2 of Chapter IV, 73 % of the Vietnamese shipowners are operating their fleets with less than three ships. It is a fact that, at this scale, the shipping companies do not have a technical staff for ensuring the proper operation and maintenance of the ship. Furthermore, in recent years, the Asian finical crisis has been making ship operations less efficient, so the owners get less money to repair and to maintain ship class, and in turn ships are put in more dangerous situations.

.3 The developmental trend of the Vietnamese maritime industry

As discussed under paragraph 4.1.3 of Chapter IV, the Vietnamese maritime industry has been activating the expanded plan of the Vietnamese fleet for catching up with the transportation demand of the country and simultaneously improving the technical condition of the fleet. The large and new types of ships including bulk carriers, container ships, oil tankers and LNG carriers have been purchased from the foreign companies or built domestically. There has also been improvement in the Vietnamese shipbuilding and ship repairing industries as discussed under paragraph 4.3.3 of Chapter IV. The shipyards are now capable of repairing ships up to 400,000 tons deadweight and are going to construct ships up to 30,000 tons deaweight. So, it is a big challenge for VR and its surveyors to fully exercise the authorised regulatory functions.

5.2 Issues

The following strategic issues are proposed as the results of the above analysis of the business environment of VR:

- handling IMO matters
- enhancement of the qualification of VR surveyors
- enhancement of the test and research capacity
- information to the Vietnamese shipowners

CHAPTER VI

Proposals for Measures

6.1 Handling of IMO matters

6.1.1 Revision of control procedures

In order to fulfil the obligations of a party to the IMO conventions, VR needs to revise the following control procedures according to the weaknesses pointed out in paragraph 5.1.2.1 of Chapter V and also the control procedures having cross functions with the revised items:

- procedure for issuing full-term statutory certificates;
- procedure for maritime casualty investigation;
- procedure for establishment, revision and provision of the certificate and survey reports forms; and
- procedure for recognition and delegation of authority to foreign classification societies.

Regarding the agreements for the authorisation of recognised organisations acting on behalf of VR, in the drafting process, it is recommended that a reference be made to the agreement between the Finnish Maritime Administration and Lloyd's Register of Shipping as set out in Appendix VI.

6.1.2 Participating in IMO activities

There are valid reasons for VR to put its personnel on IMO matters, and may even have to strengthen its concern on such matters.

Firstly, VR is responsible for exercising a major part of safety and environment protection regulatory functions within VMA; so, this responsibility should be

discharged properly not only by implementing internationally accepted minimum standards for Vietnamese flag ships, but also by participating in the process of formulation of these standards.

Secondly, VR has in-house marine technical knowledge and experience gained from the practical implementation of statutory tasks and, moreover, has very close relationship with shipyards' technical personnel, shipowner's expertise and other ancillary industries; so, it is easy for VR to improve the country's IMO activities.

Thirdly, IMO gives the best opportunity for VR to follow international trends. IMO has been playing a main role for the initiative of the maritime technical world since its foundation; all new issues on maritime technical matters are discussed in IMO first by the bodies of the organisation.

6.2 Enhancement of the qualification of VR surveyors

It is obviously that VR surveyors need to be enhanced in their professional and qualifications to cope with the changes of the shipping industry. By making reference to resolution A.789(19), VR should upgrade the management, technical appraisal and survey capacity of both the staff at Headquarters and site surveyors for then to be capable of exercising statutory tasks to large size and new types of ships. The following technical appraisal capacity should be improved:

- hull structure;
- machinery systems;
- intact and damage stability;
- grain loading stability;
- structural fire protection and fire isolation;
- use of combustible materials:
- fire detection and fire alarm systems and equipment;
- fire-extinguishing system and equipment;
- inert gas systems;
- crude oil washing;
- protective location of segregated ballast spaces;

- noxious liquid substances pollution prevention;
- GMDSS installation;
- carriage of dangerous chemical in bulk; and
- carriage of liquefied gases in bulk.

For doing that, the organisation should exert more efforts and allocate more budget in the training of staff both at the time of recruitment and subsequent in-service training. In this regard, it is necessary to establish a training centre with a full-time staff of lecturers who provide both initial and in-service training for VR surveyors. The lecturers at the centre can be supplemented by specialists invited from particular fields, the international classification societies, international organisations and from the organisation's resources.

Furthermore, it is worth maintaining the close relationship with IMO, the international classification societies and non-governmental organisations to continue the technical co-operation and training programmes.

6.3 Enhancement of the test and research capacity

It is vital that various tests and examinations should be carried out when the surveyors perform the ship surveys. To ensure the safety of the working environment and to efficiently do the job, the following equipment and tools should be provided in addition to site surveyors:

- inflammable gas detector: to confirm the safety working environment
- oxygen-gas detector: to confirm the safety working environment
- ultra-sonic thickness detector: to confirm thickness of steel plates
- magnetic particular tester: to confirm metal surface defects
- ultra-sonic flaw detector: to confirm defects inside steel products

Testing laboratories capable of performing tests and examinations of such as materials, welding samples, safety devices, radio equipment and electrical equipment should be provided at least in the Headquarters and large branch offices like Haiphong and HoChiMinh for ensuring the credibility of the services and, moreover, for fully controlling the technical condition of a ship and its equipment. The

laboratory at the Headquarters should also be provided with the facilities for performing research.

6.4 Information to the Vietnamese shipowners

It is necessary that VR should continuously inform shipowners about the statutory requirements in relation to operation and maintenance of the ships. The main purpose of the tasks is to make shipowners active in planning ships' survey and repairing schedule. The due date of the next statutory survey, of course having on hand of shipowners, however, VR should still keep notifying them several months before. The recommended items of the past surveys not yet repaired should be sent directly to the managers for taking decisions.

As there is lack of capacity for proper operation and maintenance of the ships, VR should publish guidelines for shipowners in these matters. These guidelines should cover matters such as a brief introduction about statutory requirements for surveys and certification, list of items under the scope of the periodical surveys, list of items to be maintained during operation and the procedure for survey application.

Furthermore, shipowners should be well aware of the new application of statutory requirements for their ships. While handling regulatory regulations, VR should categorise new requirements which will be applied for each specific type of ship and, then inform the appropriate shipowners for their financial and upgrade planning.

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APPENDICES

Appendix I

Chapters of the Vietnam Maritime Code

Chapter I: General Provisions

Chapter II: Sea-going Vessels

Chapter III: Ship crews

Chapter IV: Seaports and Port Authorities

Chapter V: Contract of Carriage of Cargo

Chapter VI: Contract of Carriage of Passengers and of Luggage

Chapter VII: Charter Parties

Chapter VIII: Ship's Agents and Shipbrokers

Chapter IX: Maritime Pilotage

Chapter X: Towage Service at Sea

Chapter XI: Maritime Salvage

Chapter XII: Recovery of Property from the Sea

Chapter XIII: Collisions

Chapter XIV: General Average

Chapter XV: Civil Liability of Shipowner

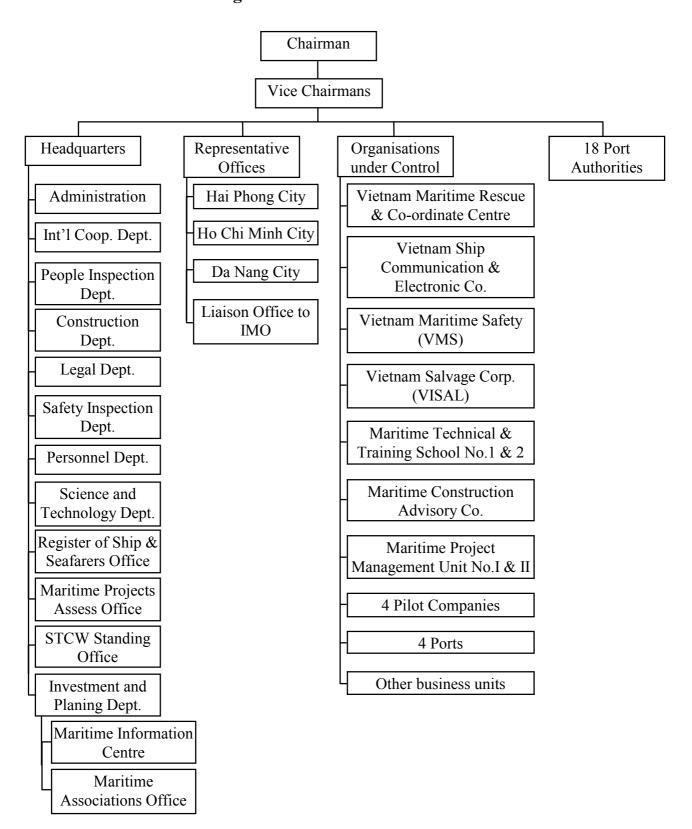
Chapter XVI: Contract of Marine Insurance

Chapter XVII: Settlement of Maritime Disputes

Chapter XVIII: Final Provisions

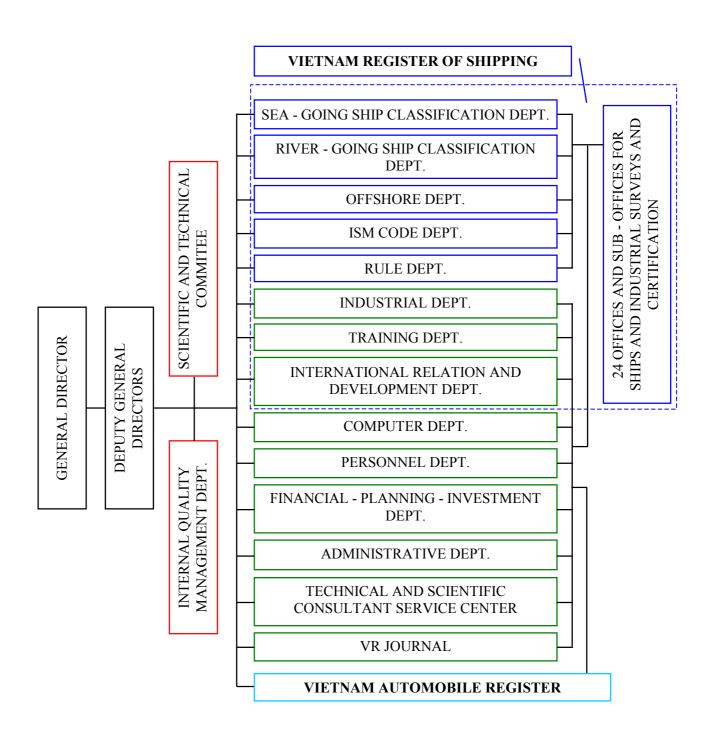
Appendix II

The organisation chart of VINAMARINE



Appendix III

The organisation chart of VR



Appendix IV

The VR Rules and Regulations

- TCVN 6259: 1997 Rules and regulations for construction and classification of steel seagoing ships, including the following parts:
 - Part 1 General Provisions
 - Part 2 Hull construction and equipment
 (For ships of 90 meters and above; and
 for ships from 20 to 90 meters)
 - Part 3 Machinery installations
 - Part 4 Electrical installations
 - Part 5 Fire protection, detection and extinction
 - Part 6 Welding
 - Part 7 Material and equipment
 - Part 8 Special purpose vessels

Steel barges

Work-ships and special purpose barges

Submersibles

Ships carrying liquefied gases in bulk

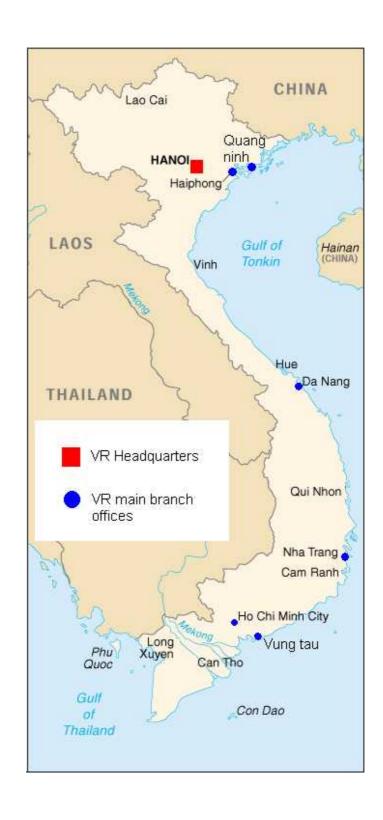
Ships carrying dangerous chemicals in bulk

- Part 9 Sub-division
- Part 10 Stability
- Part 11 Load lines;
- TCVN 6272: 1997 Rules and regulations for construction and survey/testing of lifting appliances fitted on board sea-going ships;
- TCVN 6273: 1997 Rules and regulations for construction and certification of containers carried at sea;
- TCVN 6274: 1997 Rules and regulations for construction and classification of floating docks:
- TCVN 6275: 1997 Rules and regulations for construction and certification of refrigerating plants;

- TCVN 6276: 1997 Rules and regulations for construction and certification of pollution prevention equipment fitted onboard ships;
- TCVN 6277: 1997 Rules and regulations for construction and certification of automation and remote control equipment;
- TCVN 6278: 1997 Rules and regulations for construction and certification of sea-going ship safety equipment;
- TCVN 6279: 1997 Rules and regulations for preventive machinery maintenance systems;
- TCVN 6280: 1997 Rules and regulations for navigation bridge systems;
- TCVN 6281: 1997 Rules and regulations for diving systems;
- TCVN 6282: 1997 Rules and regulations for construction and survey of glass-reinforced plastic vessels;
- TCVN 5309-5319: 1991 Regulations for construction and classification of mobile offshore units;
- TCVN 6171: 1996 Regulations for construction and classification of fixed offshore units;
- Regulations for construction and classification of floating storage units;
- Regulations for construction and classification of sea submerged oil/gas pipelines;
- Rules and regulations for construction and classification of high speed craft;
- Rules and regulations for construction and survey of small sea-going vessels;
- Rules and regulations for construction and survey of wooden ships 1984;
- Rules and regulations for construction and survey of sea-going fishing vessels;
- Rules and regulations for sea-going ship tonnage measurement 1983;
- Rules and regulations for transportation of dangerous goods by sea 1988; and
- Other specifications and standards.

Appendix V

VR main branch offices



Appendix VI

Agreement governing the delegation of statutory certification services for vessels registered in Finland between the Finnish Maritime Administration and Lloyd's Register of Shipping

This Agreement, pursuant to Finnish law and in compliance with EU Council Directive 94/57/EC and the "Guidelines for the authorisation of organisations acting on behalf of the Administration" IMO Assembly resolution A.739(18) and the Annexes thereto, is concluded between LLOYD'S REGISTER OF SHIPPING, hereinafter referred to as "LR", and THE FINNISH MARITIME ADMINISTRATION, hereinafter referred to as "the Administration" with respect to the performance of marine statutory surveys and issuance of relevant certificates.

1 PURPOSE

1.1 The purpose of this Agreement is to delegate authority to perform statutory certification services based on the SOLAS 1974, MARPOL 1973/78 and Load Line 1966 Conventions, and to define the scope, terms, conditions and requirements of that delegation.

2 GENERAL CONDITIONS

- 2.1 Statutory certification services comprise the assessment of vessels registered in Finland and classified by LR in order to determine the compliance of such vessels with the applicable requirements of the international conventions, codes and national regulations, circulars and additional instructions (hereinafter referred to as "applicable instruments") and the issue of relevant certificates, as set out in Appendix 1 hereto.
- 2.2 In so far as the certification services covered by this Agreement are concerned, LR agrees to co-operate with port state control officers to facilitate the rectification of reported deficiencies on behalf of the Administration when so requested, and report to the Administration.
- 2.3 Statutory services rendered and statutory certificates issued by LR, in accordance with this Agreement, will be accepted as services rendered by or certificates issued by the Administration provided that LR maintains compliance with the provisions of Appendix 1 of the Annex to Assembly Resolution A.739(18).
- 2.4 Authorisations for ISM Code audits and other services beyond the scope of Appendix 1 to this Agreement will be dealt with as mutually agreed, on a case-by-case basis.
- 2.5 LR shall endeavour to avoid undertaking activities, which may result in a conflict of interest.

3 INTERPRETATIONS, EQUIVALENTS AND EXEMPTIONS

- 3.1 While interpretations of the applicable instruments, as well as the determination of equivalents or the acceptance of substitutes to the requirements of the applicable instruments are the prerogative of the Administration, LR will co-operate in their establishment as necessary.
- 3.2 Exemptions from the requirements of the applicable instruments are the prerogative of the Administration and must be approved by the Administration prior to issuance.

3.3 In instances where, temporarily, the requirements of an applicable instrument cannot be met under particular circumstances, LR will specify such measures or supplementary equipment as may be available to permit the vessel to proceed to a suitable port where permanent repairs or rectification can be effected or replacement equipment fitted.

4 INFORMATION AND LIAISON

- 4.1 LR will report to the Administration such information at such frequency as agreed between LR and the Administration, as delineated in Appendix 2 to this Agreement.
- 4.2 The Administration shall be granted access to all plans and documents including reports on surveys on the basis of which certificates are issued or endorsed by LR.
- 4.3 The Administration will provide LR with all necessary documentation for the purpose of LR's provision of statutory certification services.
- 4.4 LR and the Administration, recognising the importance of technical liaison, agree to cooperate toward this end and maintain an effective dialogue.
- 4.5 LR shall, for safety reasons, not issue certificates to a ship declassed or changing class before consulting the Administration to determine whether a full inspection is necessary.
- 4.6 LR agrees to submit to the Administration all Rules, Instructions and Forms as required by the Administration in respect of work carried out by LR in accordance with this Agreement.
 - Regulations, rules, instructions and report forms shall be available in English.

5 SUPERVISION

- 5.1 The Administration is entitled, on a biennial basis, to satisfy itself that LR effectively carries out its functions in accordance with this agreement and that LR's quality system continues to comply with the requirements of Appendix 1 of the Annex to Assembly Resolution A.739(18) and to fulfil the criteria set out in the Annex to Council Directive 94/57/EC.
- 5.2 The Administration may choose to recognise audits performed on LR by an independent audit group effectively representing the interests of the Administration or IMO.
- 5.3 Should the Administration choose to conduct direct auditing of LR, the extent of audit will be subject to mutual Agreement between the Administration and LR. The Administration shall make sure that the audit group it may use is bound by confidentiality obligations.
- 5.4 The Administration has the right to perform random and detailed inspections of Finnish ships to review the work of LR.
- 5.5 The Administration is entitled to report to the Commission and the Member States of the EU the results of the auditing of LR and to send them the performance record of LR and other relevant information. The report on the audit shall be submitted to LR. If LR makes comments on it without undue delay, the Administration shall take the comments into serious consideration prior to the submission of the report to the Commission and the Member States.

6 OTHER CONDITIONS

6.1 Remuneration

Remuneration for statutory certification services carried out by LR on behalf of the Administration will be charged by LR directly to the party requesting such services. The Administration and LR do not invoice each other for the costs caused by this Agreement.

6.2 Confidentiality

In so far as activities related to this Agreement are concerned, both LR and the Administration shall be bound by confidentiality provisions to be agreed between them.

6.3 Surveyors

Normally, surveys shall be carried out by surveyors working exclusively for LR. LR may use exclusive surveyors of another organisation with which LR has a bilateral agreement provided that the other organisation is recognised by the Administration. However, LR may use non-exclusive surveyors provided such surveyors and all services and functions performed by such personnel relevant to this Agreement, are subject to the quality assurance system of LR. These provisions apply to subcontractors and to all other suppliers of support services being relevant to statutory survey and certification.

6.4 Maintaining the Equivalence of Standards

LR shall fulfil the requirements of article 15(1) of Council Directive 94/57/EC.

6.5 Withdrawal and Suspension of the Authorisation

The Administration is entitled to withdraw its authorisation to LR, if the latter no longer fulfils the criteria referred to in clause 5.l., or, if the proper body of the European Union requests the withdrawal of the recognition.

The Administration may suspend the authorisation to carry out on its behalf tasks specified in this Agreement, if it considers that LR can no longer be authorised, notwithstanding the criteria specified in clause 5.1 above. In case of such a suspension the Administration shall inform the Commission of the European Union without delay, and withdraw the suspension, if the Commission considers it unjustified.

6.6 Amendments

Amendments to this Agreement and appendixes will become effective only after consultation and written agreement between the Administration and LR.

The Administration and LR shall enter into consultations for changes in this Agreement necessitated by any amendments of the relevant legislation of the European Union early enough to match the coming into effect of the said amendments.

6.7 Representation

LR shall establish a local representation of a legal nature on the territory of Finland to ensure legal personality under Finnish law and the competence of Finnish national courts

6.8 Governing Law and Settlement of Disputes

- 1. The Agreement shall be governed by and construed in accordance with Finnish law. Any dispute arising in connection with this Agreement which cannot be settled by private negotiations between the parties shall be settled finally in the Civil Court in Helsinki.
- 2. In the performance of statutory certification services thereunder, LR, its officers, employees and others acting on its behalf are entitled to all the protection of law and the same defences and/or counterclaims would be available to the Administration and its own staff surveyors or employees if the latter had conducted the statutory certification services in question.

6.9 Liability

- 1. If liability arising out of any incident is finally and definitely imposed by a court of law on the Administration for loss or damage to property or personal injury or death, which is proved in that court of law to have been caused by wilful act or omission of LP, its bodies, employees, agents or others who act on behalf of LR, the Administration shall be entitled to indemnification from LR to the extent said loss, damage, injury or death is, as decided by that court, caused by LR.
- 2. If liability arising out of any incident is finally and definitely imposed by a court of law on the Administration for personal injury or death, which is proved in that

court of law to have been caused by any negligent or reckless act or omission of LR, its employees, agents or others who act on behalf of LR, the Administration shall be entitled to indemnification from LP, to the extent said personal injury or death is, as decided by that court, caused by LR, up to but not exceeding an amount of USD 5 million (five million US dollars).

- 3. If liability arising out of any incident is finally and definitely imposed by a court of law on the Administration for loss or damage to property, which is proved in that court of law to have been caused by any negligent or reckless act or omission of LR, its employees, agents or others who act on behalf of LR, the Administration shall be entitled to indemnification from LR, to the extent said loss or damage is, as decided by that court, caused by LR, up to but not exceeding an amount of USD 2,5 million (two million five hundred thousand US dollars).
- 4. Neither party shall be liable to the other for any special, indirect or consequential losses or damages resulting from or arising out of services performed under this Agreement, including without limitation loss of profit, loss of production, loss of contract, loss of use, business interruption or any other special, indirect or consequential losses suffered or incurred by any party howsoever caused.
- 5. Without prejudice to what is stated above, for any claim arising out of LR's performance or non-performance under this Agreement, the LR, its officers, employees, agents or others who act on behalf of LP, shall be entitled to the same defences (including but not limited to any immunity from or limitation of liability) as would be available to the Administration's own personnel if they had themselves performed the work.
- 6. If the Administration is summoned or is expected to be summoned to answer for such liability as mentioned above in this Article, LR shall be informed without undue delay. The Administration shall, for information purposes, send all claims, documents and other relevant material to LR. LR shall be entitled to provide support and/or participate in the defence of such claim, if LR, in its sole discretion, deems it necessary or appropriate. If the Administration fails to plead all available defensive measures then LR shall not be required to indemnify the Administration in accordance with sub-clauses 1, 2 and 3 above.
- 7. The Administration shall not enter into any commitment or agreement, which involves acceptance of such liability as mentioned in sub-clauses 1, 2 and 3 above, without the prior written consent of LR.
- 8. While acting for the Administration under this Agreement, LR shall be free to create contracts directly with its clients and such contracts may contain LR's normal contractual conditions for limiting its legal liability. The Administration further permits LR to include its standard terms and conditions on all certificates, reports or other documents issued by LR pursuant to this Agreement.
- 9. For the avoidance of doubt, nothing contained herein shall create or is intended to create any new cause of action in favour of the Administration or third parties.

6.10 Termination

1. If this Agreement is breached by one of the parties, the other party shall notify the violating party of its breach in writing. The latter shall within 30 days inform the former about the steps it intends to take, and remedy the breach without undue delay, but within 90 days at the latest, failing which the notifying party has the right to terminate the Agreement immediately.

2. This Agreement may be terminated by either party by giving the other party 12 months written notice.

7 THIS AGREEMENT COMMENCES ON

IN WITNESS WHEREOF the undersigned, duly authorised by the parties, have on the 23.11.1999 signed this Agreement.

For Lloyd's Register of Shipping W. AE JONG

For the Finnish Maritime Administration HEIKKI VALKONEN

Appendix 1

To the Agreement Governing the Delegation of Statutory Certification Services for Vessels Registered in Finland

between

THE FINNISH MARITIME ADMINISTRATION (The Administration)

and

LLOYD'S REGISTER OF SHIPPING (LR)

Dated

with effect from

covering:

APPLICABLE INSTRUMENTS, ADDITIONAL INSTRUCTIONS

and

DEGREE OF AUTHORIZATION

1 APPLICABLE INSTRUMENTS

- 1.1 IMO and other documents which have to be taken into account when implementing MARPOL 73/78 as amended.
- 1.1.1 Amendments and agreed interpretations to MARPOL 73/78, as agreed by MEPC.
- 1.1.2 Specifications for oil/water interface detectors (Res. MEPC.5(XIII)).
- 1.1.3 Revised specifications for the design, operation and control of crude oil washing systems Res. A.446(XI) and Amendments (Res. A.497(XII)).
- 1.1.4 Revised specifications for oil tankers with dedicated clean ballast tanks (Res. A.495(XII)).
- 1.1.5 Revised guidelines and specifications for oil discharge monitoring and control systems for oil tankers (Res. A.586(14)).
- 1.1.6 Recommendation on the standard format of the crude oil washing. operators and equipment manual (Res. MEPC 3(XII) and amendments MEPC XVI/16, Annex 7).
- 1.2 Convention on the Protection of the Marine Environment of the Baltic Sea Area, 1992, Annex IV, Prevention of pollution from ships
- 1.2.1 HELCOM Recommendation 11/10.
- 1.3 International Convention on Load Lines 1966
- 1.3.1 IMO Unified Interpretations on the International Convention on Load Lines, 1966 (LL.3/Circ.20 and LL.3/Circ.22)
- 1.4 Applicable Finnish Regulations: with further amendments, if any
- 1.4.1 Ship Survey Decree [16 September 1983/748), as amended by the following decrees [4 November 1988/925, 22 December 1993/1441, 28 April 1995/748 and 21. February 1998/177]
- 1.5 Finnish Maritime Administration Circulars: with further amendments, if any
- 1.5.1 [List of approved bilge water separators, bilge water filtering equipment, oil content meters and sewage treatment equipment (14/95)] / Council Directive 96/98/EC on Marine Equipment.
- 1.5.2 Prevention of pollution from ships

- Decree (14/93 3)
- Application of the Decree, sewage regulations (20/83).
- 1.5.3 Decree on and FMA rules for chemical tankers and gas carriers (17/98).
- 1.5.4 Transport of dangerous goods in Ro/Ro ships in restricted trade on the Baltic (22/98).
- 1.5.5 [Navigational Equipment
 - Requirements and procedure (11/87)
 - Surveys (18/81, 20/95)]/Council Directive 96/98/EC on Marine Equipment.

1.5.6 Life-saving Appliances

- Requirements (18/97)
- [List of approved appliances (23/97)]/Council Directive 96/98/EC on Marine Equipment.
- 1.5.7 Navigation Lights and Signalling Appliances
 - List of approved appliances (20/98)
 - Requirements and procedure (15/95)

2 ADDITIONAL INSTRUCTIONS

- 2.1 General
- 2.1.1 The Society shall not approve the first issue of the exemption certificate.
- 2.1.2 The following matters are mainly the responsibility of the Administration:
 - distinction between new and existing ships
 - determination of intervals between surveys
- 2.2 Additional instructions concerning MARPOL 73/78, Annexes I, II and IV
- 2.2.1 [The following equipment will be type-approved by the Administration: bilge water separators, filtering equipment and process units, oil content meters and bilge alarms, sewage treatment equipment]/Council Directive 96/98/EC on Marine Equipment.
- 2.2.2 The following equipment will be type-approved by the Society: Crude Oil Washing Equipment, Inert Gas Systems, Oil/Water Interface detectors.

3 DEGREE OF AUTHORIZATION

3.1 According to type of survey

3.1.1 Cargo vessels

Type of survey	In Finland	Outside	Issuing/Endorsing
		Finland	Certificate
LL, Initial	LR	LR	FMA
LL, Periodical	LR	LR	FMA
LL, Annual	LR	LR	FMA
SAFCON, Initial	LR	LR	FMA
SAFCON, Periodical	LR	LR	FMA
SAFCON, Annual	LR	LR	LR
SAFCON, Intermediate	LR	LR	LR
SAFEQ, Initial	FMA	FMA	FMA
SAFEQ, Periodical	FMA	LR	FMA
SAFEQ, Annual	FMA	LR	LR/FMA
SAFEQ, Intermediate	FMA	LR	LR/FMA
SAFRAD, Initial	FMA	FMA	FMA
SAFRAD, Periodical	FMA	FMA	FMA

IOPP, Initial	LR	LR	FMA
IOPP, Periodical	LR	LR	FMA
IOPP, Annual	LR	LR	LR
IOPP, Intermediate	LR	LR	LR
IMO FITNESS, Initial	LR	LR	FMA
IMO FITNESS, Periodical	LR	LR	FMA
IMO FITNESS, Annual	LR	LR	LR
IMO FITNESS, Intermediate	LR	LR	LR
SEWAGE POLL., Initial	LR	LR,	FMA
SEWAGE POLL., Periodical	LR	LR	FMA
SEWAGE, Annual	LR	LR	LR
3.1.2 Passenger Vessels			
SOLAS	AS SEPARATELY AGREED CASE BY CASE		
LL	LR	LR	FMA
IOPP	LR	LR	FMA
ISSP	LR	LR	MA
Abbreviations:			

Abbreviations:

LR: Lloyd's Register of Shipping (The Society)

FMA: The Finnish Maritime Administration (The Administration)

- 3.2 Issue of Certificates, attachments and supplements, and endorsements of such documents
- 3.2.1 The Administration will continue to issue the Safety Construction Certificate, the Safety Equipment Certificate, the Certificate of Fitness, the International Oil Pollution Prevention Certificate and the International Sewage Pollution Prevention Certificate (19733) and the International Load Line Certificate.
- 3.2.2 The Administration will issue all attachments and supplements to such certificates.
- 3.2.3 The Society may issue short term certificates, valid up to 5 months, on completion of a survey.
- 3.3.4 The surveyor conducting the annual survey is authorised to endorse the certificates.

Appendix 2

To the Agreement Governing the Delegation of Statutory Certification Services for Vessels Registered in Finland

between

THE FINNISH MARITIME ADMINISTRATION (The Administration)

and

LLOYD'S REGISTER OF SHIPPING (LR) (The Society)

Dated with effect from covering the:

REPORTING TO THE ADMINISTRATION

The Society (LR) agrees to report to the Administration information pertaining to services performed pursuant to this agreement as follows. To this end the Society (LR) shall:

- 1. send a current copy of the Society Rules for the Construction and. Classification of Ships, the Register Book and the Directory,
- 2. forward a set of forms, reports, check lists and instructions that the Society (LR) surveyors use in conducting surveys according to Appendix 1 on Finnish ships;

- 3. send a copy of each certificate, applicable record and administrative extension issued according to Appendix 1 not later than two months after the date of the proper instrument;
- 4. send information on classification (assignment, alterations, suspension and withdrawal) of ships certified according to Appendix 1;
- 5. on request send a detailed report on each survey, covering all requirements concerned;
- 6. inform, without undue delay, if a ship certified according to Appendix 1 suffered an accident, if a ship is discovered to be operating with faults or defects which may affect its seaworthiness or safety in general or represent significant deviations from the standard required in international conventions and rules, national laws and rules, and the Society (LR) rules, the obligation to provide such information applies regardless to how such deficiencies are discovered.