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## WORLD MARITIME UNIVERSITY

Malmö, Sweden

# A STUDY ON THE OVERSIGHT SCHEME OVER RECOGNIZED ORGANIZATIONS UNDER THE INTERNATIONAL INSTRUMENTS

By

## PARK, JONG CHUL Republic of Korea

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

## MASTER OF SCIENCE

In

## **MARITIME AFFAIRS**

(MARITIME SAFETY AND ENVIRONMENTAL ADMINISTRATION)

2012

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## **DECLARATION**

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

The contents of this dissertation reflect my own personal views, and are not necessarily endorsed by the University.

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#### **ABSTRACT**

Title of Dissertation: A Study on the Oversight Scheme over Recognized

Organizations under the International Instruments

Degree: MSc

This dissertation is a study on the oversight scheme over recognized organizations acting on behalf of flag States for consistent and effective implementation of international instruments.

A brief history of classification societies, which account for the most recognized organizations, is dealt with and the concept of recognized organizations and their significance is looked into in the first stage. The legal background of delegation of flag States' authority to recognized organizations is examined, categorized by legal instruments developed by IMO and ILO. Categories of recognized organizations are identified through consideration of their capability and performance aspects.

Consolidated audit summary reports (CASR) under the VIMSAS are investigated to justify the need for oversight of recognized organizations and to figure out specific problematic areas to be improved. Results of Port State Control (PSC) in Paris MoU are examined to look into the extent of recognized organization (RO)'s attribution to non-conformity with IMO instruments and to investigate differentials of performance level between various recognized organizations.

The Qualification Management System Certification Scheme (QSCS) of International Association of Classification Societies (IACS) is investigated especially focusing on Accredited Certification Body (ACB). EU's monitoring system of quality management systems of is recognized organizations is investigated.

The Maritime Labour Convention 2006 developed by The International Labour Organization (ILO) is investigated in terms of its survey and certification scheme and delegation of States' authority to recognized organizations to examine the applicability of RO related instruments developed by IMO in MLC 2006.

The concluding chapter examines the areas to be improved for more effective implementation of international instruments in terms of oversight of recognized organizations based on the research in the previous chapter. A number of recommendations are made with regard to an effective oversight scheme of recognized organizations.

**KEY WORDS**: Recognized Organizations (ROs), Classification Society, Delegation of Authority, Oversight of ROs, The Code for Recognized Organizations (RO Code), Quality Management System Certification of Recognized Organizations,

## **Table of Contents**

DECLARA	TION	i
ACKNOW	LEDGEMENTS	ii
ABSTRAC	T	iii
LIST OF A	BBREVIATIONS	. viii
CHAPTER	I Introduction	1
1.1 B	ackground of study	1
1.2 O	bjectives of the study	3
1.3 Se	cope of study	4
CHAPTER	II Flag State responsibility for implementation of IMO instrum	ents
•••••		5
2.1 O	bligations of flag State for implementation of IMO instruments	5
2.2 R	ole and Significance of Recognized Organizations	6
2.2.1	Classification Society	6
2.2.1	.1 Origin and development	6
2.2.1	.2 Significance	7
2.2.2	Recognized Organization (RO)	9
2.2.2	2.1 Legal background	10
2.3	2.2.1.1 Instruments developed by IMO	10
2.3	2.2.1.2 Instruments developed by other Organizations	12
2.3 D	elegation of Authority	13
2.3.1	Categories of Recognized Organizations	15
CHAPTER	III Oversight over ROs	17
3.1 N	ecessity of oversight over ROs	17
3.2 Po	erformance of recognized organizations	22
CHAPTER	IV Consideration of relevant legal instruments	26
4.1 R	ecognized Organization Code	26
4.1.1	Background and brief history of establishment	26

	4.1.2 Str	ucture and contents of the Code	27
	4.1.2.1	Part I – General	27
	4.1.2.2	Part II – Recognition and Authorization Requirements for	
	Organiz	ations	28
	4.1.2.3	Part III	30
	4.1.3 Com	parison between existing requirements and RO Code	31
	4.2 Volu	ntary IMO Member State Audit Scheme(VIMSAS)	33
	4.3 Code	for the Implementation of IMO Mandatory Instruments	33
C	CHAPTER V	Consideration of requirements for authorization to ROs	35
	5.1 Cons	ideration of burden from practical oversight	35
	5.1.1 Bu	rden of oversight	35
	5.1.2 Eff	ective management of resources for oversight	38
	5.2 Quali	ty management system of Recognized Organizations	39
	5.2.1 IAC	CS Quality Management System Certification Scheme (QSCS)	39
	5.2.2 Rec	quirements for ACB	40
	5.2.3 Qu	ality management system of recognized organizations of EU	43
	5.3 Appe	al requirements	44
	5.3.1 Ap	peal procedure under PSC	44
	5.3.2 Ap	peal procedure under IACS QSCS	45
	5.4 Sove	reignty issues	46
C	CHAPTER VI	Recognized Organizations for MLC 2006	48
	6.1 History	of MLC 2006	48
	6.2 Survey a	nd certification structure of MLC 2006	49
C	CHAPTER VI	I Conclusion and Recommendations	53
	7.1 Conclusio	on	53
	7.2 Recommo	endations	55
	7.2.1 Over	sight scheme on performance basis	55
	7.2.2 Assu	rance of qualification of ACB auditors for audit of recognized	
	organizatio	ons	56
	7.2.3 Appl	ication scope of RO related requirements to MLC 2006	56

## LIST OF TABLES

LIST OF FIGURES	
Table 7 Inspection and certification extent (ILO, 2009)	49
Table 6 Audit days per year (Total for all IACS Members), 2006-2009	36
Table 5 Comparison between existing requirements and RO Code	31
MoU, 2012)	23
Table 4 Performance level of various ROs (2009 – 2011, as of 2012, July 1) (Paris	
Table 3 PSC Detentions with RO and IACS related deficiencies	21
Table 2 Analysis of five CASR regarding Delegation of Authority	19
Table 1: Specific requirements for delegation of authority in various instruments	14

Figure 3 PSC Detention rate with RO related deficiencies against total detentions.. 22

## LIST OF ABBREVIATIONS

ABS American Bureau of Shipping ACB Accredited Certification Body

AFS 2001 International Convention on the Control of Harmful

Anti-Fouling Systems on Ships, 2001

ARS Alfa Register of Shipping
AVC Advisory Committee

BKR Bulgarski Koraben Registar

BLG Sub-committee on bulk liquids and gases

BV Bureau Veritas

CASR Consolidated Audit Summary Report

CCS China Classification Society

COLREG 1972 Convention on the International Regulations for

Preventing Collisions at Sea, 1972, as amended

CRS Croatian Register of Shipping
CSR Common Structure Rules

DE Sub-committee on ship design and equipment

DBS Dromon Bureau of Shipping

DNV Det Norske Veritas

EAC European Accreditation Codes

EC European Commission

EU European Union

FP Sub-committee on fire protection

FSI Sub-committee on flag state implementation

GBP The pound sterling

GISIS Global Integrated Shipping Information System

GL Germanischer Lloyd

GRAIN Code International Code for the Safe Carriage of Grain in

Bulk

HRS Hellenic Register of Shipping

HSC Code International Code of Safety for High-Speed Craft

IAB Independent Appeals Board

IACS International Association of Classification Societies

IAF International Accreditation Forum

IBC Code International Code for the Construction and Equipment

of Ships Carrying Dangerous Chemicals in Bulk

IBS Isthmus Bureau of Shipping

IGC Code International Code for the Construction and Equipment

of Ships Carrying Liquefied Gases in Bulk

ILCInternational Labour ConferenceILOInternational Labour OrganizationIMOInternational Maritime Organization

ISO International Organization for Standardization
IMSBC Code International Maritime Solid Bulk Cargoes Code
INF Code International Code for the Safe Carriage of Packaged

Irradiated Nuclear Fuel, Plutonium and High-level

Radioactive Wastes on Board Ships

INSB International Naval Surveys Bureau

IRS Indian Register of Shipping

IRS International Register of Shipping

ISM Code International Management Code for the Safe Operation

of Ships and for Pollution Prevention

ISPS Code International Code for the Security of Ships and of Port

**Facilities** 

KR Korean Register of Shipping

LL 66 International Convention on Load Lines, 1966 LL PROT 1988 Protocol of 1988 relating to the International

Convention on Load Lines, 1966

LR Lloyd's Register

MARPOL 73/38 International Convention for the Prevention of

Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, as amended

MARPOL PROT 1997 Protocol of 1997 to amend the International

Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978

relating thereto, as amended

MLC 2006 Maritime Labour Convention, 2006
MoU Memorandum of Understanding
MSC Maritime Safety Committee

NACE Nomenclature des Activités Économiques dans la

Communauté Européenne

NAV Sub-committee on safety of navigation

NK Nippon Kaiji Kyokai

NOx Code Technical Code on Control of Emission of Nitrogen

Oxides from Marine Diesel Engines

PHRS Phoenix Register of Shipping

PMDS Panama Maritime Documentation Services

PR Procedural Requirements
PRC Panama Register Corporation

PRS Polski Rejestr Statkow
PSC Port State Control

QACE Entity for the Quality Assessment and Certification of

Organizations Recognized by the European Union CIC

QC Quality Committee

QMS Quality Management System

QMSR Quality Management System Requirements

QS Quality Secretary

QSCS Quality System Certification Scheme

RINA Registro Italiano Navale

RMRS Russian Maritime Register of Shipping

RO Recognized Organizations

RO Code The Code for Recognized Organizations

RSA Register of Shipping

RSO Recognized Security Organizations

SLF Sub-committee on stability and load lines and on

fishing vessels safety

SOLAS 1974 International Convention for the Safety of Life at Sea,

1974, as amended

SOLAS PROT 1978 Protocol of 1978 relating to the International

Convention for the Safety of Life at Sea, 1974, as

amended

SOLAS PROT 1988 Protocol of 1988 relating to the International

Convention for the Safety of Life at Sea, 1974, as

amended

SRU Shipping Register of Ukraine

STCW 1978 International Convention on Standards of Training,

Certification and Watch keeping for Seafarers, 1978, as

amended

TONNAGE 1969 International Convention on Tonnage Measurement of

Ships, 1969

TL Turkish Lloyd

UI Unified Interpretations
UR Unified Requirements

UNCLOS United Nations Convention on the Law of the Sea
UNCTAD United Nations Conference on Trade and Development

USB Universal Shipping Bureau Inc

VCA Vertical Contract Audit

VIMSAS Voluntary IMO Member State Audit Scheme

#### CHAPTER I

#### Introduction

## 1.1 Background of study

International regulations have been recognized as essential tools for ensuring maritime safety and marine environment protection. Therefore, a number of meetings of the International Maritime Organization (IMO) are with thousands of participants to accomplish the ultimate goals of the Organization every year, and 22 meetings were held in 2011. Eventually, its efforts have led to the development of many international regulations (IMO, 2012a). In addition, it has been required that States are subject to conformity with those international instruments (United Nations, 2012).

However, even though it has been recognized that the international regulatory regime itself is sufficient while it still has room for improvement, the problematic area is the insufficient level of implementation of regulatory regimes by States. In many cases, it has been recognized that a lack of initiative by States and insufficient resources such as capable personnel and fiscal support has resulted in an insufficient level of implementation (International Commission on Shipping, 2000, p. 32).

Having recognized the problematic area regarding inconsistent and insufficient implementation of IMO instruments, IMO developed the Voluntary IMO Member State Audit Scheme (VIMSAS) to provide a meaningful tool for consistent and effective implementation. The scheme was operated on a voluntary basis and, out of 170 member States of IMO, 67 states have expressed their willingness to be audited, where 48 states have been audited so far. Furthermore, IMO made a decision to

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<sup>&</sup>lt;sup>1</sup> C 108/6 para 8

make its current voluntary scheme a mandatory system to improve maritime safety and marine environmental protection as well as to assist States in improving their performance by enhancement of coherent implementation of IMO instruments (Matthews, 2009).

Although it is apparent that flag States assume full responsibility for their duties under IMO instruments, flag State authority empowered by IMO instruments may be delegated to recognized organizations (ROs) under certain provisions prescribed in relevant IMO instruments. Consequently, out of 170 Member States of IMO as of September 6, 2012, 112 States have delegated statutory authority to recognized organizations (IMO, 2012c). Furthermore, the merchant fleets of the 35 largest flags that have delegated their authority to ROs represent 68% of world fleets (UNCTAD, 2011).

Since ROs have exercised statutory authority on behalf of most flag States under the provision of IMO instruments, ensuring reliability and capability of ROs became a larger priority for consistent and effective implementation of IMO instruments. For that reason, the Code for the Implementation of Mandatory IMO Instruments, 2011 which is being used as standard for VIMSAS<sup>2</sup>, regulates the delegation of authority to achieve the implementation of IMO instruments at a globally uniform level.

In fact, IMO had already established the standards, which are the resolution A.739(18) entitled "Guidelines for the authorization of organizations acting on behalf of the Administration" and the resolution A.789(19) entitled "Specification on the survey and certification functions of recognized organizations acting on behalf of the Administration", to manage delegation of authority systematically. In addition, these requirements were made mandatory under major IMO conventions such as the 1974 SOLAS convention chapter XI-1, MARPOL convention Annex I and II and Load Lines convention chapter I of annex I and annex B of its 1988 protocol.

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<sup>&</sup>lt;sup>2</sup> Refer to paragraph 3 in annex of resolution A.974(24)

Despite many efforts to ensure consistent enforcement of IMO instruments, the need for consolidated documentation for integrating scattered requirements regarding delegation of authority into single standards to assist flag States in complying with their obligations with international regulations was raised during the Maritime Safety Committee's eighty-fourth session (IMO, 2008b). After in depth discussion, a draft Code for the Recognized Organizations was developed which introduced a consolidated regime for flag States and recognized organizations.

While the matter of delegation of authority has been subject to VIMSAS, and some problematic areas have been identified through voluntary audits of flag States, there has not been a comprehensive and robust way to check flag States and recognized organizations' compliance with relevant international regulations for delegation of authority as VIMSAS has been operated on a voluntary basis and only 48 States<sup>3</sup> representing 39% of the total member States of the IMO have been audited since its adoption in 2003 (IMO, 2012b). Notwithstanding, after the adoption of a mandatory member State audit scheme, it is probable that all member States of IMO will have to demonstrate their fulfillment of obligations with regard to delegation of authority.

This paper will deal with the issue of flag States' delegation of authority to recognized organizations and focus especially on an oversight system of recognized organizations for ensuring recognized organizations full compliance with relevant international and national regulations. The ultimate aim of this study is to provide helpful recommendations to parties concerned with the achievement of an effective, consistent and robust oversight system of recognized organizations.

## 1.2 Objectives of the study

This dissertation is to achieve the following;

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<sup>&</sup>lt;sup>3</sup> As of 13<sup>th</sup> April 2012

- a. Describe flag State responsibility of implementation of international instruments, in particular, recognized organizations;
- Review the important role of Classification Societies and recognized organizations
- c. Highlight the significance of oversight over ROs
- d. Compare existing requirements regulating delegation of State authority to ROs with a new RO Code
- e. Analyze the effectiveness of practical implementation of the RO related international requirements
- f. Provide recommendations for the effective implementation of the RO related international requirements

## 1.3 Scope of study

- a. Code for the Implementation of Mandatory IMO Instruments, 2011 (Resolution A.1054(27))
- b. IMO mandatory instruments under Resolution A.1054(27)
- c. Guidelines for the Authorization of Organizations Acting on behalf of the Administration (Resolution A.739(18))
- d. Specifications on the Survey and Certification Functions on Recognized Organizations Acting on behalf of the Administration Resolution A.789(19)
- e. Maritime Labour Convention 2006
- f. IACS Quality System Certification Scheme
- g. Draft Code for Recognized Organizations (Draft RO Code)

#### **CHAPTER II**

## Flag State responsibility for implementation of IMO instruments

## 2.1 Obligations of flag State for implementation of IMO instruments

It is the duty of the flag States to ensure the safety of ships flying their flags at sea. This duty shall be achieved through measures such as surveys of ships by qualified surveyors, confirmation of the qualifications of the master and crews of the ships and assurance of the familiarity of the master and crews with international regulations regarding safety at sea and marine protection (United Nations, 2012). <sup>4</sup> Ships engaging in international voyages over a certain gross tonnage shall be surveyed on a regular basis according to international instruments.

The Maritime community already has a number of well-established international instruments developed by international organizations such as IMO and ILO<sup>5</sup>. However, an international regulatory regime without implementation of authority over ships will not have any value. Only consistent and effective implementation of those international regulations can protect safety of life and the marine environment on the high seas (Mansell, 2009, p. 2). Hence, it is strongly required for flag States to put international requirements in effect through development of their national law (Res.A.1054(27)).

In terms of obligations of Maritime Administration, Resolution A.1054(27)<sup>6</sup> provides very specific provisions of mandatory IMO instruments prescribed in the Code as an

<sup>&</sup>lt;sup>4</sup> United Nations convention on the law of the sea (UNCLOS), article 94

<sup>&</sup>lt;sup>5</sup> Maritime Labour Convention, 2006 was developed by International Labour Organization(ILO) and will come into force from 20<sup>th</sup> August, 2013

<sup>&</sup>lt;sup>6</sup> Code for the Implementation of Mandatory IMO Instruments, 2011 developed by IMO

annex. It describes the specific obligations of contracting governments/parties, flag States, port States and coastal States.

## 2.2 Role and Significance of Recognized Organizations

## 2.2.1 Classification Society

Having considered the current system for implementation of international instruments for quality shipping, it is quite difficult to achieve the aim of international regulatory regime for quality shipping without the significant role of major classification societies such as IACS member classification societies. While not all classification societies show their expertise in terms of their business, IACS developed its own technical rules, so called class rules, with regard to construction, equipment and other elements of ships to provide classification service. They have served in the maritime field as entities to provide reliable safety assessments of ships to concerned stakeholders.

## 2.2.1.1 Origin and development

The concept of Classification Societies (Class) was introduced for insurance of merchant ships. It was necessary to prove that the ship concerned had been constructed in compliance with appropriate standards for the insurance of the ship (Mansell, 2009, p. 126). The first actor was Lloyd's which was a coffee house in London where persons concerned, such as shipowners, copywriters and charterers, got together to share information. The Register Society, which was established in 1760, published a Register of Ships to provide evidence of ships' seaworthiness to underwriters. After merging with another register, which was formed by shipowners

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<sup>&</sup>lt;sup>7</sup> See Rogelio Estrada Villanueva, JR "The Emerging Role of the Classification Society as an Extension of the Flag State Administration", Unpublished master's thesis, World Maritime University, Malmo, Sweden, 2004 at page 3

in 1834, they published their rules and regulations to provide a survey and classification service on ships (Mansell, 2009, p. 127).

Coming to the nineteenth century, characteristics of ships had become more complicated and diverse in terms of size and technical advances. In addition, the loss of 2,000 ships and 20,000 seafarers had led to the bankruptcy of several French insurance companies in 1821 and this comprehensive situation brought about the advent of another classification society in 1829 which was the Bureau Veritas (BV) (Mansell, 2009, p. 127). After that time, following global need for Classification Societies, many Classification Societies were established. At present, the major 13 Classification Societies<sup>8</sup> have membership of IACS<sup>9</sup> which is to develop technical rules and regulations with regard to the design, construction, maintenance and survey of ships and to provide support to international organizations in terms of development, and implementation of statutory regulations for the purpose of protecting maritime safety and the marine environment at sea (IACS, 2009).

## 2.2.1.2 Significance

A unique feature of Classification Societies is expertise on ship design, construction and equipment. With this expertise and experience from service, they develop their own rules and regulations for verification of the safety and seaworthiness of ships.

- American Bureau of Shipping (ABS)
- Det Norske Veritas (DNV)
- China Classification Society (CCS)
- Lloyd's Register (LR)
- Germanischer Lloyd (GL)
- Registro Italiano Navale (RINA)
- Bureau Veritas (BV)
- Nippon Kaiji Kyokai (NK)
- Korean Register of Shipping (KR)
- Russian Maritime Register of Shipping (RMRS)
- Polski Rejestr Statkow (PRS)
- Croatian Register of Shipping (CRS)
- Indian Register of Shipping (IRS)

<sup>&</sup>lt;sup>8</sup> Members of IACS (13 members);

<sup>&</sup>lt;sup>9</sup> IACS: International Association of Classification Societies

With outstanding technical skills, Classification Societies have been recognized as reliable entities for verification of the condition of ships. Consequently, flag States have delegated their statutory authority regarding survey and certification of ships to Classification Societies under the provision of IMO regulations.

Furthermore, technical rules and regulations of Classification Society have affected the decisions of international regulatory bodies through contributing to the interpretation and development of maritime regulatory instruments adopted by IMO member States. For instance, IACS not only established its unified interpretation but also has submitted it to IMO by request of IMO. By the decision of the Maritime Safety Committee at its seventy-fourth session, having considered the expertise of IACS and the significance of unified implementation of IMO regulations, IACS was invited to submit its unified interpretation on specific regulations to the Committee for consideration.(MSC 74/24, 19.5) IACS unified interpretations submitted to the Committee were considered case by case and they were referred to relevant Subcommittees for in depth consideration with a target completion date. (MSC 76/23 18.6) However, MSC at its seventy-eighth session decided to include "Consideration of IACS unified interpretations" as a continuous agenda item in the work programme of the BLG<sup>10</sup>, DE<sup>11</sup>, FP<sup>12</sup>, FSI<sup>13</sup>, NAV<sup>14</sup> and SLF<sup>15</sup> Sub-committee to speed up the consideration of IACS unified interpretations.

Besides the contribution of Classification Societies in the public aspect, they have also made contributions to the maritime industry. With a world-wide service network <sup>16</sup>, Classification Societies, which have been recognized by flag States, provide shipowners with customized services in foreign ports regarding statutory

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<sup>&</sup>lt;sup>10</sup> Sub-committee on bulk liquids and gases

<sup>&</sup>lt;sup>11</sup> Sub-committee on ship design and equipment

<sup>&</sup>lt;sup>12</sup> Sub-committee on fire protection

<sup>&</sup>lt;sup>13</sup> Sub-committee on flag state implementation

<sup>&</sup>lt;sup>14</sup> Sub-committee on safety of navigation

<sup>&</sup>lt;sup>15</sup> Sub-committee on stability and load lines and on fishing vessels safety

<sup>&</sup>lt;sup>16</sup> IACS members have more than 1,000 overseas branches/offices all over the world (Sources: Aggregated by author in individual website of member of IACS)

surveys that can barely be carried out by flag States' surveyors. This feature allows shipowners to save their resources

## 2.2.2 Recognized Organization (RO)

Survey, followed by certification as evidence of full compliance with relevant international instruments, of the ship under the certain provision <sup>17</sup> of IMO instruments is a crucial element to ensure compliance with relevant regulations. Since it is the flag States' obligation to ensure the safety of a ship, qualified officers of the Administration should conduct the survey under international instruments.

However, it is possible for a flag State to delegate their statutory functions, such as survey and certification, to recognized organizations.<sup>18</sup> A definition of Recognized Organization can be found in Resolution A.1052(27)<sup>19</sup> as follows;

"An organization which meets the relevant conditions set forth by resolution  $A.739(18)^{20}$ , as amended by resolution  $MSC.208(81)^{21}$ , and resolution  $A.789(19)^{22}$ , and has been authorized by the flag State Administration to provide the necessary statutory service and certification to ships entitled to fly its flag."

It is also defined in IACS procedures<sup>23</sup> as

<sup>19</sup> Procedure for Port State Control, 2011. See 1.7.8

<sup>&</sup>lt;sup>17</sup> ICLL 66 and Protocol 88 Art. 13 and 14, SOLAS Reg. I/6, I/7, I/8, I/9 and I/10, MARPOL Annex I Reg.6, Annex II Reg.8, Annex IV Reg.4 and Annex VI Reg.5, HSC Code Para 1.5.4, NOx Technical Code 2008 Reg 6.1, IBC Code Section 1.5, BCH Code Section 1.6, IGC Code Section 1.5 (Code for the Implementation of Mandatory IMO Instruments, 2011)

<sup>&</sup>lt;sup>18</sup> See SOLAS chapter I regulation 6(a)

<sup>&</sup>lt;sup>20</sup> Guidelines for the authorization of organizations acting on behalf of the Administration

<sup>&</sup>lt;sup>21</sup> Adoption of amendments to the guidelines for the authorization of organizations acting on behalf of the Administration (Resolution A.739(18))

<sup>&</sup>lt;sup>22</sup> Specification on the survey and certification functions of recognized organizations acting on behalf of the Administration

<sup>&</sup>lt;sup>23</sup> Volume 3: IACS Quality System Certification Scheme (QSCS)

"A legally identifiable organization which is authorized by a Flag Administration as defined in SOLAS Chapter XI-1, Regulation 1 and listed accordingly in the IMO database, Global Integrated Shipping Information System (GISIS)"

Flag States are requested to report the detailed responsibilities and scope of authority <sup>24</sup> delegated to recognized organizations according to the reporting requirements. <sup>25</sup> IMO also established an information data base system in 2005, called the Global Integrated Shipping Information System (GISIS), in order to provide a direct reporting system to Member States and to access those data (IMO, 2010d).

Although not all flag States report detailed information to IMO, at present, as of 12<sup>th</sup> September 2012, 81 organizations have been registered as recognized organizations and delegated by one or many countries (IMO, 2012c). Among them, more than 90% of world tonnage is accounted for by IACS member classification societies (UNCTAD, 2011).

Annex A shows the current status of delegation of flag States' authority to ROs which are members of IACS. According to Annex A, there are 766 authorizations from individual flag States to their individual ROs. This number may raise a question how this great number of delegations can be controlled and monitored effectively at a consistent level.

## 2.2.2.1 Legal background

## 2.2.2.1.1 Instruments developed by IMO

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<sup>&</sup>lt;sup>24</sup> MSC/Circ.1010, Communication of Information on the Authorization of Recognized Organizations (ROs)

<sup>&</sup>lt;sup>25</sup> Regulation 1/6 of the SOLAS Convention and regulation 4 of Annex I and regulation 10 of Annex II of MARPOL 73/78 Convention

Among the many instruments developed by IMO, those which are mandatory for Contracting Governments are as follows; (IMO, 2011a)

- The International Convention for the Safety of Life at Sea, 1974, as amended (SOLAS 1974)
- The Protocol of 1978 relating to the International Convention for the Safety of Life at Sea, 1974, as amended (SOLAS PROT 1978)
- the Protocol of 1988 relating to the International Convention for the Safety of Life at Sea, 1974, as amended (SOLAS PROT 1988)
- the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, as amended (MARPOL 73/78)
- the Protocol of 1997 to amend the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, as amended (MARPOL PROT 1997)
- the International Convention on Standards of Training, Certification and Watch keeping for Seafarers, 1978, as amended (STCW 1978)
- the International Convention on Load Lines, 1966 (LL 66)
- the Protocol of 1988 relating to the International Convention on Load Lines, 1966 (LL PROT 1988)
- the International Convention on Tonnage Measurement of Ships, 1969 (TONNAGE 1969)
- the Convention on the International Regulations for Preventing Collisions at Sea, 1972, as amended (COLREG 1972)

According to major instruments developed by IMO such as SOLAS Convention, MARPOL Convention and ICLL Convention, officers of Administration shall conduct surveys and inspections of the ships under the regulations. However, the Administration may delegate their authority as stipulated in the Convention or Code concerned for implementation of those instruments to organizations which are

proved to have qualifications to act on behalf of the Administration. These organizations are called Recognized Organizations (RO).

In the same manner, according to the International Code for the Security of Ships and of Port Facilities (ISPS Code), authority for verification and certification of ships under the Code may be delegated to recognized security organizations (RSO). However, the following duties of Contracting Governments shall not be delegated to RSO (KR, 2012).

- Deciding of security level
- Approving a Port Facility Security Assessment and amendments to approved assessment
- Approving a Port Facility Security Plan and amendments to approved plan
- Deciding the port facilities required to nominate a Port Facility Security Officer
- Exercising control and compliance measures according to SOLAS Reg. XI-2/9
- Requirement for a Declaration of Security

# 2.2.2.1.2 Instruments developed by other Organizations

Besides IMO instruments in terms of safety of life at sea and marine environment protection, the International Labour Organization (ILO) developed the Maritime Labour Convention (MLC), 2006 to protect seafarer's right comprehensively. MLC, 2006 is considered as the "fourth pillar" of the international regulatory regime for quality shipping together with three pillars; SOLAS, MARPOL and STCW Convention (ILO, 2012). According to MLC 2006, inspection and certification under the Convention may be conducted by recognized organizations which are authorized by the competent authority concerning competency and independence. The scope of

authority which may be delegated shall be limited within the duties of the competent authority. MLC 2006 will come into effect from 20<sup>th</sup> August 2013. The issue of MLC 2006 will be discussed in detail in Chapter VI.

## 2.3 Delegation of Authority

Recognized Organizations, regardless of whether they are public or private enterprises, exercise authority, which is a fundamental component for ensuring full compliance with and enforcement of the regulatory regime over ships on behalf of States. Therefore, delegation of authority should be subject to a thorough control and monitoring system.

Resolution A.739(18) provides minimum requirements that should be complied with by flag States and organizations to be delegated by flag States when delegating the State's statutory function. Resolution A.789(19) provides detailed requirements, which describe specifications under specific functions of ROs that ROs should meet to be recognized.

The organization that wants to be recognized as an RO by a flag State should demonstrate its compliance with resolution A.739(18) as amended by resolution MSC.208(81) and resolution A.789(19) and the flag State concerned should assess and evaluate the organization's compliance level with those.

Among international regulatory regimes in terms of safety of life at sea, marine environment protection and quality seafaring, specific regulations which allow delegating a concerned Party's authority to recognized organizations and relevant regulations to be met by recognized organizations are described in the table below.

Table 1: Specific requirements for delegation of authority in various instruments

International		Regulation regarding	Resolutions to be complied
Instru		delegation of authority to	with
Insti u	ments	R(S)Os	for R(S)Os
SOLAS	S 1074	Ch.I Reg.6 (a) and	Res.A.739(18) and
SOLA	3 1 7 / 4	Ch.XI-1 Reg.1	Res.A.789(19)
	Annex I	Ch.2 Reg.6 para. 3.1	Res.A.739(18) and
	Aimex I	CII.2 Reg.0 para. 3.1	Res.A.789(19)
MARPOL	Annex II	Ch.3 Reg.8 para. 2.1 and	Res.A.739(18) and
73/78	Ailliex II	2.2	Res.A.789(19)
73/76	Annex IV	Ch.2 Reg.4 para. 3	Nil
	Annex VI	Ch 2 Pag 5 pags (2) (a)	Res.A.739(18) and
	Aillex VI	Ch.2 Reg.5 para. (3) (a)	Res.A.789(19)
		Annex A Article 13,	Res.A.739(18) and
ICI	LL	Annex B Annex I Ch.1	Res.A.789(19)
		Reg.2-1	Res.A.769(19)
MLC	2006	Title 5 Reg. 5.1.1.3	Nil
TONNA	GE 1969	Article 6 and 7	Nil
IGC (	Code	Ch.1 para.	Res.A.739(18) only
ide (	Code	1.5.1.1 and 1.3.30.3	Res.11.757(10) omy
IRC (	IBC Code Ch.1 para.		Res.A.739(18) and
ibev	Code	1.5.1.1 and 1.5.1.2	Res.A.789(19)
NOx Co	de 2008	Ch.1 para. 1.2.2	Res.A.739(18) and
NOx Code 2008		Cii.1 para. 1.2.2	Res.A.789(19)
AFS 2001		Annex 4 Reg.1 para. (4)	Res.A.739(18) and
AIS.	<b>2</b> 001	rimon + rog.1 para. (4)	Res.A.789(19)
INF (	Code Code	Annex Ch.1 para. 1.3	Res.A.739(18) and
	Couc	Thinex Cit.1 para. 1.3	Res.A.789(19)
HSC Code		Ch.1 para. 1.5.4	Nil

ISM Code	Part B para. 13.2 and 13.7	Nil
GRAIN Code Part A para. 3.		Nil
IMSBC Code Nil		Nil
	Part A para. 4.3	
ISPS Code	Part A para. 19.1.2 and	Nil
	19.2.2	

(Source: Author)

The Flag State also verifies whether the organization has enough resources to conduct statutory functions on behalf of the State with respect to technical, managerial and research capacity. In addition, there should be a formal agreement between the State and the organization and the agreement should contain, at least, the minimum elements in appendix 2 of resolution A.739(18).

It is at the discretion of the State to decide on the extent of authority to be delegated to ROs. Type and degree of authority to be delegated should be determined following the demonstration of the size, structure, experience and capacity of ROs and assessment by flag State.

#### 2.3.1 Categories of Recognized Organizations

The increasing role and significance of recognized organizations, not only in technical but also administrative and operational aspects, has been recognized as an essential element for consistent and uniform implementation of IMO instruments since flag States may delegate their statutory authority to recognized organizations according to the mandatory IMO instruments such as SOLAS, MARPOL and Load Line conventions. Even though the RO exercises the survey and certification authority according to the scope of delegation, full responsibility for guaranteeing the compliance of ships flying their flag with IMO conventions should still be assumed

by the flag State. In addition, the flag State has a duty to control and monitor its ROs to accomplish its responsibility mentioned in this paragraph (Mansell, 2009, p. 113).

According to the GISIS database, currently 81 recognized organizations have been reported. They can be categorized into two groups. IACS has thirteen member classification societies which are equipped with well-developed standards and its consultative status with IMO has been granted since 1969. They also put their work together to accomplish uniform implementation of their rules or IMO instruments through the unified interpretations or unified requirements. Furthermore, more than 90% of world tonnage is accounted for by IACS member classification societies (UNCTAD, 2011). Therefore, recognized organizations which are members of IACS can be categorized as high performance ROs (Mansell, 2009, p. 113).

On the other hand, many non-IACS classification societies and organizations as recognized organizations, which lack consistency of standards, have shown relatively low performance in terms of implementation of international instruments. Even though recognized organizations should have appropriate resources with regard to technical, managerial and research capabilities for ensuring their successful performance in compliance with relevant regulations, it is quite difficult to find evidence showing that some non-IACS classification societies have enough capabilities while it has been recognized that IACS classification societies have large enough capabilities according to RO related requirements developed by IMO.

These recognized organizations may be categorized as low performance ROs. This identification is necessary to consider and establish an effective monitoring and oversight system over ROs (Mansell, 2009, p. 114).

#### **CHAPTER III**

## Oversight over ROs

## 3.1 Necessity of oversight over ROs

Recognized Organizations are assigned immense authority by flag States to exercise their authority for the survey and certification of ships although size and degree of delegation depends on the capability of the ROs. Because of the tremendous significance of their acts, ROs' activities within the extent of delegation should be monitored and controlled to ensure their full compliance with international obligations.

The establishment and implementation of a thorough oversight system of recognized organizations is the obligation of the flag States which delegated their statutory authority and this obligation is subject to audit under VIMSAS.

In pursuance of paragraph 7.4.3 of Res.A.974(24)<sup>26</sup>, IMO produces a consolidated audit summary report on a regular basis based on individual audit summary reports following audits of member States under the VIMSAS for improvement of implementation level through lessons learned from the audits. Figure 1 shows the result of an analysis based on five consolidated audit summary reports (CASR)<sup>27</sup> from 45 audits, containing 359 findings, conducted so far under VIMSAS, especially focusing on part 2, *Flag States*, of the Res.A.1054(27) which has 196 findings.

<sup>27</sup> See A 27/8/1 Consolidated audit summary report and FSI 20/INF.16 Review of consolidated audit summary reports

<sup>&</sup>lt;sup>26</sup> Framework and procedures for the voluntary IMO member state audit scheme

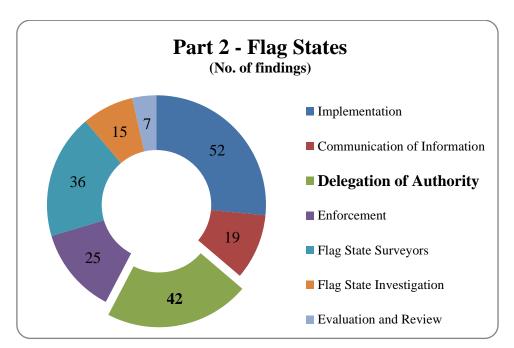


Figure 1: Analysis of audit results under part 2 of the Code - Flag States (Source: Annex of the FSI 20/INF.16)

According to Figure 1, even though concrete regulations were developed to regulate delegation of authority matters, the second-largest problematic area under part 2 of the Res.A.1054(27)<sup>28</sup>, which is the audit standard under VIMSAS<sup>29</sup>, is regarding provision of delegation of authority.

A detailed analysis of audit results for the area of delegation of authority in five CASRs has been carried out by the author and the analysis results are described in Table 2 and Figure 2 below.

<sup>29</sup> Refer to paragraph 3 in annex of resolution A.974(24)

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<sup>&</sup>lt;sup>28</sup> Code for the Implementation of Mandatory IMO Instruments, 2011

Table 2 Analysis of five CASR regarding Delegation of Authority

Description of findings	CASR <sup>30</sup>	Paragraph No.
	1 <sup>st</sup>	28, 38
	2 <sup>nd</sup>	85
Agreement	3 <sup>rd</sup>	63, 69
	4 <sup>th</sup>	61, 67, 100, 117, 123, 156
	5 <sup>th</sup>	101, 124, 157
	1 <sup>st</sup>	36, 51, 96
Oversight of Recognized	2 <sup>nd</sup>	60, 97, 106
Organizations	3 <sup>rd</sup>	82, 106, 114
Organizations	4 <sup>th</sup>	100, 108
	5 <sup>th</sup>	118, 139, 157, 166, 185, 197, 209
Documented procedure and guidance	1st	74
for Recognized Organizations	2 <sup>nd</sup>	44, 52
for Recognized Organizations	3 <sup>rd</sup>	100
	1 <sup>st</sup>	40, 70
Miscellaneous	3 <sup>rd</sup>	71
Wiscendieous	4 <sup>th</sup>	126
	5 <sup>th</sup>	112, 115, 127, 215
	1	I

(Source: Tabulated by Author based on five consolidated audit summary reports of VIMSAS)

 $<sup>^{30}</sup>$ 1st CASR: A 25/8/2, 2nd CASR: C 101/6/2, 3rd CASR: A<br/>26/9/1, 4th CASR: C105/6/1, 5th CASR: A 27/8/1



Figure 2 Analysis of five CASRs regarding Delegation of Authority

(Source: Author based on Table 2)

According to the analysis, out of 44 findings<sup>31</sup> with regard to the delegation of authority, 32 findings representing 73% of the total number of findings are regarding an oversight programme for recognized organizations and agreements between the State and the RO.

Furthermore, evidence that it is still necessary to improve the performance of recognized organizations can be found in many areas. For instance, Paris MoU has analyzed the responsibility of recognized organizations regarding detainable deficiencies since 1999. If detainable deficiencies are contributed by a Recognized Organization under the certain criteria, they are marked "RO responsible" (Paris MoU, 2011, p. 20).

Table 3 shows the PSC detention rate with all RO related deficiencies and, in particular, with member of IACS related deficiencies in Paris MoU from 1999 to 2011. Out of 16,514 detentions since 1999, 2,771 detentions were determined to be attributed to inadequate performance of recognized organizations. It is 16.8% of total

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<sup>&</sup>lt;sup>31</sup> Actual number of findings are 42 however, 2 of 42 findings contained findings in 2 areas. Therefore, 44 findings have been considered in the analysis.

detentions which is a fairly high figure. In addition, 9.7 % of total detentions were attributed to IACS members as recognized organizations.

Even though IACS member classification societies have been recognized to establish, maintain and improve their capabilities as classification societies as well as recognized organizations in accordance with RO related requirements, detention rates with RO and IACS member classification societies related deficiencies shown in Table 3 indicate that there is still significant room for improvement of performance level of recognized organizations through a thorough oversight system for recognized organizations.

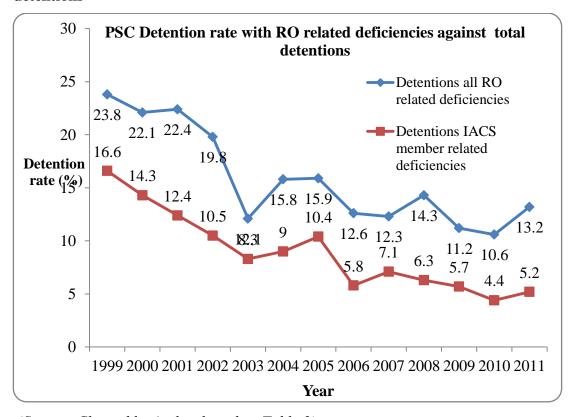
Table 3 PSC Detentions with RO and IACS related deficiencies

Year	No. of	No. of	Detention	n with RO	Detention with IACS			
	inspections	detentions	related deficiencies		Member related			
		(A1)	(A	A2)		ies		
			No.	%	No.	%	%	
						(of A2)	(of A1)	
1999	18399	1684	400	23.8	280	70.0	16.6	
2000	18559	1764	390	22.1	253	64.9	14.3	
2001	18681	1699	380	22.4	210	55.3	12.4	
2002	19766	1577	312	19.8	166	53.2	10.5	
2003	20309	1428	173	12.1	118	68.2	8.3	
2004	20316	1187	188	15.8	107	56.9	9.0	
2005	21302	994	158	15.9	103	65.2	10.4	
2006	21566	1174	148	12.6	68	46.0	5.8	
2007	22877	1250	154	12.3	89	57.8	7.1	
2008	24647	1220	174	14.3	77	44.3	6.3	
2009	24186	1059	119	11.2	60	50.4	5.7	
2010	24058	790	84	10.6	35	41.7	4.4	
2011	19058	688	91	13.2	36	39.6	5.2	

Total	273724	16514	2771	16.8	1602	57.8	9.7

(Source: Compiled by the Author from the Annual Reports of the Paris MoU, from 1999 to 2011)

Figure 3 PSC Detention rate with RO related deficiencies against total detentions



(Source: Charted by Author based on Table 3)

Figure 3 was derived from the data in Table 3 to analyze the trend of detention rates in terms of performance of recognized organizations. According to Figure 3, it seems that detention rates attributed to ROs have gradually declined; however, 11.6%, which is the average rate for the last three years, is still quite a high figure.

## 3.2 Performance of recognized organizations

As discussed in paragraph 3.1, it is revealed that there are still areas to be improved in terms of securing recognized organizations' full compliance with IMO instruments. Recognized organizations' performance affects flag State performance tremendously and verification of recognized organization's compliance with relevant IMO resolutions can be the way to assess the minimum performance level of recognized organization. However, objective published data for determining conformity with relevant IMO resolutions has not been available so far.

Under this circumstance, Paris MoU has assessed the specific responsibility of recognized organizations for detainable deficiencies and published in its annual report since 1999 (Paris MoU, 2011).

Table 4 shows the performance level of various ROs that had been subject to 60 or more PSC inspections in a three year period (2009~2011) in the port of Paris MoU region. According to Table 4, 28 recognized organizations were assessed according to the criteria developed by Paris MoU. Assessment was carried out based on the number of inspections, detentions and other factors, and subsequently, four grades of performance level were established: high, medium, low and very low.

Table 4 Performance level of various ROs (2009 – 2011, as of 2012, July 1) (Paris MoU, 2012)

RO	Inspections	Detentions	Low/medium limit	Medium/high limit	Excess Factor	Performance Level
American Bureau of Shipping, ABS	6035	1	139	102	-1.97	
Det Norske Veritas, DNV	12725	11	281	228	-1.89	high
China Classification Society, CCS	878	0	25	10	-1.87	

RO	Inspections	Detentions	Low/medium limit	Medium/high limit	Excess Factor	Performance Level
Lloyd's Register, LR	14112	18	310	254	-1.85	
Germanischer Lloyd, GL	15868	27	347	288	-1.80	
Registro Italiano Navale, RINA	3160	4	77	50	-1.80	
Bureau Veritas, BV	13515	28	298	243	-1.75	
Nippon Kaiji Kyokai, NK	6878	15	157	118	-1.72	
Turkish Lloyd, TL	1437	2	38	20	-1.69	
Korean Register of Shipping, KR	833	1	24	10	-1.58	
Russian Maritime Register of Shipping, RMRS	6055	26	140	103	-1.45	
Polski Rejestr Statkow, PRS	787	5	23	9	-0.63	•
Hellenic Register of Shipping, HRS	418	3	14	3	-0.05	
Alfa Register of Shipping, ARS	116	0	5	0	0.11	
International Naval Surveys Bureau, INSB	915	13	26	11	0.15	
Croatian Register of Shipping, CRS	225	2	8	1	0.18	
Indian Register of Shipping, IRS	137	1	6	0	0.23	
Isthmus Bureau of Shipping, IBS	293	4	10	1	0.29	medi
INCLAMAR, INC	117	2	5	0	0.44	um
Shipping Register of Ukraine, SRU	771	15	22	9	0.47	
Panama Register Corporation, PRC	150	3	6	0	0.50	
Panama Maritime Documentation Services, PMDS	125	3	6	0	0.58	

RO	Inspections	Detentions	Low/medium limit	Medium/high limit	Excess Factor	Performance Level
Dromon Bureau of Shipping, DBS	60	2	3	0	0.68	
Universal Shipping Bureau Inc., USB	197	6	8	0	0.78	
Bulgarski Koraben Registar, BKR	406	17	13	3	1.74	low
International Register of Shipping, IRS	1051	42	29	13	2.07	very
Register of Shipping, RSA	175	13	7	0	3.55	low
Phoenix Register of Shipping, PHRS	116	10	5	0	3.90	10W

(Source: Recognized Organization performance table (2009-2011), Paris MoU)

As shown in Table 4, IACS member classification societies are graded as showing high performance level except for the Croatian Register of Shipping (CRS) and Indian Register of Shipping (IRS) which have achieved member status of IACS in recent years.<sup>32</sup> Most non-IACS classification societies have shown medium, low or very low performance levels.

Different performance levels of recognized organizations mean inconsistent levels of implementation of IMO instruments. Therefore, a concrete system to improve the coherent level of performance of all recognized organizations should be considered and an oversight system of recognized organizations can be one of the effective regimes.

 $<sup>^{\</sup>rm 32}$  For CRS: May 2011, For IRS: June 2010

#### CHAPTER IV

# **Consideration of relevant legal instruments**

#### 4.1 Recognized Organization Code

#### 4.1.1 Background and brief history of establishment

During the eighty-fourth session of the Maritime Safety Committee (MSC), the development of a Code for Recognized Organizations (RO Code) was proposed by 27 European States together with the European Commission (EC). From the point of view of the proposer, the background for proposal was the absence of consolidated requirements for recognizing, authorizing and monitoring ROs and the absence of a uniform and effective audit system over ROs. Objectives of the RO Code suggested by proposers are as follows; (IMO, 2008b)

- To help States to implement the requirement for recognizing, authorizing and monitoring their ROs
- To put together scattered requirements regarding ROs in one mandatory instrument
- To establish the mandatory audit regime which should be conducted by qualified and independent auditors

Following consideration of the proposal, a number of delegations raised a doubt as to whether the new instrument should be developed since there are well established requirements which should be abided by when flag States delegate their authority to ROs. They stated that there was no appropriate compelling need for the proposal because of the same reasons. However, the MSC at its eighty-fourth session decided

to approve the "Development of a code for recognized organizations" to be included in the work programme of the Sub-Committee on Flag State Implementation (FSI). (IMO, 2008a)

As instructed by MSC at its eighty-fourth session, FSI at its seventeenth session commenced work to consider the development of the RO Code. However, the necessity of the development of a Code was not agreed among delegations. Some delegations raised concerns that an audit regime over ROs conducted by a third party could invade the sovereign rights of a flag State over their ROs. In addition, they expressed their view that the ultimate responsibility for ensuring the compliance of ROs with international instruments should be assumed by the flag State which recognized their ROs. Having considered various opinions raised by many delegations, FSI 17<sup>th</sup> agreed that a gap analysis to distinguish the loop hole, which existing requirements did not or insufficiently deal with, should be conducted before a discussion on specific matters such as the necessity of auditing ROs. (IMO, 2009)

During the FSI 18<sup>th</sup> session, several documents were submitted for gap analysis as suggested in FSI 17<sup>th</sup> session. After the consideration of documents submitted and report of the working group of the Sub-committee, FSI 18<sup>th</sup> decided several issues raised during the discussion and prepared an outline of an RO Code which should be the commencement point of discussions to develop an RO Code. In addition, the Sub-committee decided to establish a correspondence group to prepare a draft Code for consideration in the next session. (IMO, 2010e)

FSI 19<sup>th</sup> and 20<sup>th</sup> sessions considered the relevant issues for the development of an RO Code through the working and inter-sessional groups and, consequently, prepared a draft RO Code for consideration by the parent Committees. (IMO, 2012c)

# 4.1.2 Structure and contents of the Code

4.1.2.1 Part I – General

Like other IMO instruments, Part I of the Code provides the purpose, scope of application and contents of the Code. Cooperation between flag States to ensure that their ROs abide by the Code is stipulated in Part I of the Code since one flag State may delegate its authority to several ROs which means one RO may be recognized by several flag States.

# 4.1.2.2 Part II – Recognition and Authorization Requirements for Organizations

Part II of the Code contains mandatory requirements for flag states and ROs that they have to abide by when they recognize or are recognized regarding delegation of flag States' authority.

#### - Terms and Definitions

In terms and definitions, the new concept of "A Vertical Contract Audit (VCA)" is introduced. Specific detail will be looked into later.

#### - General Requirements for ROs

The Code emphasizes the elements which ROs are required to have when they want to be recognized according to IMO instruments, such as independence, impartiality, integrity, competence, responsibility and transparency.

#### Management and Organization

The basic principle of this regulation 3 is that ROs shall have their quality management system implemented and advance its efficiency. For the purpose of this regulation 3, first of all, the policy and objectives for quality, safety and pollution

prevention shall be well defined and a quality management system shall be managed by documentation. The RO shall develop a quality manual to implement the quality management system effectively. In this regulation 3, cooperation between ROs for systematization of process regarding statutory certification and services under the system developed by flag States is highlighted.

#### Resources

Appropriate resources should be provided to ROs for achievement of their duty as ROs and implementation of a quality management system. Furthermore, ROs shall ensure that the work environment is safe and efficient enough to carry out statutory certification and services.

#### - Statutory Certification and Services Processes

The functional requirements for ROs to carry out statutory certification and services in terms of their design and development are dealt with in this regulation 5.

#### - Performance Measurement, Analysis and Improvement

As the method to assess the performance level of ROs regarding compliance with the Code, internal audits and vertical contract audits (VCA) shall be conducted appropriately. However, a specific consistent procedure for vertical contract audit does not exist.

# - Quality Management System Certification

Conformity with the RO's quality management system shall be certified by an independent certification body which is recognized by the flag State concerned. That certification body shall be accredited to conform to certain international standards by

an authorization body. However, there are no consistent working procedures to conduct assessment and certification of ROs.

#### 4.1.2.3 Part III

The purpose of Part III of the Code is to provide guidelines which flag States may refer to when they establish and manage oversight programmes over their ROs. Part III should be considered as a non-mandatory guidance to help flag States in conducting their duty regarding oversight programmes of their ROs.

#### Terms and Definitions

Many definitions are clarified to prevent misinterpretation of terms such as audit, oversight and monitoring.

#### - Establishing an Oversight Programme

An oversight programme should be developed to ensure the consistent and effective implementation of international instruments.

# - Principle of Auditing

The reliability of an oversight programme depends on the principle of auditing. The Code produces five principles which are ethical conduct, fair presentation, due professional care, independence and evidence-based approach.

# - Managing an Oversight Programme

The aim of an oversight programme cannot be accomplished without its effective and practical implementation. In this regard, the Code emphasizes the management of an

oversight programme with several factors to be considered. Furthermore, the Code opens the opportunity for joint audit and mutual recognition of oversight conducted by other flag States as agreed beforehand.

# 4.1.3 Comparison between existing requirements and RO Code

The RO Code under discussion in IMO includes many new requirements which were not prescribed in existing requirements. Table 5 provides a comparison between existing IMO requirements and requirements in the RO Code to identify the requirements that have been newly introduced in the RO Code.

Table 5 Comparison between existing requirements and RO Code

Ex	isting requirement	nt	RO Code	RO Code		
Res.A.739(18)	Annex	1	Part II 8.1.1			
		2	n/a			
		2.1	Part II 8.4.1	4.1.1		
		2.2	Part II 1.2	8.2.1.1		
		2.3	Part II 8.6.1	6.5.6		
		2.4	Part II 8.5.1			
		2.5	Part II 8.7.1			
		3	Part III 5.3.1			
		3.1	Part III 5.3.1.1			
		3.2	Part III 5.3.1.2			
		3.3	Part III 5.3.1.3			
		3.4	Part III 5.3.1.5			
		3.5	n/a			
Res.A.739(18)	Appendix 1	1	Part II 3.8.1			
		2	Part II 4.1.2			
		2-1	Part II 4.2.4			

Exi	sting requiremen	nt	RO Code	e
		3		
		3.1	Part II 4.1.3	2.2.1
		3.2	Part II 3.9.2.2	4.1.3.2
				5.2.2
Res.A.739(18)	Appendix 1	3.3.1	Part II 4.2.1	
		3.3.2	Part II 4.2.1	
		3.4	Part II 2.5.1	
		3.5	Part II 3.8.2	
		3.6	Part II 2.8.2	
		3.7	Part II 3.2.1	3.4.1.2
		3.8	Part II 7.1.1	
		3.8.1 ~ 4	n/a	
	Appendix 2		Appendix 3	
Res.A.789(19)	Annex		Appendix 2	
		Module 4A	Part II 4.2.5	4.2.6, 4.2.7
		Cargo ship	SOLAS 74 Chap.	
		safety	XII	
		construction		
		certificate, 2,		
		TS, FS		
			IAPP(A.2.3.1)	
			EIAPP(A.2.3.12)	
		Matrix of	Deleted	
		Module		
Res.A.1054(27)	Delegation of	18	n/a	
	Authority of			
	Part 2			
		18.1	Part II 8.4.1	

Existing requireme	nt	RO Code				
	18.2	Part II 8.2.1.1	1.2			
	18.3	Part II 3.9.2.1.3	6.5.6			
			8.6.1			
	18.4	Part II 8.5.1				
	18.5	Part II 8.7.1				
	19	n/a				
	20	Part III 5.1.1				
	20.1	Part III 5.1.1.1				
	20.2	Part III 5.1.1.2				
	20.3	Part III 5.1.1.3				

(Source: Author)

#### 4.2 Voluntary IMO Member State Audit Scheme(VIMSAS)

Even if thorough international instruments for quality shipping have been developed, it is impossible to achieve the aim of those instruments without consistent and effective implementation. VIMSAS was established to help the Party States to IMO instruments improve their capacities and comprehensive performance for implementation of IMO instruments. (IMO, 2003) Subsequently, "Framework and Procedures for the Voluntary IMO Member State Audit Scheme" was adopted to provide specific guideline in conducting an audit over Member States. According to the Framework and Procedures for the Voluntary IMO Member State Audit Scheme, one of the objectives is to observe and assess the control system regarding delegation of Member State's authority to recognized organizations.

#### 4.3 Code for the Implementation of IMO Mandatory Instruments

During the IMO Assembly's eighteenth session, Interim Guidelines to Assist Flag States was developed to enhance consistent compliance with international instruments for maritime safety and marine environment protection considering the difficulty in complying with IMO instruments. (Res.A.740(18)) These interim guidelines provided only instruction which was characterized as general. However, it has been reviewed and updated on numerous occasions considering newly developed and amended instruments as well as necessary items to be provided for its purpose. Consequently the Code for the Implementation of IMO Mandatory Instruments, 2011 was adopted as Res.A.1054(27).

The Code provides general duties which flag States, coastal States and port States should implement as well as specific obligations under the IMO instruments prescribed in the Code. Specific obligations in the Code are detailed enough for member States to identify every precise provision in terms of their obligations.

In terms of monitoring of ROs, the Code prescribes that an oversight programme of ROs should be established by flag States to ensure complete conformity with international instruments. This provision will be incorporated in the RO Code being developed.

#### **CHAPTER V**

#### Consideration of requirements for authorization to ROs

#### 5.1 Consideration of burden from practical oversight

#### 5.1.1 Burden of oversight

Since member States were invited to volunteer for audit in compliance with IMO resolution A.974(24) through Circular letter No.2687<sup>33</sup>, 67 States expressed their readiness for audit and, among them, 48 States have been audited so far. Results of audits revealed that the second largest problematic area concerns delegation of authority<sup>34</sup> and 41% of findings regarding delegation of authority were related to States' oversight systems of their recognized organizations.

Furthermore, the current audit scheme on a voluntary basis is under discussion to make it mandatory with a target completion year of 2014. This progress will force flag States to enhance their efforts for assurance of effective and concrete oversight systems of their recognized organizations. Consequently, this movement will bring an increased level of auditing of recognized organizations in the future.

Table 6 shows that even during the voluntary period for implementation of VIMSAS, the audit period of recognized organizations by flag States increased significantly, showing an increase of audit days from 376 in 2006 to 700 in 2009, which represents an 86% increase (IMO, 2010c).

<sup>&</sup>lt;sup>33</sup> Invitation to Member States to volunteer for audit in accordance with Assembly resolution A.974(24) on Framework and Procedures for the Voluntary IMO Member State Audit Scheme <sup>34</sup> See Figure 1 in chapter III

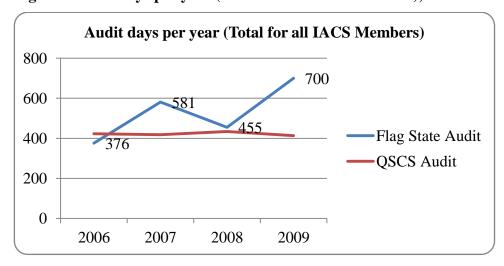
<sup>35</sup> See resolution A.1018(26) on Further Development of the Voluntary IMO Member State Audit Scheme

Table 6 Audit days per year (Total for all IACS Members), 2006-2009

	Audit days per year (Total for all IACS Members)												
20	06	2007		20	08	2009							
Flag	QSCS	Flag	QSCS	Flag	QSCS	Flag	QSCS						
State	Audit	State	Audit	State	Audit	State	Audit						
Audit		Audit		Audit		Audit							
376	423	581	418	455	434	700	413						

(Source: Annex of FSI 18/15/4)

Figure 4 Audit days per year (Total for all IACS Members), 2006-2009



(Source: Annex of FSI 18/15/4)

As required by resolution A.1054(27) and resolution A.739(18), recognized organizations should be subject to oversight and monitoring programme established by flag States for ensuring the quality of performance carried out by recognized organizations. It leaves no room for doubt that each flag State has a sovereign right to supervise its ROs and each RO should accept the supervision of the flag State which delegated its statutory authority.

However, it is necessary to review the purpose of the IMO as follows; (IMO, 2004, p. 7)

"... to encourage and facilitate the general adoption of the highest practicable standards in matters concerning the maritime safety, efficiency of navigation and prevention and control of marine pollution from ship...."

Therefore, instruments developed by IMO should be the highest, and, simultaneously practicable standards. Even though it is quite difficult to draw an exact line of demarcation between highest level and practicable level, it should be decided case by case through discussion and consideration among experts and delegations. Instruments for recognized organizations should also be covered by this principle.

As mentioned in Chapter II, Annex A indicates that there are 766 individual authorizations between flag States and members of IACS as recognized organizations and there are a total of 81 organizations recognized by flag States including IACS members. Having considered 13, the number of IACS members, the number of total individual authorizations may be much larger.

To estimate the cost burden for an audit, the average cost for an audit under VIMSAS can be referenced. Until now<sup>36</sup>, 48 member States have been audited under VIMSAS and the average cost for 1 audit is calculated as around 11,000 GBP<sup>3738</sup>. Presuming that there may be annual audits for recognized organizations and each flag State will conduct an audit for each individual organization, the total cost for audits may reach 8,426,000 GBP<sup>39</sup> for members of IACS as recognized organizations only. Although current regulations for authorization include only provisions for an oversight system, and a specific period of audit for recognized organizations is not

<sup>&</sup>lt;sup>36</sup> As of 13<sup>th</sup> April 2012
<sup>37</sup> The pound sterling, the official currency of the United Kingom

<sup>&</sup>lt;sup>38</sup> Refer to C108/6 para 8

<sup>&</sup>lt;sup>39</sup> Worth of 13,683,808 USD at currency as of 19<sup>th</sup> September 2012

stipulated in those regulations, it is not difficult to expect that the fiscal and temporal cost will be a great burden to both flag States and recognized organizations.

To address the matter of burden for audits, the provisional Code for Recognized Organizations includes a provision for combined oversight and mutual recognition of oversight results. According to part III 7.2.2.2 of the Code, it is allowed for flag States to carry out oversight of their common recognized organizations conjunctionally by the establishment of an agreement between States. In addition, flag States may accept the results of oversights conducted by other States under the agreement or national law.

# 5.1.2 Effective management of resources for oversight

Flag States' oversight of their recognized organizations is a primary and essential measure to ensure consistent and effective implementation of international instruments for recognized organizations. For that reason, all recognized organizations should be subject to their flag States' oversight without exception.

Nevertheless, it is quite important to allocate an appropriate amount of resources for oversight depending on the requirement of resources. It is ineffective to allocate the same amount of resources for oversight without considering the necessary amount, depending on the performance level of recognized organizations.

As discussed in the previous chapter, the performance level among many recognized organizations may appear in different aspects. Since one of the purposes of oversight of recognized organizations is to maintain the performance level of recognized organizations at a consistent and high level, already well-performing recognized organizations need to be distinguished from low performing recognized organizations when establishing an oversight programme. More resources, such as the period and duration of the audit, for oversight need to be assigned to relatively

low performing recognized organizations since they have much more room for improvement by States' oversight. Therefore, it would be more effective to establish an oversight programme of recognized organizations on an organization's performance basis rather than a time basis.

#### 5.2 Quality management system of Recognized Organizations

It is an obligation of organizations which have been delegated flag States' authority under the relevant IMO instruments to establish and implement effective quality systems. This system should be verified as to whether its development and establishment have been effective compared to applicable international quality standards<sup>40</sup>.

Major classification societies had developed single quality management systems for their common use and verification of their effective implementation and improvement. It will be useful to look at IACS' quality management system for understanding Part I chapter 7 of draft RO code.

# 5.2.1 IACS Quality Management System Certification Scheme (QSCS)

IACS has its own quality requirements, which are Quality Management System Requirements (QMSR), to be complied with by its member society and QMSR was established based on the quality management requirements of the ISO 9001 Standards. QMSR also contains additional requirements which are relevant and appropriate to the classification society based on resolution A.739(18), resolution A.789(19), ISO 17020<sup>41</sup> standards and its experience as a classification society.

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 $<sup>^{40}</sup>$  See paragraph 3.8, Appendix 1, Annex of Res.A.739(18) and paragraph 7.1.1, Part II of draft RO Code(Annex 6, FSI 20/19)

<sup>&</sup>lt;sup>41</sup> ISO/IEC 17020:2012, Conformity assessment-Requirements for the operation of various types of bodies performing inspection

IACS Quality System Certification Scheme (QSCS) is the tool for ensuring a member society's compliance with QMSR. QSCS was established in 1991 and has evolved to reflect its adequacy to members and the shipping industry, subsequently. The 11<sup>th</sup> version of OSCS is valid currently.

A major change in the 11<sup>th</sup> edition of QSCS is the introduction of an independent audit body for quality certification. In fact, QSCS audit was conducted by IACS' exclusive auditors until 2010. However, they decided to outsource QSCS audits to an external independent audit body which is called Accredited Certification Body (ACB) after the settlement with the European Union's Directorate-General for Competition which required IACS to provide "objective and transparent membership criteria" (Joshi, 2010). At present, IACS has designated 6 ACBs<sup>42</sup> meeting the requirements of the QSCS (IACS, 2012) and each member of IACS should make a contract with one of ACBs<sup>43</sup>

#### 5.2.2 Requirements for ACB

Having introduced ACB for certification of classifications society's compliance with QMSR, IACS established detailed requirements for ACBs. At a minimum, ACB shall

DEKRA: DNV, RINA

DQS: GL ZSJZ: PRS SAI Global: RS

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<sup>&</sup>lt;sup>42</sup> A list of ACBs meeting the requirements of the QSCS are as follows;

<sup>-</sup> SGS SOCIETE GENERALE DE SURVEILLANCE S.A. of 1 Place des Alpes, CH-1211 Geneva, Switzerland

<sup>-</sup> DEKRA Certification B.V., Utrechtseweg 310, 6812 AR Arnhem P.O. Box 5185, 6802 ED Arnhem, The Netherlands

<sup>-</sup> BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes, MK5 8PP, UK

<sup>-</sup> DQS GmbH, August-Schanz-Straße 21, D-60433 Frankfurt am Main, Germany

<sup>-</sup> SAI Global Certification Services Pty Ltd (trading as SAI Global), 286 Sussex Street, Sydney, NSW, 2000 Australia

<sup>-</sup> ZSJZ WAT (Department of Management and Quality Systems, Military University of Technology) ul.Nowowiejska 26, 02-010 Warszawa, Poland

<sup>&</sup>lt;sup>43</sup> SGS: ABS, CCS, KR, NK BSI: BV, CRS, IRS, LR

- be accredited to abide by ISO/IEC 17021:2006 standard by an accreditation body who is signatory to of International Accreditation Forum(IAF)
- shall have accreditation under appropriate part of NACE<sup>44</sup> and/or EAC<sup>45</sup> codes

In addition, ACB shall not have any relation with classification societies except a contract for auditing to guarantee the independence of the ACB. Besides requirements for ACBs, audit members of ACB also have the capability qualified under ISO 19011:2002, ISO/IEC 17021:2011 and the relevant experience and familiarization of the appropriated parts of NACE or EAC Codes. (IACS, 2012)

However, it will be quite difficult to expect that auditor from ACB to carry out audits of classification societies without relevant knowledge and understanding regarding specific features of the nature of the classification society and its work (Joshi, 2010). Therefore, IACS QSCS requires a minimum 2 years of experience in applying requirements developed by IACS such as;

- QSCS
- Technical resolutions
- Classification society's technical rules for classification and statutory work

IACS also requires auditors from ACB to be trained through IACS QSCS Familiarization training course provided by IACS. This course includes familiarization with following requirements;

<sup>&</sup>lt;sup>44</sup> NACE Codes: Machinery and equipment - 25.4, 28, 30.4, 33.12, 33.2; Electrical and optical equipment - 26, 27, 33.13, 33.14, 95.1; Shipbuilding - 30.1, 33.15; Engineering services - 71, 72, 74 (except 74.3); Transport, storage - 49, 50, 52

<sup>45</sup> EAC Codes: 17/17.1,18/18.1, 20 and 34.

- QMS requirements
- Unified Interpretations (UI)
- Unified Requirements (UR)
- Procedural Requirements (PR)
- Common Structural Rules (CSR)

In terms of auditors' knowledge of audits of quality management systems of recognized organizations, it is quite important for the auditor from the ACB to understand the specific features of the nature of recognized organizations which exercise ship surveys and certification authority on behalf of flag States, since quality systems of organizations or companies may show different aspects depending on their business characteristics. The market for ship classification is quite a distinctive industry and this requires ample understanding of its distinctiveness for effective and successful audit. Therefore, auditors from ACB should have sufficient knowledge to carry out successful audits of the quality management systems of recognized organizations.

Even though IACS provides training courses for familiarization with specific features of classification societies to supplement quality management system auditors from ACB with relevant knowledge, the familiarization course is not sufficient to deliver enough capability in application of specific features of classification societies and recognized organizations to auditors. So as to ensure effective and robust audits of recognized organizations, the auditors need to be well acquainted with the work process systems of recognized organizations, records showing compliance with the relevant requirements during the process and where to find them. Furthermore it must be required for auditors to have sufficient understanding of classification and statutory functions and to know the relevant documents from classification societies and statutory regulations, instructions to be obeyed by surveyors and technical documents, in particular for IACS, such as PR/UR/UI. It is recommended that

auditors have the specific maritime background in education or through work experience, for instance naval architect, marine engineer or survey experience, or at least have a technical professional in the audit team (QACE, 2012).

Auditors also need to maintain their knowledge and experience obtained through regular involvement in audits of recognized organizations. Moreover, auditors' involvement in audits of several recognized organizations rather than single or few organizations will help auditors to have sufficient and various experiences through comparison of same work process between different recognized organizations (QACE, 2012).

# 5.2.3 Quality management system of recognized organizations of EU

The European Union (EU) introduced "Regulation 391/2009 on common rules and standards for ship inspections and survey organizations" which was part of the measures in consequence of the Erika disaster and the Regulation came into force in 2009 (Lloyd's List, 2010). Article 11 of the Regulation 391/2009 requires that recognized organizations should establish independent quality assessment and certification entities in compliance with the applicable international quality standards such as ISO 9001 quality standard criteria. (EU, 2009)

In pursuance of article 11 of the Regulation 391/2009, 12 recognized organizations<sup>46</sup>, of which 11 are members of IACS, established QACE <sup>47</sup> to provide regular assessment of quality management system certification of organizations recognized by the EU. QACE was established as a not-for-profit private company limited by guarantee which is a community interest company. While QACE does not conduct

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<sup>&</sup>lt;sup>46</sup> American Bureau of Shipping(ABS), Bureau Veritas SA(BV), China Classification Society(CCS), Det Norske Veritas AS(DNV), Germanischer Lloyd SE(GL), Korean Register of Shipping(KR), Lloyd's Register(LR), Nippon Kaiji Kyokai(NK), Polski Rejestr Statków S.A.(PRS), RINA Services S.p.A.(RINA), Russian Maritime Register of Shipping(RMRS) as member of IACS, Registro Internacional Naval SA(RINAVE) as non-IACS member.

<sup>&</sup>lt;sup>47</sup> QACE-Entity for the Quality Assessment and Certification of Organizations Recognized by the European Union CIC

direct audits of recognized organizations, it exercises its authority through observation and assessment of audits carried out by independent Accredited Certification Bodies (ACB). (QACE, 2012) Although QACE was established by EU's recognized organizations which are subject to the activities of QACE, it has an independent board of directors<sup>48</sup> who exercise and control its authority to secure its independence (Eason, 2010).

# 5.3 Appeal requirements

It is apparent that the entire right and responsibility with regard to monitoring their recognized organizations lies on flag States. However, there might be disagreements over audit findings or non-conformity when recognized organizations are audited by ACB regarding quality management systems or flag States. Especially, since auditors from ACBs may have a lack of knowledge concerning maritime background or technical application of IMO instruments, disagreements over audit results may be raised by recognized organizations. However, procedures to resolve the disputes raised during audits are not clear in the RO Code.

It is quite valuable to refer to other regimes for benchmarking the benefits of relevant requirements.

#### 5.3.1 Appeal procedure under PSC

According to the resolution A.1052(27), the master of a ship which is subject to PSC should be advised that the company or its representative has a right to make a complaint if the disagreement cannot be solved within an appropriate time and the right to appeal if PSCO decide to detain the ship concerned(Res.A.1052(27) Annex para 21, 22).

<sup>48</sup> At present, QACE has 5 elected non-executive directors of the board. (QACE, 2012)

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In pursuance of this requirement, PSC MoUs, such as Paris MoU and Tokyo MoU established national appeals procedures and detention review procedures. Under the national appeal procedure, a ship's owner or operator has the right to appeal to the appropriate body in the State of the port of call. Specific information for appeal, such as the subject of right to appeal, contact point and deadline for appeal and other relevant information by each State are provided State by State (Paris MoU, 2012) (Tokyo MoU, 2012).

In the event the subject of the right to appeal refuses to use national appeal procedures, but still wants to make a complaint regarding detention, they can send such a complaint to the ship's flag State or the recognized organization. Then, the flag State of the recognized organization requests the port State to reconsider the detention decision and the port State will investigate those requests (Paris MoU, 2012) (Tokyo MoU, 2012).

If the flag State or recognized organization does not agree with result of the port State's investigation, they can request a review of the detention decision by the Secretariat of MoU within a certain period<sup>49</sup> from the date of release from detention. The Secretariat will then set up a "Detention Review Panel" to consider the request for review and inform the flag State or recognized organization of the result of the review (Paris MoU, 2012) (Tokyo MoU, 2012).

#### 5.3.2 Appeal procedure under IACS QSCS

IACS established an appeal procedure to cope with disagreements of opinion which may be raised between a classification society and an auditor from ACB during a QSCS audit with regard to the audit process and application of the QSCS documentation. The appeal is dealt with by the Quality Secretary (QS) providing interpretation of QSCS and technical documents at the first level. Then the Quality

<sup>&</sup>lt;sup>49</sup> 120 days for Paris MoU and 90 days for Tokyo MoU

Committee (QC) handles the appeal, where necessary, using the technical expertise of the IACS. Advisory Committee (AVC), which consists of industry representatives and IMO observers, who consider the objectivity of the process dealing with all the appeals during periodic meetings. If the appeals concern the audit itself or the interpretation of quality standards, such as ISO standards, the appeals are handled according to the appeal procedures of the each ACB (IACS, 2012).

Furthermore, IACS operates the Independent Appeals Board (IAB) to deal with the appeals regarding the matters of membership of IACS such as refusal, suspension or withdrawal of membership. IAB consists of a chairman and a panel of at least 10 adjudicators who have expertise in terms of technical and legal aspects and they should be independent of IACS. IACS also developed the "Appeal Board Rules of Procedure" and this procedure describes detailed instructions from the commencement of an appeal to its completion, even matters of cost which might be incurred during the appeal (IACS, 2009).

#### 5.4 Sovereignty issues

When it comes to sovereignty issues against a States' control of its recognized organizations, strong arguments were raised during discussions for the development of the RO Code. One of the intentions of the proposal for the development of an RO Code was to establish a legal regime which should ensure that recognized organizations are subject to mandatory audits by third party independent auditors (MSC 84/22/13). Several States expressed their serious concerns during discussions that a mandatory audit scheme to be conducted by a third party audit body may infringe on the sovereign right of States to control their recognized organization since flag States possess all power to exercise their exclusive right over recognized organizations.

Consequently, several requirements were established to make the sovereignty issue clear in the RO Code. For instance, Part II 3.9.3.3 in the Code states that;

"No flag State shall mandate its recognized organizations to apply to ships, other than those entitled to fly its flag, any requirement pertaining to their classification rules, requirements, procedures or performance of other statutory certification processes, beyond convention requirements and the mandatory instruments of the IMO"

# Furthermore, Part III 7.2.2.2 states that;

"... conversely no flag State may be compelled by another flag State or organization to accept oversight of an RO by others in lieu of conducting their own individual flag State oversight unless they so elect by written agreement or is so provided in the law of that State"

#### **CHAPTER VI**

# **Recognized Organizations for MLC 2006**

#### 6.1 History of MLC 2006

As explained in the previous chapter, most of the concerns have been regulated by instruments developed by the IMO since those concerns are mostly related to maritime safety, marine environment protection and seafarers' qualification in terms of the safety perspective. In addition, IMO has raised the significance of seafarers having considered seafarers' dedication to the maritime sector. <sup>50</sup> Regulations regarding seafarers developed by the IMO focus more on safety aspects, with the intention to accomplish, ultimately, safety onboard while labour instruments developed by ILO focus more on seafarers' rights as human beings.

The first international maritime labour instrument was the "National Seamen's Code Recommendation" adopted by ILO, which was established in 1919 following the cessation of World War I as part of the peace agreements, at its Genoa session in 1920 (McConnell, Devlin, & Doumbia-Henry, 2011, pp. 3, 13). Even after that, the ILO has made many efforts to improve seafarers' rights. Ultimately, eight-six years after the adoption of the first maritime labour instrument, ILO adopted the Maritime Labour Convention, 2006, in which it incorporated more than 68 existing international labour instruments. It was unanimously adopted by ILO, at the 94<sup>th</sup> Session of the International Labour Conference (ILC) (McConnell, Devlin, & Doumbia-Henry, 2011, p. 16). MLC, 2006 has been considered as the "fourth pillar" of the international regulatory regime for quality shipping together with the three pillars; SOLAS, MARPOL and STCW Convention (ILO, 2012).

<sup>&</sup>lt;sup>50</sup> IMO designated year 2010 as the "Year of the Seafarer" which was theme for World Maritime Day of 2010, <a href="http://www.imo.org/ourwork/humanelement/gotosea/pages/2010-yearoftheseafarer.aspx">http://www.imo.org/ourwork/humanelement/gotosea/pages/2010-yearoftheseafarer.aspx</a>

# 6.2 Survey and certification structure of MLC 2006

Even though MLC, 2006 was established by ILO, it has a similar structure to IMO instruments in terms of ensuring implementation of the convention. MLC 2006 provides detailed requirements which should be fully met by concerned parties as well as inspection and certification requirements and maritime labour certificates should be issued after confirming ships' full compliance with the convention (ILO, 2006). Inspections and certification under the Convention may be conducted by recognized organizations which are authorized by a competent authority concerning competency and independence. The scope of authority which may be delegated shall be limited within the duties of the competent authority. MLC 2006 will come into effect from 20<sup>th</sup> August 2013.

Table 7 Inspection and certification extent (ILO, 2009)

Regulation No.	Content	Certification	Inspection
		/Inspection	Only
Title 1: I	Minimum Requirements for Seafarers to	Work on a Shi	p
Regulation 1.1	Minimum age	Yes	
Regulation 1.2	Medical certificate	Yes	
Regulation 1.3	Training and qualifications	Yes	
Regulation 1.4	Recruitment and placement	Yes	
	Title 2: Conditions of employmer	nt	
Regulation 2.1	Seafarers' employment agreements	Yes	
Regulation 2.2	Wages	Yes	
Regulation 2.3	Hours of work and hours of rest	Yes	
Regulation 2.4	Entitlement to leave		Yes
Regulation 2.5	Repatriation		Yes
Regulation 2.6	Seafarer compensation for the ship's		
	loss or foundering		

Regulation No.	Content	Certification	Inspection
		/Inspection	Only
Regulation 2.7	Manning levels	Yes	
Regulation 2.8	Career and skill development and		
	opportunities for seafarers'		
	employment		
Title 3: A	accommodation, recreational facilities, f	ood and caterir	ng
Regulation 3.1	Accommodation and recreational	Yes	
	facilities		
Regulation 3.2	Food and catering	Yes	
Title 4: Health	protection, medical care, welfare and so	cial security pr	otection
Regulation 4.1	Medical care on board ship and	Yes	
	ashore		
Regulation 4.2	Shipowner's liability		Yes
Regulation 4.3	Health and safety protection and	Yes	
	accident prevention		
Regulation 4.4	Access to shore-based welfare		
	facilities		
Regulation 4.5	Social security		Yes
	Title 5: Compliance and enforcement	ent	
Regulation 5.1.1	General principles		Yes
Standard A5.1.1			
Regulation 5.1.2	Authorization of recognized		
	organizations		
Regulations 5.1.3	Maritime labour certificate and		
	declaration of maritime labour		
	compliance		
Regulation 5.1.4	Inspection and enforcement		
Regulation 5.1.5	On-board complaint procedures	Yes	

Regulation No.	Content	Certification	Inspection
		/Inspection	Only
Regulation 5.1.6	Marine casualties		
Regulation 5.2.1	Inspections in port		
Regulation 5.2.2	Onshore seafarer complaint-handling procedures		
Regulation 5.3	Labour-supplying responsibilities		

(Source: Tabulated by Author based on Guidelines for flag State inspections under the Maritime Labour Convention, 2006)

Unlike other traditional IMO instruments with regard to maritime safety and marine environment protection, MLC 2006 requires different skills to check compliance with the convention (Landon, 2012). Even though the convention provides an inspection and certification scheme, not all regulations in MLC 2006 require inspection and certification. Table 7 describes the status of the extent to which regulations are subject to inspection and certification or inspection only. According to Table 7, the characteristic of each regulation are quite different from traditional IMO instruments. For instance, regulations for recruitment and placement, and seafarers' employment agreements and wages are subject to inspection which requires different qualifications for the surveyors from those for traditional surveyors.

Although MLC 2006 does not refer to any requirements which should be observed when flag States delegate their authority under the Convention, resolution A.739(18) is recommended to be taken into consideration when establishing an oversight programme for recognized organizations. However, this does not mean that recognized organizations for MLC 2006 should observe all of the requirements of resolution A.739(18). Furthermore, MLC 2006 does not provide any specific requirements for recognized organizations and their inspectors under the MLC 2006 in terms of unique features of the requirements of the Convention while IMO

resolution A.789(19) provides very detailed requirements for the survey and certification functions of recognized organizations under IMO instruments.

#### **CHAPTER VII**

#### **Conclusion and Recommendations**

#### 7.1 Conclusion

This dissertation tries to discuss effective control and monitoring of recognized organizations and to find the areas to be improved through consideration and analysis of current international instruments for a new RO Code being developed.

Effective and consistent implementation of relevant international instruments is a key element for securing maritime safety and marine environment protection. In this regard, it has been identified that ultimate and full responsibility for implementation of international instruments are assumed by flag States. According to the research in this dissertation, 81 recognized organizations have been reported to GISIS and there are 766 individual authorizations between flag States and members of IACS as recognized organizations. Since specific functions, such as survey and certification of ships, have been delegated by many flag States to recognized organizations, which have well-developed professional rules and expert experience with respect to the structural integrity of ships, under the international regulations, the identity and significance of these recognized organizations, which in many cases are classification societies, have been explained. Additionally, detailed authorization status between flag States and recognized organizations has been described.

Through the analysis of CASR in consequence of audits under VIMSAS, it was revealed that, in terms of breach of flag States' obligations, the second-largest area with findings was the area of delegation of authority. Especially, most of the findings regarding delegation of authority were related to oversight programmes and

agreements between the States and ROs according to relevant IMO resolutions. In terms of the performance of recognized organizations, according to the analysis of data from port States control in the Paris MoU region, it is revealed that 2,771 of 16,514 (16.8%) detentions since 1999 were attributed to improper performance of recognized organizations. Furthermore, the performance level of recognized organizations among them has not been presented in a consistent aspect. Consequently, the necessity for control and monitoring over recognized organizations was extracted through this analysis.

Having recognized the importance of a uniform quality level for delegation of authority, IMO has already developed relevant requirements to regulate delegation of States' authority. However, since those regulations are scattered in various IMO requirements and a harmonized audit scheme does not exist to verify effective and consistent implementation of these requirements, at the eighty-fourth session of Maritime Safety Committee, it was proposed to develop a consolidated instrument including an audit scheme for recognized organizations and at present a draft RO Code has been developed by the Sub-committee on Flag State Implementation for further consideration of the parent committee. In this dissertation, an overview of requirements was presented and a comparison between existing requirements and the draft RO Code was carried out to analyze the newly introduced concept and requirements.

A critical analysis of effectiveness for practical implementation of existing requirements and the draft RO Code has been carried out. At present, 81 recognized organizations including members of IACS have been reported to GISIS along with 766 individual delegations of authority between flag States and recognized organizations. This number may force flag States and recognized organizations to undertake excessive burdens in terms of conduct of audits. With regard to verification of quality management systems of recognized organizations, the draft RO Code introduces verification requirements for quality management systems of

recognized organizations which should be conducted by an independent accredited certification body (ACB) with qualification under certain international criteria. Even though auditors of ACB are qualified for audits of quality systems, it does not mean that they are qualified to carry out audits of the classification societies, as recognized organizations, which have quite unique characteristic in terms of classification of ships. Auditors for verification of quality systems of recognized organizations should fully understand the characteristics of organizations in terms of survey and certification functions according to international instruments.

Besides international instruments developed by the IMO, the ILO established MLC 2006 for ensuring seafarers' rights, incorporating existing requirements for seafarers and MLC 2006 will enter into force from 20<sup>th</sup> August 2013. Even though MLC 2006 has different concerns from instruments developed by IMO, it has similar schemes to verify its implementation such as inspection/certification scheme, delegation of authority and port State control. Like IMO instruments, flag States may delegate inspection and certification authority according to MLC 2006 to recognized organizations. Therefore, recognized organizations under MLC 2006 should also be subject to oversight and monitoring regimes and it should be considered to extend the scope of application of the RO Code to MLC 2006.

#### 7.2 Recommendations

Based on the research in the dissertation, the following recommendations have been developed for effective and uniform implementation of requirements with regard to oversight and monitoring of recognized organizations;

#### 7.2.1 Oversight scheme on performance basis

In order to manage the resources for oversight of recognized organizations in effective way, it is recommended that an oversight programme of recognized organizations needs to be established on a recognized organizations' performance basis rather than a time basis. For instance, in case of an audit of a recognized organization, the period of audit, duration for one audit, and the number of auditors or scope of audit may be adjusted based on the performance level of the recognized organization subject to oversight.

Performance based management of oversight resources will bring more effective allocation of resources by limiting resources for well-performing recognized organizations and allocating more resources to low-performing recognized organizations.

7.2.2 Assurance of qualification of ACB auditors for audit of recognized organizations

Since it is very important for auditors to understand the nature of the auditee for an effective and accurate audit, education and training procedures should be established to enhance comprehension of auditors from ACB regarding the unique nature of statutory functions and recognized organizations. Furthermore, it is strongly recommended that recognized organizations verify whether auditors from ACB have specific knowledge and experiences in the maritime field for audit and flag States ensure that the recognized organization's verification is adequate and correct.

#### 7.2.3 Application scope of RO related requirements to MLC 2006

Even though MLC 2006 has different features and purposes from traditional IMO instruments for maritime safety and marine environment protection, inspection and certification schemes of MLC 2006 were established with close similarity to those of IMO instruments. Therefore, the application scope of requirements for recognized organizations needs to be extended to cover MLC 2006 for harmonized control of recognized organizations.

Furthermore, before extending the application scope of RO related requirements to MLC 2006, detailed specifications on the survey and certification functions of recognized organizations should be developed referring to IMO resolution A.789(19).

#### References

- Eason, C. (2010, November 25). Class societies form watchdog to meet EU regulations on quality. Retrieved from Lloyd's List: http://www.lloydslist.com/ll/sector/regulation/article350700.ece
- Equasis. (2011). The world merchant fleet in 2011, Statistics from Equasis. Paris: Equasis.
- European Union. (2009, April 23). *Common rules and standards for ship inspection and survey organisations* (Regulation (EC) No 391/2009).
- International Association of Classification Societies. (2009, October 27). CHARTER. London, U.K: IACS.
- International Association of Classification Societies. (2012, January). *IACS Quality System Certification Scheme*. Retrieved from IACS: http://www.iacs.org.uk/document/public/explained/List%20of%20ACBs.pdf
- International Commission on Shipping. (2000). Ships, Slaves and Competition. Charlestown, Australia.
- International Labour Organization. (2006, February 07). *Maritime Labour Convention*, 2006. Retrieved from International Labour Organization: http://www.ilo.org/wcmsp5/groups/public/---ed\_norm/---normes/documents/normativeinstrument/wcms\_090250.pdf
- International Labour Organization. (2009). Guidelines for flag State inspections under the Maritime Labour Convention, 2006. Geneva: International Labour Office.

- International Labour Organization. (2012, August 21). *Maritime Labour Convention*.

  Retrieved from International Labour Organization:

  http://www.ilo.org/global/standards/maritime-labour-convention/lang-en/index.htm
- International Maritime Organization. (1993a, November 4). Guidelines for the Authorization of Organizations acting on behalf of the Administration (A 18/Res.789). London: Author.
- International Maritime Organization. (1993b, November 4). *Interim Guidelines to Assist Flag States* (A 18/Res.740). London: Author.
- International Maritime Organization. (1995, December 8). Specifications on the Survey and Certification Functions of Recognized Organizations acting on behalf of the Administration (A 19/Res.789). London: Author.
- International Maritime Organization. (2003, November 27). *Voluntary IMO Member State Audit Scheme* (Res.A.946(23)). London: Author.
- IMO. (2004). *Basic Documents*, 2004 edition. London: International Maritime Organization.
- International Maritime Organization. (2005a, December 01). Framework and Procedures for the Voluntary IMO Member State Audit Scheme (Res.A.974(24)). London: Author.
- International Maritime Organization. (2005b, December 02). *Invitation to Member States to volunteer for audit in accordance with Assembly resolution*

- A.974(24) on Framework and Procedures for the Voluntary IMO Member State Audit Scheme (Circular letter No.2687). London: Author.
- International Maritime Organization. (2008a, May 23). Report of the Maritime Safety Committee on its eighty-fourth session (MSC 84/24). London: Author.
- International Maritime Organization. (2008b, February 6). Work Programme.

  Development of a Code for Recognized Organizations (RO Code): submitted by Austria et al (MSC 84/22/13). London: Author.
- International Maritime Organization. (2009, April 24). Report to the Maritime Safety

  Committee and the Marine Environment Protection Committee (FSI 17/20).

  London: Author.
- International Maritime Organization. (2010a, May 18). Development of a Code for Recognized Organizations. Gap analysis for development of a Code for Recognized Organizations: submitted by the Republic of Korea (FSI 18/15/6). London: Author.
- International Maritime Organization. (2010b, January 18). Further Development of the Voluntary IMO Member State Audit Scheme (A 26/Res.1018). London: Author.
- International Maritime Organization. (2010c, May 14). General comments to be taken into account in the further development of the Recognized Organizations (ROs) Code: submitted by the IACS (FSI 18/15/4). London: Author.
- International Maritime Organization. (2010d, January 18). *Global Integrated Shipping Information System (GISIS)* (A 26/Res.1029). London: Author.

- International Maritime Organization. (2010e, July 26). Report to the Maritime Safety Committee and the Marine Environment Protection Committee (FSI 18/20). London: Author.
- International Maritime Organization. (2011a, November 30). *Code for the Implementation of Mandatory IMO Instruments*, 2011 (A 27/Res.1054(27)). London: Author.
- International Maritime Organization. (2011b, March 4). Report to the Maritime Safety Committee and the Marine Environment Protection Committee (FSI 19/19). London: Author.
- International Maritime Organization. (2012a). *Introduction to IMO*. Retrieved from International Maritime Organization:

  <a href="http://www.imo.org/About/Pages/Default.aspx">http://www.imo.org/About/Pages/Default.aspx</a>
- International Maritime Organization. (2012b, April 13). *Progress report on the implementation of the Audit Scheme* (C 108/6). London: Author.
- International Maritime Organizations. (2012c). *Recognized Organizations*. Retrieved from Global Integrated Shipping Information System(GISIS): http://gisis.imo.org/Public/RO/BrowseOrganisation.aspx
- International Maritime Organization. (2012d, April 16). Report to the Maritime Safety Committee and the Marine Environment Protection Committee (FSI 20/19). London: Author.

Joshi, R. (2010, March 23). CMA 2010: IACS raises quality concerns. Retrieved from Lloyd's List: http://www.lloydslist.com/ll/sector/regulation/article6170.ece

KR. (2012). KR-CON. Retrieved from KR-CON: http://krcon.krs.co.kr/

Landon, F. (2012, May 21). *Staying within the boundaries*. Retrieved from Lloyd's List: http://www.lloydslist.com/ll/sector/regulation/article398748.ece

Lloyd's List. (2010, November 04). *Class societies blast EU's mutual standards ruling*. Retrieved from Lloyd's List:

http://www.lloydslist.com/ll/sector/regulation/article349084.ece

Mansell, J. (2009). Flag State Responsibility. New York: Springer.

Matthews, S. (2009, December 04). *IMO to make controversial audit scheme mandatory*. Retrieved from Lloyd's List: http://www.lloydslist.com/ll/sector/regulation/article29446.ece

McConnell, M., Devlin, D., & Doumbia-Henry, C. (2011). *The Mairitime Labour Convention, 2006: A Legal Primer to an Emerging International Regime*. Leiden: Martines Nijhoff Publishers.

Paris MoU. (2011). Annual report. Hague: Paris MoU.

Paris MoU. (2012, May 9). *Appeal procedure*. Retrieved from Paris MoU: http://www.parismou.org/Inspection\_efforts/Detentions/Appeal\_procedure/#2 625907a-5531-48f2-9587-a9c9f0ae7379

- Paris MOU. (2012). *Recognized Organization performance table* (2009-2011). Hague: Paris MOU.
- QACE. (2012). Annual Report 2011. London: QACE.
- Tokyo MoU. (2012). *Detention Review Panel*. Retrieved from Tokyo MoU: http://www.tokyo-mou.org/
- UNCTAD. (2011). *Review of Maritime Transport 2011*. Geneva: United Nations Publication.
- United Nations. (2012). UNITED NATIONS CONVENTION ON THE LAW OF SEA.

  Retrieved from OCEANS & LAW OF THE SEA, UNITED NATIONS:

  http://www.un.org/Depts/los/convention\_agreements/texts/unclos/closindx.ht

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Annex A

Authorization Status of ROs (Limited as members of IACS (as of 29th August, 2012) (GISIS, 2012)

	ABS	BV	CCS	DNV	GL	KR	LR	NK	RINA	RS	CRS	IRS	PRS
Algeria		О		О	О								
Antigua	О	О		О	О	О	О	О	О	О			
and													
Barbuda													
Australia	О	О	О	О	О	О	О	О	О				
Austria	О	О		О	О		О						
Azerbaijan						О				О			
Bahamas	О	О	О	О	О	О	О	О	О	О			
Bangladesh	О	О		О	О		О	О					
Barbados	О	О	О	О	О	О	О	О	О	О			
Belgium	О	О		О	О		О	О					
Belize	О	О	О	О	О	О	О	О	О	О		О	
Bermuda	О	О		О	О		О	О	О				
Brazil	О	О		О	О		О	О	О				
British	О	О		О	О		О	О	О				
Virgin													
Islands													
Brunei	О	О		О	О		О	О					
Darussalam													
Bulgaria					О		О			О			
Cambodia	О	О			О	О			О	О			О
Canada	О	О		О	О		О						

	ABS	BV	CCS	DNV	GL	KR	LR	NK	RINA	RS	CRS	IRS	PRS
Cayman	О	О		О	О		О	О	О				
Islands													
Chile							О	О					
China			О										
Colombia	О	О			О		О						
Comoros	О	О	О		О	О	О	О	О	О	О	О	О
Cook	О	О		О	О	О	О	О	О	О			О
Islands													
Croatia											О		
Cuba		О		О	О		О	О		О			
Curacao	О	О		О	О		О	О	О				
Cyprus	О	О	О	О	О	О	О	О	О	О			О
Czech		О		О	О		О			О	О		О
Republic													
Denmark	О	О		О	О		О	О	О				О
Djibouti	О	О		О	О		О	О	О				
Dominica	О	О				О		О		О		О	О
Egypt	О	О		О	О		О	О	О	О			О
Eritrea					О								
Estonia	О	О		О	О		О		О	О			
Ethiopia				О	О								
Faroes,		О		О			О						
Denmark													
Faero				О									
Islands													
Finland	О	О		О	О		О		О	О			
France	О	О		О	О		О						

	ABS	BV	CCS	DNV	CL	KR	LR	NK	RINA	RS	CRS	IRS	PRS
Georgia	О	О	О	О	О	О	О	О	О	О	О	О	О
Germany	О	О		О	О		О			О			
Gibraltar	О	О		О	О		О	О	О				
Greece	О	О	О	О	О	О	О	О	О				
Honduras	О	О	О	О	О	О	О	О	О	О			
Hong	О	О	О	О	О	О	О	О	О				
Kong,													
China													
Hungary					О		О			О			
India	О	О		О	О		О	О				О	
Indonesia	О	О		О			О	О					
Iran		О	О		О	О				О			
Ireland	О	О		О	О		О	О	О	О			
Isle of Man	О	О		О	О	О	О	О	О				
Israel	О	О		О	О		О	О	О				
Italy	О	О			О				О				
Jamaica	О	О	О	О	О	О	О	О	О	О			
Japan							О	О					
Jordan	О	О		О	О	О	О	О		О			
Kiribati	О		О		О	О	О	О		О			
Kuwait	О	О		О	О		О	О					
Latvia	О	О		О	О		О			О			
Liberia	О	О	О	О	О	О	О	О	О	О		О	
Libya	О	О		О	О		О		О	О			
Lithuania	О	О		О	О		О	О	О	О			О
Luxembour	О	О		О	О		О	О	О				

	ABS	BV	CCS	DNV	CL	KR	LR	NK	RINA	RS	CRS	IRS	PRS
Madagascar		О					О						
Malaysia	О	О	О	О	О	О	О	О		О		О	
Maldives	О	О		О	О	О	О	О					
Malta	О	О	О	О	О	О	О	О	О	О			О
Marshall	О	О	О	О	О	О	О	О	О	О		О	О
Islands													
Mauritius	О	О		О	О	О	О	О				О	
Mexico	О	О			О			О					
Mongolia						О				О			О
Morocco	О	О		О	О		О	О	О				
Netherlands	О	О		О	О		О	О	О				
New	О	О		О	О		О						
Zealand													
Nigeria	О	О		О			О						
Nis	О	О		О	О		О						
Norway	О	О		О	О		О	О	О				
Oman	О	О		О	О		О	О	О				
Pakistan	О	О		О	О	О	О	О	О				
Panama	О	О	О	О	О	О	О	О	О	О		О	О
Papua new	О	О		О	О		О	О					
guinea													
Philippines	О	О	О	О	О	О	О	О	О				
Poland		О		О	О		О		О	О			О
Portugal	О	О		О	О		О		О				
Qatar	О		О	О	О	О	О	О		О		О	
Republic of						О							
Korea													

	ABS	BV	CCS	DNV	GL	KR	LR	NK	RINA	RS	CRS	IRS	PRS
Republic of	О	О	О	О	О	О	О	О	О	О			О
Moldova													
Romania		О			О	О				О			
Russian					О					О			
Federation													
Saint Kitts	О	О			О	О	О	О	О	О		О	О
and Nevis													
Saint	О	О	О	О	О	О	О	О	О	О	О	О	О
Vincent and													
the													
Grenadines													
Saudi	О	О		О	О		О	О	О				
Arabia													
Serbia	О	О		О	О		О			О			
Sierra	О	О			О	О	О		О	О			
Leone													
Singapore	О	О	О	О	О	О	О	О	О				
Sint	О	О		О	О		О	О	О				
Maarten													
Slovakia	О	О		О	О		О			О			О
Slovenia		О			О				О				
Somalia	О	О		О	О		О	О	О				
South	О	О		О	О		О	О	О				
Africa													
Sri Lanka	О												
Spain		О			О				О				
Sweden	О	О		О	О		О		О				

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	ABS	BV	CCS	DNV	GL	KR	LR	NK	RINA	RS	CRS	IRS	PRS
Switzerland	О	О		О	О		О	О	О				
Syrian Arab								О		О		О	О
Republic													
Thailand	О	О		О	О		О	О					
Togo		О			О								
Trinidad	О	О					О						
and Tobago													
Tunisia	О	О		О			О	О					
Turkey	О	О		О	О	О	О	О	О				
Tuvalu	О	О		О	О	О	О	О	О	О		О	О
Ukraine					О					О			
United	О	О		О		О	О			О			
Arab													
Emirates													
United	О	О		О	О		О	О	О				
Kingdom													
United			О										
Republic of													
Tanzania													
United	О	О		О	О		О		О				
States													
Vanuatu	О	О	О	О	О	О	О	О	О	О			О
Viet Nam	О		О	О		О	О	О		О			О
			-	<del>'</del>	-		1	1	1		1		1

(Source: Tabulated by Author based on GISIS)